

# ZIAUDDIN UNIVERSITY

## PROSPECTUS

# 2024



\*For further updates regarding entry test interviews kindly logon to [www.zu.edu.pk](http://www.zu.edu.pk)



## **OUR VISION**

To be a prestigious educational institution recognised for its academic excellence, research, and services, nurturing ethical and intellectual curiosity that contributes towards the development of a knowledge-based society in Pakistan.

## **OUR MISSION**

Ziauddin University is committed to providing sustainable solutions for global challenges through education, research, and practice. Our university inspires leadership for all sectors of society. We carry out this mission through the open exchange of ideas in an ethical, interdependent, and diverse community of faculty, staff, students, alumni, and partners.

## TABLE OF CONTENTS

DR. SIR ZIAUDDIN AHMAD	05
MESSAGE FROM THE CHANCELLOR	07
MESSAGE FROM THE VICE CHANCELLOR	09
MEMBERS OF THE GOVERNING BODY	11
MEMBERS OF ACADEMIC COUNCIL	12
ZIAUDDIN UNIVERSITY	13
<b>FACULTY OF HEALTH SCIENCES</b>	17
• ZIAUDDIN MEDICAL COLLEGE	19
• COLLEGE OF DENTISTRY	43
• COLLEGE OF PUBLIC HEALTH	55
• COLLEGE OF MOLECULAR MEDICINE	61
<b>FACULTY OF ALLIED HEALTH SCIENCE</b>	71
• COLLEGE OF PHYSICAL THERAPY	73
• COLLEGE OF OCCUPATIONAL THERAPY	85
• COLLEGE OF CLINICAL PSYCHOLOGY	93
• COLLEGE OF SPEECH LANGUAGE & HEARING SCIENCES	105
• COLLEGE OF PODIATRIC MEDICINE	120
• COLLEGE OF MEDICAL TECHNOLOGY	124
• COLLEGE OF HUMAN NUTRITION AND DIETETICS	146
<b>FACULTY OF LIBERAL ARTS &amp; HUMAN SCIENCES</b>	156
• COLLEGE OF MEDIA SCIENCES	162
• COLLEGE OF LANGUAGES, LITERATURE & CULTURE	176
• COLLEGE OF EDUCATION	194
<b>FACULTY OF VETERINARY &amp; ANIMAL SCIENCES</b>	211
<b>FACULTY OF PHARMACY &amp; PHARMACEUTICAL SCIENCES</b>	225
• COLLEGE OF PHARMACY	231
• COLLEGE OF PHARMACEUTICAL SCIENCES	248
<b>FACULTY OF NURSING &amp; MIDWIFERY</b>	256
<b>FACULTY OF EASTERN MEDICINE &amp; NATURAL SCIENCES</b>	268
<b>FACULTY OF LAW, POLITICS &amp; GOVERNANCE</b>	280
<b>FACULTY OF ENGINEERING, SCIENCE, TECHNOLOGY &amp; MANAGEMENT</b>	298
• COLLEGE OF ENGINEERING & TECHNOLOGY	310
• COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING	339
• COLLEGE OF MANAGEMENT AND APPLIED SCIENCES	375

## TABLE OF CONTENTS

DEPARTMENT OF CONTINUING PROFESSIONAL EDUCATION	413
DEPARTMENT OF EDUCATIONAL DEVELOPMENT	415
DEPARTMENT OF RESEARCH	417
QUALITY ENHANCEMENT CELL	423
OFFICE OF RESEARCH, INNOVATION & COMMERCIALIZATION (ORIC)	441
NATIONAL AND INTERNATIONAL LINKAGES	427
CLINICAL TRIAL UNIT	433
UNIVERSITY POLICIES	436
EXTRA CURRICULAR ACTIVITIES	437
DEPARTMENT OF STUDENT AFFAIRS	439
STUDENT LIFE	441
DEPARTMENT OF SPORTS	447





## DR. SIR ZIAUDDIN AHMAD

M.A. (Cantab.) Ph.D. (Göttingen)  
D.Sc. C.I.E. M.L.A (Central)

Ex-Vice Chancellor and Rector of Aligarh Muslim University

Dr. Sir Ziauddin Ahmad is an individual who left a lasting impact on the subcontinent. He was an eminent educationist, scholar, visionary, and exemplary individual who serves as an inspiration to those willing to make a difference in the world. Born in 1873 in Meerut, India, his journey of success started at the age of 12, when he attained the first division in high school. Dr. Ziauddin also received a Lang Medal and a government scholarship from Aligarh M.A.O. College. In 1895, he secured the first position in Bachelor of Arts (B.A.) and received the Coveted Shachey Gold Medal at Aligarh M.A.O. College. However, this was just a glimpse of his intellectual prowess. After completing B.A. in Mathematics, Dr. Ziauddin Ahmad was appointed as the assistant lecturer in Aligarh M.A.O. College—the same educational institute that aided him in expressing his brilliance. He then attained a Master of Arts (M.A.) degree from the University of Calcutta. In 1901, he achieved a Doctor of Science (D.Sc.) degree in mathematics from the University of Allahabad. He then enrolled himself in Trinity College at Cambridge University and achieved the prestigious Sir Isaac Newton scholarship—an honour no other Indian had attained. The final jewel in his list of educational triumphs was the PhD in Mathematics, that he earned from the internationally renowned Göttingen University, Germany. After his journey of attaining the highest level of education was completed, Dr. Ziauddin Ahmad aspired to raise the standard of education within the subcontinent. He also worked as an Assistant Secretary for Sir Syed Memorial Fund, established for the purpose of founding a Muslim university. Since the educationist was inspired by Sir Syed Ahmed Khan's approach towards modern tutelage, he dedicated himself to creating a liberal teaching system for the Muslims of India. Dr. Ziauddin was appointed as the very first Pro Vice-Chancellor of Aligarh Muslim University. He took over as Vice Chancellor in 1935. His journey of spreading literacy, higher education, and the ability to critically analyse information ended on December 23, 1947, when Sir. Dr. Ziauddin Ahmad died in London. He was buried beside Sir Syed Ahmed Khan in the Aligarh Muslim University Mosque premise, thus fulfilling his pledge of serving Aligarh for life.



## MESSAGE FROM THE CHANCELLOR

Ziauddin University was formed with the aim of spreading knowledge across the world, and most importantly, empowering the youth of Pakistan with education equivalent with international standards. The university's primary emphasis is on providing a positive learning environment that drives students to achieve heights of success.

Apart from motivating our apprentices, Ziauddin University offers an array of programmes and state of the art facilities that warranty academic excellence. Thus, we often see our students conducting researches that can change history as we know it. From practical experiments to journal studies – the students at the university are involved in all aspects of the advancement of the nation.

Our aim now is to uphold a standard of excellence and to keep creating opportunities that break barriers in terms of knowledge, research, and development.

### DR. ASIM HUSSAIN

SITARA.E. IMTIAZ, NISHAN.E.IMTIAZ  
CHANCELLOR, ZIAUDDIN UNIVERSITY



## MESSAGE FROM THE VICE-CHANCELLOR

It gives me immense pleasure to present the prospectus of Ziauddin University. As we continue to navigate an ever-evolving academic landscape, Ziauddin University remains steadfast in its commitment to excellence, innovation, and societal impact. Over the past year, our university has not only sustained its reputation as a beacon of higher education in Pakistan but has also actively pushed the boundaries of what we can achieve together.

Our strength lies in our diverse and forward-thinking academic offerings, which span across nine different faculties. Each discipline is designed not only to impart knowledge but also to equip our students with the skills necessary to thrive in an increasingly complex global environment.

This year, we are particularly excited to introduce several pioneering initiatives that will further enhance the educational experience at Ziauddin University. Recognizing the importance of holistic development, we are now including extracurricular and co-curricular courses on official transcripts. This initiative underscores our commitment to producing well-rounded graduates who excel not only academically but also in leadership, teamwork, and other essential life skills.

Additionally, we have made it mandatory for all students, regardless of their field of study, to complete an internship as part of their degree requirements. This practical experience will be reflected on their transcripts, providing our graduates with a competitive edge in the job market. Furthermore, in our quest to align with global standards, we now require students to obtain international certifications, which will also be documented on their transcripts, ensuring that our alumni are recognized not just nationally but globally.

Our expansion continues, with the new Sukkur campus now fully operational. This campus is not just an extension of our educational network but a vital hub for innovation and community engagement in the region. We are proud to introduce specialized programs in disciplines like Nursing, Medical Technology, and Public Health, designed to meet the specific needs of the communities we serve while maintaining our rigorous academic standards.

In addition to our academic advancements, we are expanding our physical infrastructure to better support our students' overall well-being. The indoor sports facilities at our Clifton campus have been extended, providing state-of-the-art spaces for physical activity and recreation. Moreover, the development of our purpose-built Education City campus is well underway, which will offer a world-class learning environment equipped with cutting-edge facilities.

Inspired by the vision and dedication of Sir Dr. Ziauddin Ahmad, we continue to uphold the values of integrity, innovation, and service to society. Furthermore, Ziauddin University continues to pioneer in adopting cutting-edge teaching methodologies. Our faculty, who are leaders in their respective fields, utilize a blend of traditional and contemporary teaching techniques, ensuring that our students receive a holistic education that prepares them for the challenges of tomorrow.

I invite you to explore the opportunities that Ziauddin University offers and to become part of a community dedicated to academic and professional excellence.

PROF. DR.  
MOHAMMAD INAYATULLAH KHAN  
VICE-CHANCELLOR, ZIAUDDIN UNIVERSITY



## GOVERNING BODY

### CHAIRMAN

**Dr. Asim Hussain, SI, NI, (Master of Surgery)**  
Chancellor, Ziauddin University

### MEMBERS

**Prof. Dr. Mohammad Inayatullah Khan (Ph.D)**  
Vice-Chancellor, Ziauddin University

**Mr. Saleem Mandviwalla**  
Senator, Senate of Pakistan

**Justice Adnan Iqbal Chaudhry**  
Honorable Judge, High Court of Sindh

**Prof. Dr. Sarosh Hashmat Lodi (Ph.D)**  
VC, NED University Nominee of Chairman,  
Sindh, HEC

**Sardar Yaseen Malik HI, SI,**  
Chairman, Hilton Pharma

**Mr. M. Saleem Khan Master**  
(Harvard Uni.) Master (Economics)  
Former Federal Secretary to the Govt. of Pakistan

**Mr. Anwar Mansoor Khan**  
Former Judge High Court, Sindh & Attorney General  
of Pakistan

**Prof. Dr. Pirzada Qasim Raza Siddiqui (Ph.D)**  
Former Vice Chancellor, Ziauddin Uni. and University  
of Karachi/Professor Emeritus

**Prof. Dr. Khalid M. Iraqi (Ph.D)**  
Vice-Chancellor, University of Karachi or nominee

**Mr. Ifkhar Ahmed Shaikh**  
President Karachi Chamber of Commerce &  
Industries

**Prof. Dr. Abbas Zafar (MBBS, FRCS)**  
Dean, Faculty of Health Sciences

**Prof. Dr. Fahad Azim (BE Electrical) Ph.D**  
Dean, Faculty of Engineering, Science, Technology  
& Management

**Mr. Muhammad Adnan Fuzail (MBA)**  
Director Quality Enhancement Cell

**Engr. Capt. (Retd) Syed Waqar Hussain**  
(B.Sc (Engg) Master in Economics & International  
Relations)  
Registrar, Ziauddin University, Secretary

**Prof. Dr. Nida Hussain (MBBS, DAB)**  
Pro-Chancellor, Invited Member

**Mr. Faizan S. Syed**  
Advisor to the Chancellor on Financial/Media  
Sciences, Invited Member

**Dr. Ammad Hussain**  
Chief Executive, Dr. Ziauddin Hospital

**Mr. Shahzad Iqbal**  
Director Finance, Invited Member

## ACADEMIC COUNCIL

### CHAIRMAN

**Prof. Dr. Mohammad Inayatullah Khan**  
Vice-Chancellor, Ziauddin University

### MEMBERS

**Prof. Dr. Nida Hussain**  
Pro-Chancellor

**Prof. Dr. Anwar Ejaz Beg**  
Advisor to Chancellor/Prof. Pharma

**Prof. Dr. Abbas Zafar**  
Dean, Faculty of Health Sciences

**Engr. Dr. Fahad Azim**  
Dean, Faculty of Engineering, Science, Technology

**Prof. Dr. Nudrat Fatima**  
Principal, College of Pharmacy

**Dr. Pamela Marshall**  
Dean, Faculty of Nursing & Midwifery

**Dr. Shehla Najib Sidiki**  
Dean, Faculty of Liberal Arts & Human Sciences

**Prof. Dr. Zafar Iqbal Qureshi**  
Dean, Faculty of Veterinary and Animal Sciences

**Prof. Dr. Sumaira Farooqui**  
Dean, Faculty of Allied Health Sciences

**Engr. Capt. (Retd) Syed Waqar Hussain**  
Registrar

**Prof. Dr. Talat Mirza**  
Executive Director, Research Dept.

**Ms. Shaaista Sarki**  
Dean, Faculty of Law, Politics & Governance

**Dr. Tabiba Tasneem Qureshi**  
Dean, Faculty of Eastern Medicine & Natural  
Sciences

**Ms. Amina A. Siddiqui**  
Principal, College of Speech Language & Hearing  
Sciences

**Dr. Wahab Qadri**  
Principal, Ziauddin College of Dentistry

**Dr. Zulfiqar Ali Umrani**  
Director, ORIC & CTU

**Mr. Syed Atta Ullah Shah**  
Chief Librarian

**Dr. Amna Amir Khan**  
Associate Professor, College of Physical therapy

**Dr. Noor Muhammad Soomro**  
Prof. Faculty of Veterinary and Animal Sciences

**Mr. Muhammad Adnan Fuzail**  
Director, QEC

**Dr. Faisal Khan**  
Principal, Podiatric Medicine

**Dr. Yasmin Amarsi**  
Advisor to Chancellor on Nursing

**Dr. Ali Abbas Mirza**  
Director, Student Affairs

**Dr. Tehmina Tabish**  
Assistant Professor and Vice Principal of College of  
Speech Language and Therapy, By Invitation

**Dr. Uzma Ghouri**  
Associate Director Academics, (Clinical) Clifton Campus

**Dr. Arif Hussain**  
Assistant Dean, Allied Health Sciences

**Mr. Faizan S. Syed**  
Advisor to Chancellor on Financial/Media Sciences

**Prof. Dr. Ahmed Fawad**  
Associate Director Academics (Clinical) North  
Nazimabad

**Dr. Fasiha Sohail Khan**  
Associate Director Academics (Clinical), Kaemari  
Campus

**Prof. Dr. Pirzada Qasim Raza Siddiqui**  
Professor Emeritus, ZU

**Dr. Nasir Qureshi**  
Chairperson, Department of Architecture &  
Environment Design

**Dr. Saamia Tariq**  
Acting Chairperson, Dept. of Civil Engineering

**Dr. Ashar Ekhlaq Ahmed**  
Director, Post Graduate Studies (Clinical)

**Dr. Saad Jawaid Khan**  
Chairperson, Biomedical Engineering

**Dr. Masood Hameed Khan**  
Advisor to Chancellor

**Ms. Shaaista Sarki**  
Dean, Faculty of Law, Politics and Governance

**Prof. Dr. Khursheed Hashmi**  
Principal, College of Natural Sciences

**Prof. Dr. Ejaz Mohiuddin**  
Principal, College of Eastern Medicine

**Prof. Dr. Nuzhat Hassan**  
Acting Principal, Ziauddin Medical College

**Ms. Rana Hussain**  
Principal, Ziauddin College of Education

**Mr. Muizz Alam Khan**  
Controller of Examinations

**Dr. Iram Khursheed**  
Director, Directorate of Educational Development

**Prof. Dr. Munaf Rashid**  
Chairperson, Dept. of Software Engineering

**Dr. Humaira Rashid**  
Acting Principal, Ziauddin College of Medical  
Technology

**Dr. Yousuf Irfan Zia**  
Chairperson, Department of Electrical Engineering

**Dr. Saifullah**  
Chairperson, Department of Management  
Technology & Information Sciences



## ZIAUDDIN UNIVERSITY

Sir Dr. Ziauddin Ahmad's vision was transformed into reality in the late 1950's when his daughter Dr. Ejaz Fatima and his son-in-law Dr Tajammul Hussain started a small maternity home in Nazimabad. Over the years, this small maternity home took shape of a busy 80-bed hospital that serves the densely populated area of Nazimabad.

In 1968, the family of Dr Ziauddin Ahmad established Dr Ziauddin Hospital Trust, where in the same year this trust established a second hospital in North Nazimabad as Dr Ziauddin Hospital, which is now a 300-bed tertiary care hospital, catering to a large population. This hospital provides an opportunity for students to gain knowledge and skills in assessing and evaluating a wide range of problems in a tertiary care setting. The hospital is equipped with state of the art equipment necessary to diagnose and manage problems effectively and efficiently.

In August 1994, through an Ordinance (XVII of 1994), the Government of Sindh granted the permission to establish Dr. Ziauddin Postgraduate Institute of Medical Sciences. By virtue of this Ordinance, the Institute could grant its own postgraduate degrees and diplomas.

In October 1995, the Sindh Assembly passed an Act (VI of 1995) for the establishment of Ziauddin Medical University. At this time the university also established an association with the neighbouring community to set up a health centre, and entered into mutual partnership with the Karachi Municipal catchments population by providing healthcare services & educational support.

In December 2005, Ziauddin Medical University was given the Charter as Ziauddin University vide "The Ziauddin University" (Amendment) ACT 2003 dated December 13, 2005.

Presently, following faculties/colleges are successfully running under the umbrella of Ziauddin University:

### **Faculty of Health Sciences**

- Ziauddin Medical College
- College of Dentistry
- College of Public Health
- College of Molecular Medicine

### **Faculty of Allied Health Sciences**

- College of Physical Therapy
- College of Occupational Therapy
- College of Clinical Psychology
- College of Speech Language & Hearing Sciences
- College of Podiatric Medicine
- College of Medical Technology
- College of Human Nutrition & Dietetics

### **Faculty of Liberal Arts & Human Sciences**

- College of Media Sciences
- College of Languages, Literature & Culture
- College of Education

### **Faculty of Veterinary & Animal Sciences**

### **Faculty of Pharmacy & Pharmaceutical Sciences**

- College of Pharmacy
- College of Pharmaceutical Sciences

### **Faculty of Nursing & Midwifery**

### **Faculty of Eastern Medicine & Natural Sciences**

- College of Eastern Medicine

### **Faculty of Law, Politics & Governance**

### **Faculty of Engineering, Science, Technology & Management**

- College of Engineering & Technology
- College of Computing & Software Engineering
- College of Management & Applied Sciences

## PROFESSIONAL ACCREDITATIONS

Ziauddin University is accredited by the following bodies:

- Pakistan Medical and Dental Council (PMDC)
- Pakistan Bar Council (PBC)
- Pharmacy Council of Pakistan (PCP)
- National Accreditation Council for Teacher Education (NACTE)
- National Agriculture Education Accreditation Council (NAEAC)

- National Technology Council (NTC)
- Pakistan Nursing Council (PNC)
- Pakistan Engineering Council (PEC)
- Pakistan Veterinary Medical Council (PVMC)
- National Computing Education Accreditation Council (NCEAC)

## UNIVERSITY LIBRARIES

A network of 15 libraries of Ziauddin University is actively working at different faculties and colleges at all campuses. The primary goal of these libraries is to provide quality and relevant

information and literature to support and strengthen the university and hospitals' academic, research, and patient care programmes.

### eBooks

1	Ebscohost databases	236,000
2	Calibri databases	4500

### eJournals

1	HEC Digital Library	3553
2	Research4Life	34141
3	Ebscohost:	5820

## ZU DIGITAL LIBRARY AVAILABLE AT ZU WEBSITE

EBSCOhost Databases	HEC Digital Library	Research4Life (WHO Databases)	Other Databases
<b>eBook Academic Collections (EBSCO)</b> – There are nearly <b>236,000</b> eBooks in this package, including more than <b>16,000/- Medical Books.</b>	<b>Springer Link</b> 503+ Journals	<b>HINARI</b> 10645 Journals	<b>Pakistanlawsite</b> (Law Database)
<b>eJournals:</b> Engineering Source – <b>3000</b> full-text titles in engineering, computer science and related areas	<b>Wiley-Blackwell</b> 1,600+ Journals	<b>AGORA</b> 10074 Journals	<b>E-Books</b> (Calibre) 4464
<b>eJournals MEDLINE</b> - providing full text for over <b>1,800 journals</b>	<b>Taylor &amp; Francis Journals</b> 1000 + Journals	<b>OARE</b> 7686 Journals	<b>E-Journals</b> (Open Access)
<b>eJournals Dentistry &amp; Oral Sciences</b> Source: <b>293 Journals</b>	<b>Ovid</b> 438 Journals	<b>ARDI</b> 4863 Journals	<b>ZU Archives</b>
<b>eJournals EBSCO Pharmacy</b> Collection <b>357 Journals</b>	<b>INFORMS</b> 12 Scholarly Journals	<b>GOALI</b> 873 Journals	<b>ZU Thesis 361</b> (DSpace)
<b>eJournals Alt Health Watch 180</b> Journals	<b>E-library</b> 142,000 Books	<b>Total Books</b> 55,833	
<b>eJournals Rehabilitation &amp; Sports Medicine</b> Source - full-text for over <b>190</b> sports and rehabilitation journals	ProQuest Dissertations (Currently suspended)		

**More than 24000** Books and 124 Computers are provided in the ZU libraries network to facilitate the library users.

**Training Sessions:** The Librarians Provide training of Literature search, literature management, and Turnitin.

**Library Services:** Scanning, Printing, Literature Search, Article Supply, Circulation, Reference Services, and e-Alert.

**Anti-plagiarism Software (Turnitin):** Check the documents' originality and issue the certificate

for the ZU Research work of the students of Ph. D., M. Phil., M.D., M.S., M.Sc. N., BSc. N. and other papers & publications

**Operations:** NLM & LC Schemes for literature Classification and MARC21 for Catalog are being used.

The KOHA library software is used to automate the library services, information about the available literature (library catalog) and its status, and develop a virtual network among the ZU.

## ZU LIBRARIES, TIMINGS, AND STAFF

Clifton		North Nazimabad		Link Road	
<b>1</b>	<b>Dr. Naeem A. Jafery Library</b> 8:00 am to 10:00 pm (Mon. to Fri.) 8:00 am to 4:00 pm (Saturday) <i>Syed Attaullah Shah - Chief Librarian</i> <i>Sheraz Khurshid - Deputy Chief Librarian</i> <i>Kishwer Zaheer - Librarian</i> <i>Aisha Fareed - Deputy Librarian</i> <i>Touqeer Shah - LIS Analyst</i> <i>Fayyaz Khan - Assistant Librarian</i> <i>Madiha Shahid - Assistant Librarian</i> <i>Moin Khan - Senior Library Assistant</i>	<b>5</b>	<b>Hospital Library</b> 8:30 am to 10:00 pm (Mon. to Sat.) <i>Nazish Nawab - Deputy Librarian</i> <i>Faizan Sohail - Assistant Librarian</i> <i>Muhammad Iqbal - Senior Library Assistant</i>	<b>11</b>	<b>Dr. Aijaz Fatima Library</b> 9:00 am to 3:30 pm (Mon. to Fri.) <i>Syeda Sobia Ayaz - Deputy Librarian</i> <i>Rahmatullah Khan - Assistant Librarian</i>
<b>2</b>	<b>College of Speech Language &amp; Hearing Sciences</b> 8:30 am to 4:30 pm (Mon. to Fri.) <i>Umme Ruma Rehan - Assistant Librarian</i>	<b>6</b>	<b>Faculty of Eng. Sci., Tech. &amp; Mgt.</b> 8:30 am to 9:00 pm (Mon. to Fri.) <i>Sahar Afshan - Assistant Librarian</i> <i>Siddiqa Khan - Assistant Librarian</i>	<b>12</b>	<b>Faculty of Pharmacy</b> 9:00 am to 3:30 pm (Mon. to Fri.) <i>Umama Syed - Assistant Librarian</i> <i>Erum Khan - Assistant Librarian</i>
<b>3</b>	<b>College of Physical Therapy BB</b> 8:30 am to 4:30 pm (Mon. to Fri.) <i>Jannat Shaheen - Assistant Librarian</i>	<b>7</b>	<b>Faculty of Nursing and Midwifery</b> 8:30 am to 4:30 pm (Mon. to Fri.) <i>Sadia Shamim - Assistant Librarian</i> <i>Noureen Kamal - Library Assistant</i>	<b>13</b>	<b>Faculty of Veterinary and Animal Sciences</b> 9:00 am to 3:30 pm (Mon. to Fri.) <i>Faiza Inam - Assistant Librarian</i>
<b>4</b>	<b>Faculty of Law, Politics and Governance</b> 9:00 am to 5:00 pm (Mon. - Fri.) <i>Nafees Ahmed - Assistant Librarian</i> <b>Website:</b> library.zu.edu.pk <b>Email:</b> library@zu.edu.pk <b>Ext:</b> 2563-2567	<b>8</b>	<b>College of Physical Therapy NN</b> 8:30 am to 4:30 pm (Mon. to Fri.) <i>Tehreem Mustafa - Assistant Librarian</i>	<b>Kaemari - Karachi</b>	
		<b>9</b>	<b>College of Medical Technology</b> 8:30 am to 4:30 pm (Mon. to Fri.) <i>Bushra Anwar - Assistant Librarian</i>	<b>14</b>	<b>KDLB Hospital Library -</b> 8:30 am to 6:00 pm (Mon. - Sat.) <i>Abida Younus - Deputy Librarian</i> <i>Maryam Rani - Library Assistant</i>
		<b>10</b>	<b>Faculty of Eastern Medicine and Natural Sciences</b> 8:30 am to 4:30 pm (Mon. to Fri.) <i>Samar Majeed - Assistant Librarian</i>	<b>Sukkur</b>	
				<b>15</b>	<b>College of Physical Therapy</b> 8:30 am to 4:30 pm (Mon. to Fri.) <i>Zeeshan Channa - Assistant Librarian</i>

## LIBRARY TRAINING, ORIENTATIONS, AND INTRODUCTION:

Use of ZU Libraries: Collection, Discipline, Membership & Services

3. Anti-plagiarism – Policy and procedure  
a. Turnitin Software

2. How to search the literature:

- Online databases;
  - Journals' articles
  - Ebooks
  - Open source material
- Physical literature from the ZU Libraries through Online Public Access Catalog (OPAC)

4. Faculty Publications:

- How to upload your publications in HRMS (ZU Portal)
- In which Journal you may publish your article

5. For Researchers only:

- How to review the literature
- Proposal Writing
- How to write a thesis



# FACULTY OF HEALTH SCIENCES



# ZIAUDDIN MEDICAL COLLEGE

## KEY INFORMATION

### DEAN, FACULTY OF HEALTH SCIENCES

Prof. Dr. Abbas Zafar

## CONTACT INFORMATION

Website:

<https://zmc.zu.edu.pk/>

Telephone:

+92-21-35862937 Ext: 572, 573

Locate Us:

4/B, Shahrah-e-Ghalib, Block 6, Clifton,  
Karachi.



As I leaf through the chapters of my medical school journey, I find myself reflecting on the incredible adventures we've shared—the sweat, the tears, and the countless hours of hard work, weaving a medical tapestry that tells the story of a young Ziauddin graduate who never deemed his efforts worthy of a gold medal.

As I reflect on this adventure, I am compelled to share the essence of the medical student spirit. In the realm of stethoscopes and textbooks, willpower is the silent force that transforms challenges into stepping stones. Hard work, a key that unlocks doors to the vast universe of medical knowledge, is a beacon guiding future doctors.

I can proudly say that we have earned the degree of MBBS, or, as I like to call it, mastering the art of balancing books and scalpels. Proudly, we grew up from ranting kids sitting in the BCR to discussing complicated ECGs and ABGs - as if figuring them was any easier than figuring life at medical school itself.

Each sleepless night, once burdened, now stands as a testament to my dedication. Beyond the grades and accolades, this has been a journey of relentless pursuit, pushing boundaries, and embracing the challenges that came along.

In the pursuit of knowledge, who could forget Café Zee's hot tea? Here's to the wisdom found at the bottom of every teacup.

Ziauddin University, you've been more than just an alma mater – you've been the caffeinated backdrop to my successes and the stage for laughter-filled adventures. To the teachers who fueled my curiosity and the university that moulded me into a gold medalist, you're the real MVPs. Here's to the quirks, the cafe Zee's tea, the resilience, and to future medical mavericks – may our journeys be as uniquely extraordinary as us.

As we close this chapter, let's remember to embrace the quirks, find inspiration in our triumphs, and share a laugh over the challenges. Life is a symphony, and in our pursuit of medical excellence, let's not forget to dance a little along the way.

To the resilient, the inspired, and the extraordinary class of 2024, may your Zee's tea always be hot, your patient histories impeccable, and your logbooks forever signed.

Hamza Siddiqui  
MBBS



## VISION

To provide excellent educational opportunities of national and international standards in a conducive learning environment that serves to empower students to be the world's leaders in achieving global healthcare outcomes.

## MISSION

To produce humane health care providers from diverse groups of people to meet future primary health care needs, having virtues of dignity and humanity with an appreciation of the social sciences. Special emphasis is placed on promoting critical reasoning, self-directed and lifelong learning with competencies to research, communicate, and lead efficiently. Integrated, community – oriented, and evidence-based teaching will enable students to collaborate within the healthcare industry for better patient outcomes.

## COMPETENCIES OF ZMC GRADUATES

At Ziauddin University we expect to develop in you the following competencies:

- I. Skillful
- II. Self-directed and life-long learner
- III. Communicator
- IV. Collaborator
- V. Professional
- VI. Researcher
- VII. Leader

For Programme Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs) please refer study guides.

## INTRODUCTION

Ziauddin Medical College was established in 1996. It is strategically located within the university site at Clifton, Karachi. Medical teaching programmes are spread over three main tertiary care hospitals in different parts of the city. These hospitals are well equipped with advanced diagnostic, monitoring and treatment facilities. Ziauddin Group of hospitals includes:

- Dr. Ziauddin Hospital, North Nazimabad Site
- Dr. Ziauddin Hospital, Clifton Site
- Dr. Ziauddin Hospital, Kemari Site

Other clinical learning sites include:

- Primary Health Care Centre, Sikanderabad.
- Dr. Ziauddin Cancer Hospital, North Nazimabad.
- Dr. Ziauddin Maternal and Child Health Centre, Gole Market Nazimabad.

Ziauddin Medical College prepares its students to become skilled practitioners, researchers and teachers with leadership potential. They develop skills to deal with health problems holistically and solve them at individual, family and community levels, through an innovative programme that emphasizes individual attention in small teaching/learning groups. The undergraduate clinical programmes are community-oriented and address priority healthcare needs of the country. This enables students to acquire the art and skill of probing scientifically into health and related problems of individuals and communities. Students are exposed to a variety of learning strategies to provide experiential learning through a multi-disciplinary approach to patient care.

To meet the challenges posed by the exponential growth of information, students assume the responsibility for their own learning. The Medical Education Department of the DED-ZU prepares faculty, and hence the students, on the latest educational trends including teaching and assessment strategies. The focus of using these student-centered learning strategies such as Problem-Based Learning (PBL) and Case Based Discussions (CBDs), is to promote self-directed learning skills and teamwork. Research projects, relevant to national and community needs, are also encouraged.

## PROGRAMMES OFFERED

Ziauddin Medical College offers Undergraduate and Postgraduate programmes that are recognized by the Pakistan Medical & Dental Council (PMDC), the regulatory body responsible for issuing license to practice medicine and the Higher Education Commission (HEC).

# MBBS

## INTRODUCTION

At Ziauddin Medical College, a student is identified as an adult learner and is expected to utilize inborn capabilities to adapt and understand the rapidly changing academic atmosphere around the world.

The academic schedule for the MBBS degree programme reflects the innovative system-based course. For the clinical training and experience the students are rotated through all three hospitals affiliated with the University.

The course content is presented with a Body System based Modular approach which is in line with regulations of the Pakistan Medical & Dental Council (PMDC) for MBBS degree. Emphasis is given to the development of conceptual understanding and the ability to construct knowledge for oneself. The students are actively involved in their learning process and the assessment involves examining the learner's entire conceptual network, not just discreet facts and principles.

Curriculum reviews take place critically on a regular basis to incorporate content updates in the form of themes for quality improvement purposes. Patient safety, genetics, and medical ethics are some of the vertically integrated themes introduced in the MBBS curriculum.

Faculty from Basic Health Sciences (BHS), Community Health Sciences (CHS) and Clinical Sciences are collaboratively engaged in teaching programmes. As a result, students develop a comprehensive understanding and holistic approach to recognise and solve healthcare problems.

The Primary Healthcare (PHC) programme run by the Department of Family Medicine serves as an educational site for community based training. The PHC programme is a unique prototype of partnership between academia, local NGOs, government and international NGOs for education, research and service.

## ELECTIVES

For MBBS students, elective experience is mandatory. It should be acquired from institutions which should not be a part of the Ziauddin University system. Students have an option to undergo this in Pakistan or overseas. This experience allows them a wider exposure and enables them to discover their specialised field of interest. The financial responsibility of completing electives is undertaken by the students. The Dean's Office facilitates placement of students for this purpose.

## LEARNING AND TEACHING STRATEGIES

### SELF-DIRECTED LEARNING

The College prepares students to become independent, self-directed, life-long learners. The introduction of student-centred learning strategy is a step towards promotion of critical thinking and problem solving skills. Students are encouraged to consult from a wide selection of learning resources including books, journals, models, computer assisted learning programmes, digital anatomage table and the internet.

### PROBLEM-BASED LEARNING (PBL)

PBL is the leading strategy adopted for learning at Ziauddin Medical College. This approach is characterised by:

- Providing students an opportunity to learn how to deal with problems they may face later in their professional practice.
- Emphasis on self-motivation and responsibility for learning.
- Training for learning professional skills such as leadership and team work.

The aim of problem-based learning is to overcome various drawbacks in the traditional methods of instruction, for instance passive role of students during lectures, irrelevant subject matter in the curriculum, lack of integration between disciplines, insufficient preparation of students for higher education after completing MBBS and in particular, the difficulties experienced by many medical graduates in applying what they have learned.

**CLINICAL TRAINING**

A balance between hospital, ambulatory care, and community settings is essential for a meaningful exposure to curative, preventive, and rehabilitative aspects of healthcare. Learning at the Ziauddin group of hospitals provides a unique experience of exposure to patients from different geographical and socio-economic backgrounds.

A squatter settlement adjacent to the university, in Sikanderabad, provides community-based setting and the outpatient care for patients belonging to a lower socio-economic class. Family Medicine Health Centre (FMHC) is a low-cost outpatient clinic for the under-privileged population living close to the Clifton site. These sites provide better opportunities of learning to students as they come in contact with a varying range of people and patients with health problems.

Students begin their clinical experience from the third year. After an introductory course they gain an experience in emergency, PHC clinics as well as outpatient and inpatient clinics.

The fourth year is mainly spent at Kemari site with fully developed ENT, Gynaecology and Obstetrics, Ophthalmology departments and clinical disciplines of Medicine and Allied, Surgery and Allied, Paediatrics.

In the final fifth year, students are based in North Nazimabad site where a comprehensive attachment in Medicine, Surgery, Paediatrics aims at a professional problem oriented approach to make them ready for taking care of patients when they graduate. They are encouraged to make their own presentations and participate in discussions as well as gain knowledge from dedicated lectures and group tutorials on selected topics. The hospital's state of the art diagnostics and intensive care facilities help polish their clinical learning.

**STUDENT ASSESSMENT****MODES OF ASSESSMENT**

Assessment of knowledge, skills and attitudes is accomplished through various modes of assessment. MCQ-one best type, and Viva (oral examination) are mainly used to assess multiple levels of knowledge including recall of basic facts, clinical interpretation and application. However, Objective Structured Practical/-

Clinical Examinations (OSPE/ OSCE) are used to assess skills (practical/clinical) & attitudes with underpinned knowledge background.

**CONTINUOUS ASSESSMENT POLICY**

Securing minimum scores in an academic year requires consistency in Continuous Assessments. The minimum level is determined by a student's achievement in module examinations, which include written tests, practical assignments and other academic activities. Student eligibility for Summative Examinations is determined by an individual's attendance and performance in Continuous Assessment Test (CAT) during academic year. Each student requires at least 80% attendance to be eligible for appearing in exam. Student performance in each year is judged by formative (continuous) and summative (end of year) assessments.

**PROFESSIONAL EXAMINATIONS**

As per PMDC policy there are five professional exams, held at the end of each academic year. A consistent record of satisfactory performance is necessary for eligibility to MBBS Final Assessment. Each student's performance is reviewed by the concerned department, which also determines eligibility for the certifying examination. Progression to second, third, fourth and fifth year is regularly determined by achieving satisfactory performance in the respective academic year.

**ADMISSION POLICY ZIAUDDIN MEDICAL COLLEGE 2024-25****CRITERIA FOR ADMISSION**

Admission to Ziauddin Medical College for a five (5) year (MBBS) degree course is open to all individuals who meet the selection criteria. All candidates are chosen for their academic achievements and potential.

Students are admitted to the first year of MBBS on previous high school and/or college academic record, and score in MDCAT /test and interview conducted by the Ziauddin University and as determined by the Pakistan Medical and Dental Council. Selection of student is on the basis of an admission policy approved by the Governing Body of Ziauddin University, which is in line with the regulations of Pakistan Medical and Dental Council (PMDC). Students are largely admitted in the category of Local Residents. A few seats are available for over-

seas students (as defined by the PMDC Rules).

**General Criteria for Admission**

- Have passed MDCAT examination conducted by the relevant Provincial University designated by PMDC.
- Obtained a Higher Secondary School Certificate Qualification HSSC or equivalent 12th Grade Qualification and having obtained minimum 60% marks in Pre-Medical as per PMDC criteria.
- Passed the subjects of Biology, Chemistry, Physics / Mathematics.
- Local and overseas students are required to appear for an interview.
- A written aptitude test (MCQ) will be conducted.
- Proficiency in English language, both in written and verbal expression is required.
- With GCE Cambridge/London, 'Advanced level' (A level), American High School Diploma, and other equivalent Certificates or Diplomas, an equivalence to HSC (Pre-Medical) will be required from IBCC.

**Local Students**

Documents to be submitted for admission:

- Duly filled in admission form of Ziauddin Medical College along with application processing fee.
- Photographs (5 passport size).
- One copy each of mark sheets of Secondary School Certificate (SSC Part I and II).
- One copy of Secondary School Certificate (if available).
- One copy each of mark sheets of Higher Secondary Certificate (HSC Part I and II Pre-Medical) if available\*
- Students who are appearing in HSC Part II exam will be required to submit the Mark sheet after announcement of their result.

If results of HSC Part II have not been declared by the concerned Board, admit card of HSC Part II examination must be submitted.

For students with GCE Cambridge/London, one copy each of the transcripts of 'O' level and 'A' level examination results  
One copy of National Identity Card (in case NIC is not available, 'B' form with a copy of Parent's / Guardian's NIC must be submitted).

**Selection Criteria for Admission 2024-2025:**

The final merit list will be issued after having completed all tests, interviews etc and taking into account results of MDCAT and other exam results for the purpose of calculating the merit.

**Admission Criteria for Overseas Students**

As per PMDC criteria the university has defined the category of Overseas Students as follows:

- A foreign student for purposes of admission is defined as a students who has completed his/her HSSC from outside Pakistan.
- The term foreign students can include a students who may be an overseas Pakistani Having only Pakistani nationality
- Dual national
- Foreign national

**For students who have graduated from Overseas Pakistani Schools**

Documents to be submitted for admission:

- Duly filled in application form of Ziauddin University along with the required non refundable admission fee in US dollars.
- One copy each of mark sheets of Secondary School Certificate (SSC Part I and II).
- One copy of Secondary School Certificate (if available).
- One copy each of Higher Secondary Certificate mark sheets (HSC Part I and II Pre-Medical).
- In case the result of HSC Part II has not been declared by the concerned Board, photocopy of admit card of HSC Part II examination must be submitted.
- For students completing GCE, Cambridge/London, one copy each of 'O' and 'A' Levels transcripts.
- Have passed MDCAT examination conducted by the relevant Provincial University designated by PMDC.

**For High School Graduates of USA /Canada**

- One copy of High School Certificate (Grade 9-12 or 13) attested by the School Principal/ Officer
  - Have passed MDCAT examination conducted by the relevant Provincial University designated by PMDC.
- Note: Before submitting applications, applicants must ensure that they have complied

with the instructions given with the application form. It remains the responsibility of the applicant to submit application according to the instructions. Students are expected to submit photocopies of documents along with the application and originals for the purpose of verification by the university. If required, the university will check the authenticity of the documents submitted with the concerned school, college, board or university.

**Admission Test**

An aptitude Test for all eligible applicants will be conducted by the University. The structure of the Test will be provided to PMDC in advance for review. Applicants will also be given sufficient time to appear in the Test. The test consists of Multiple Choice Questions of various types. In addition to Biology, Chemistry and Physics corresponding to that expected at the end of Intermediate or equivalent qualifications e.g. 12th Year etc. There will be questions on English and General Knowledge as well.

**Interview**

Subjective Components	Weightage %	Questions	Time Duration (in minutes)
Biology	50%	45	90
Chemistry			
Physics			
<b>General Components</b>			
General Knowledge, Current Affairs, Aptitude/ Analytical Skills/IQ, General English/ Comprehension	50%	45	
	100%	90	90

Short listed applicants will be interviewed to assess their suitability to complete the MBBS course and pursue a career in health sciences.

**STRUCTURE OF INTERVIEW PROCESS FOR ADMISSION TO FIRST YEAR MBBS FOR SESSION 2024-25**

As per the Pakistan Medical and Dental Council (PMDC) Act/Admissions Regulations, an interview will be conducted according to the rules in force at the time.

The following documents are required to be submitted through admission.zu.edu.pk prior to the interview:

- Scanned and attested copies of matric/O-Level marksheet
- Intermediate/A-Level marksheet if available
- MDCAT result/score and merit number if available

The interview process is divided into writing a personal statement giving a personal insight about the candidate; (interests, strengths, weaknesses, accomplishments etc.). The personal statement which should not be more than 300 words will be submitted prior to the interview.

- Interview will be based on general knowledge, self-assessment, analytical skills, critical thinking, motivation and interest in healthcare and knowledge about ethics in healthcare.
- Questions will also be based on the personal statement earlier submitted
- Each candidate will be assessed by two interviewers. In case of major discrepancy a third interviewer will adjudicate
- Each candidate will be allocated 10 minutes for the interview with each interviewer

**Notification of Admission**

The Registrar of the university will notify students who are successful in the admission process. Successful applicants are given a deadline by which to accept the offer of admission. Offers not accepted by the given deadline will be cancelled.

**Dates for Admission Process 2024-25**

Newspaper advertisement	To be announced later
Admission Test	To be announced later
Interviews	To be announced later
Final Merit List to be displayed	After announcement of MDCAT and Intermediate / 'A' Level Results
Classes to start from	To be announced later

**FEE STRUCTURE 2024-25**

MBBS Fee Structure (Local & Foreign Students)				
Description	Currency	Amount	Currency	Amount
<b>First Year</b>				
Admission Fee	PKR	200,000		
Consolidated Fee	PKR	2,680,000	USD	18,000
<b>Second Year</b>				
Consolidated Fee	PKR	2,880,000	USD	18,000
<b>Third Year</b>				
Consolidated Fee	PKR	3,312,000	USD	18,000
<b>Fourth Year</b>				
Consolidated Fee	PKR	3,312,000	USD	18,000
<b>Fifth Year</b>				
Consolidated Fee	PKR	3,312,000	USD	18,000

**Note:**

- Government tax will be applicable as per prevailing tax law.
- Tuition fee of foreign student is inclusive of Government Tax.

**CAREER PROSPECTS OF PROGRAMME**

The Bachelor of Medicine, Bachelor of Surgery (MBBS) programme from Ziauddin Medical College opens up a wide range of career opportunities such as; General Practitioner, Medical Officer, Clinical Research Associate, Occupational Health Physician, Medical Writer or Editor, Medical Advisor in Pharmaceutical Companies, Medical Officer in NGOs and Non-Profit Organizations, Medical Educator, Public Health Officer, Hospital Administrator, Medical Consultant, Primary Healthcare Provider, Medical Transcriptionist, Medical Officer in the Armed Forces, Forensic Medical Examiner, Telemedicine Practitioner, Health

Policy Analyst, Medical Quality Assurance Officer, Medical Sales Representative, and Medical Coordinator.

These are just a few examples of career opportunities for MBBS. However, it's important to note that some positions may benefit from additional certifications, specialization, experience, or postgraduate training. It is advisable to research the specific requirements and opportunities available in the desired field of interest.



## DIPLOMA IN HEALTHCARE MANAGEMENT

### VISION

Revolutionize healthcare through a structured programme focusing on management, research, education, systems improvement, training and development

### MISSION

To inculcate managerial competencies in healthcare professionals and bringing them at par with the changing global scenario.

### OBJECTIVES

Develop, monitor, evaluate, review and maintain a Postgraduate curriculum that provides:

1. An essential core of knowledge and skills, concepts, tools and techniques of management and administration
2. Basic concepts and techniques of problem-solving, data evaluation and assessment
3. Computer application to health information
4. Relevant correlations between management, finance and IT application to health care, through interdisciplinary courses and through early and continuous exposure to health care delivery facilities
5. A thorough grounding in professional ethics in Health System Management needed to interact appropriately with other care-providers, administrators, patients and their families.

### WHO SHOULD APPLY?

Hospital Administrators, Medical Directors, Unit Head of Hospitals, Doctors, Dentists, Nurses, Health technicians, Pharmacists, Doctors in Public sector health system, NGO Personnel

### TIMING & MODUS OPERANDII

- A student should undertake 4 courses per Semester
- Saturdays (2 pm to 9 pm) and Sundays (10 am to 5 pm)

### ELIGIBILITY CRITERIA

The applicant must have a Bachelor's degree from HEC recognized educational institution in Medicine and Allied (nursing, pharmacy, biomedical engineering etc.)

- Sixteen years of schooling or 4 year education (124 credit hours) after HSSC /F.Sc/Grade 12 equivalent will be required for admission in the MPhil/MS.

### Entry Test:

To be conducted by the Ziauddin University and Preliminary interview

### COURSE OUTLINE OF DIPLOMA IN HEALTHCARE MANAGEMENT

#### SEMESTER 1

1. Managing Healthcare Organization
2. Epidemiology and Demography
3. Biostatistics
4. Communication Skills for Healthcare Workers

#### SEMESTER 2

1. Research Methodology
2. Financial Management
3. Human Resource Management
4. Health Management Information System (HMIS)

#### SEMESTER 3

1. Introduction to Healthcare Systems
2. Ethics, law and Jurisprudence
3. Organizational Development, Organizational Behaviour and Leadership
4. Continuous Quality Improvement (CQI)

### PEDAGOGY

The learning process will be through a mix of lectures, case-based sessions, small group sessions, exercises, assignments and internet-based teaching.

Mandatory electives in the field of choice will allow students to sharpen their skills through application of theoretical learning.

### PROGRAMME OUTCOME

After successful completion of programme, the participants will be able to:

1. Analyse contemporary healthcare systems
2. Incorporate research as a mandatory tool for learning and sharing new information.
3. Use scientific and evidence based approach for provision of quality healthcare, which is efficient and cost-effective.
4. Apply epidemiological and statistical concepts for better planning and management of health related issues.
5. Apply principles of financial management, allocation of resources, priority setting and decision making.
6. Demonstrate use of health information systems and technology for effective management of healthcare organization.
7. Market healthcare services focusing on consumer behavior and needs.
8. Apply concepts of human resource management in order to optimize performance.
9. Effectively manage healthcare systems at different levels of care to achieve organizational.

## MASTERS IN HEALTHCARE MANAGEMENT

### VISION

Revolutionize healthcare through a structured programme focusing on management, research, education, systems improvement, training and development.

### MISSION

To inculcate managerial competencies in healthcare professionals and bringing them at par with the changing global scenario.

### OBJECTIVES

Develop, monitor, evaluate, review and maintain a Postgraduate curriculum that provides:

1. An essential core of knowledge and skills, concepts, tools and techniques of management and administration
2. Basic concepts and techniques of problem-solving, data evaluation and assessment
3. Computer application to health information
4. Relevant correlations between management, finance and IT application to health care, through interdisciplinary courses and through early and continuous exposure to health care delivery facilities
5. A thorough grounding in professional ethics in Health System Management needed to interact appropriately with other care-providers, administrators, patients and their families.

### WHO SHOULD APPLY?

Hospital Administrators, Medical Directors, Unit Head of Hospitals, Doctors, Dentists, Nurses, Health technicians, Pharmacists, Doctors in Public sector health system, NGO Personnel

### TIMING & MODUS OPERANDII

- A student should undertake 4 courses per Semester
- Saturdays (2 pm to 9 pm) and Sundays (10 am to 5 pm)

### ELIGIBILITY CRITERIA

The applicant must have a Bachelor's degree from HEC recognized educational institution in Medicine and Allied (nursing, pharmacy, biomedical engineering etc.)

- Sixteen years of schooling or 4 year education (124 credit hours) after HSSC /F.Sc/Grade 12 equivalent will be required for admission in the M.Phil/MS.

### Entry Test:

To be conducted by the Ziauddin University and Preliminary interview

### COURSE STRUCTURE OF MASTERS IN HEALTHCARE MANAGEMENT

Institute	Masters in Healthcare Management Credit	Credit Hours
Total Courses	22 (3 credit hour each course)	66
Thesis	-	6
Total Credit Hours		72

### PEDAGOGY

The learning process will be through a mix of lectures, case based sessions, small group sessions, exercises, assignments and internet based teaching.

Mandatory electives in the field of choice will allow students to sharpen their skills through application of theoretical learning

### PROGRAMME OUTCOME

After successful completion of programme, the participants will be able to:

1. Analyse contemporary healthcare systems
2. Incorporate research as a mandatory tool for learning and sharing new information
3. Use scientific and evidence based approach for provision of quality healthcare, which is efficient and cost-effective.
4. Apply epidemiological and statistical concepts for better planning and management of health related issues.
5. Apply principles of financial management, allocation of resources, priority setting and decision making.
6. Demonstrate use of health information systems and technology for effective management of healthcare organization.
7. Market healthcare services focusing on consumer behaviour and needs.
8. Apply concepts of human resource management in order to optimize performance.
9. Effectively manage healthcare systems at different levels of care to achieve organizational.



## DIPLOMA IN MEDICAL JURISPRUDENCE

### INTRODUCTION

Diploma in Medical Jurisprudence is a two-year postgraduate diploma programme to train and equip medical graduates with the relevant professional and ethical knowledge to perform in the medicolegal section of a primary or tertiary care hospital, or to serve in the academic arena as faculty of Forensic Medicine & Toxicology.

### MISSION

To produce physicians having the legal and ethical insight to serve as better Medico-Legal experts and to improve the medicolegal system of the country by academic contribution.

### OBJECTIVES

The training will develop the academic insight and competency within the enrolled candidates to,

- Conduct medicolegal examinations and autopsies fulfilling all the requirements of the legal system of Pakistan.
- To understand DNA fingerprinting, its application and limitations in resolving the cases of legal importance.
- To understand the pathological basis of injury and signs that may provide clue to the cause of death.
- To identify common lapses and limitations with in the prevailing Medicolegal system of the country and being able to provide suggestions to improve the system in the light of advancements in the field of Forensic Medicine.
- To understand the laws governing the practice of healthcare provision along with the ethical concerns.
- To serve as a medicolegal expert.

### ELIGIBILITY CRITERIA

MBBS + One year House Job + Valid PMDC Registration with, one year of teaching experience as demonstrator in the Department of Forensic Medicine & Toxicology, of a PMDC recognized institute/One year experience as

Medicolegal Officer.

- Eligible Candidates will have to pass the entry test held by Ziauddin University.
- Short-listed candidates will be interviewed.
- Final Selection will be made on cumulative basis (Experience + Entry test + Interview).

### REQUIRED DOCUMENTS

Documents required for the admission

- Completed DMJ application form
- Copy of MBBS degree with mark sheets of professional examinations and certificate of number of attempts in the professional examinations.
- Copy of PMDC registration certificate
- Three latest passport size photographs
- Reference letters from two consultants, with whom the applicant has worked
- Certificates of completion of required experience
- NOC to attend the course, from the institute (If currently employed).

### ASSESSMENT

D.M.J Course consists of 2 parts of one year each that is PART I and PART II.

After completion of each session (1 year), Ziauddin University, Karachi will conduct examination, as per schedule announced by the Controller of Examination.

Examinations will consist of two components.

#### Components:

1. Theory Examination
2. OSCE & Viva Examination.

80% attendance is mandatory to be eligible in the exams.

### SCOPE

After going through this course, successfully, the candidate will be able to serve on the government positions within the Medicolegal system of the country.

The successful candidates serving as faculty members will have a better opportunity to be promoted as per rules and regulations of PMDC.

## POSTGRADUATE PROGRAMME IN BASIC HEALTH SCIENCES MPhil/PhD

The Postgraduate Programme in Basic Health Sciences started at ZU in 1997. This integrated programme is divided into semesters and provides extensive experience and training to the candidates who acquire knowledge, skills and an attitude required for teaching and research. The curriculum is covered through lectures, seminars, journal club and research that includes both basic science wet lab research and clinical research. Systems are placed for evaluation and performance concerning the candidate's performance and proper guidance for appropriate growth in all areas of training and professional experience.

### MASTER OF PHILOSOPHY (MPHIL)

MPhil candidates in Basic Health Sciences will have to be full time research students for a minimum period of 1.5 academic years. The degree shall be awarded based on both, course work and thesis. The course work is covered in two semesters. The programme is recognised by Pakistan Medical and Dental Council (PMDC) and Higher Education Commission (HEC) and follows regulations for registration to research studies leading to a degree of MPhil in the following subjects: Anatomy, Biochemistry, Physiology, Pathology, Pharmacology and Forensic Medicine.

### DOCTOR OF PHILOSOPHY (Ph.D)

PhD students in various faculties of Health and Medical Sciences will have to be full time research students for a minimum period of three academic years. The coursework of degree shall be awarded both by course work and thesis. The programme is recognised by PMDC and HEC and follows regulations for registration to research studies leading to the degree of doctorate in the following subjects of Medical and Health Sciences: Biochemistry, Pathology, Pharmacology and Physiology.

### ADMISSION POLICY

#### ELIGIBILITY CRITERIA

- a) Candidates possessing MBBS/BDS/equivalent degree from a HEC recognised university.
- b) MPhil / PhD GAT exam by university
- c) NTS/GAT
- d) Interviews of candidates shortlisted on the basis of performance in the MPhil GAT exam by university.

Final selection of candidates will be based on the previous academic record and experience, entry test and an interview.



## POSTGRADUATE PROGRAMMES IN CLINICAL SUBJECTS

Ziauddin University offers MD/MS programme of a 4 to 5-year duration in various disciplines. The course is designed to produce skilled practitioners, researchers and teachers with exceptional proficiency in the chosen clinical field. The course comprises core subjects and also focuses on clinical research practices.

The programme is supervised by qualified faculty and has support of allied disciplines. The University hospitals are modern and fully equipped with diagnostic services, inpatient facilities including Intensive and Coronary Care Units and also fully equipped Radiology department with an interventional procedures facility. The library is well provided with latest journals and also has multimedia facilities including Internet.

For medical graduates interested in pursuing a research degree, the University offers the following programmes:

### DOCTOR OF MEDICINE (MD)

- Cardiology
- Critical Care
- Dermatology
- Emergency Medicine

- Gastroenterology
- Nephrology
- Neurology
- Nuclear Medicine
- Medicine
- Paediatrics
- Psychiatry
- Radiology
- Radiotherapy (Radiation Oncology)
- Rheumatology

### MASTER OF SURGERY (MS)

- ENT
- General Surgery
- Orthopaedic Surgery
- Gynaecology and Obstetrics
- Ophthalmology
- Urology

### ADMISSION POLICY

#### ELIGIBILITY CRITERIA

- Candidates possessing MBBS or equivalent qualification recognised by PMDC and have done one year of House Job in an institute recognised by PMDC.
- Eligible candidates will be required to pass a GAT exam and will be interviewed for suitability by the Postgraduate Committee.

## DIPLOMA PROGRAMMES

The University offers Postgraduate Diplomas in the following disciplines:

- Anaesthesia
- Cardiology
- Dermatology
- Family Medicine
- Medical Oncology
- Paediatric Medicine
- Psychiatry
- Gynaecology and Obstetrics
- Clinical Pathology
- Transfusion Medicine

## POSTGRADUATE TRAINING

Ziauddin University is recognised for postgraduate training by the College of Physicians and Surgeons Pakistan for the following programmes:

### MCPS

- Ophthalmology
- Clinical pathology

### FCPS

- Anaesthesia
- Chemical Pathology
- ENT
- Gastroenterology
- Haematology
- Histopathology
- Medicine
- Microbiology
- Neurology
- Gynaecology and Obstetrics
- Radiology
- Paediatrics
- Surgery
- Nephrology

- Pulmonology
- Critical care
- Orthopaedics
- Forensic Medicine
- Family Medicine
- Radiation oncology
- Urology
- Ophthalmology
- Operative Dentistry
- Medical Oncology
- Oral and Maxillofacial Surgery
- Community Medicine

### Post Fellowship

- Hepatobiliary and liver Transplant Surgery

### MRCOG

- Gynaecology and Obstetrics





## FACULTY MEMBERS

### PRO-CHANCELLOR

Prof. Dr. Nida Hussain

### DEAN, FACULTY OF HEALTH SCIENCES

Prof. Dr. Abbas Zafar

### PRINCIPAL, ZIAUDDIN COLLEGE OF MEDICINE

Prof. Dr. Nuzhat Hassan

### DIRECTOR, POSTGRADUATE STUDIES (CLINICAL)

Dr. Ashar

### DIRECTOR POSTGRADUATE (BASIC HEALTH SCIENCES)

Prof. Dr. Shamim Mushtaq

### ASSOCIATE DIRECTOR ACADEMICS, NORTH SITE (CLINICAL)

Prof. Dr. Ahmed Fawad

### ASSOCIATE DIRECTOR ACADEMICS, CLIFTON SITE (CLINICAL)

Prof. Dr. Uzma Ghouri

### ASSOCIATE DIRECTOR ACADEMICS, KDLB (CLINICAL)

Dr. Fasiha Sohail

### DEPARTMENT OF ANATOMY

DR. BUSHRA WASIM  
PROFESSOR AND HOD  
MBBS, FCPS, PHD

DR. KEVIN JOSEPH JEROME BORGES  
PROFESSOR  
MBBS, M.PHIL, CHPE, CFM, PHD (SCHOLAR)

DR. SYED NUDRAT NAWAID SHAH  
ASSOCIATE PROFESSOR  
MBBS, M.PHIL, CHPE, CFM, PHD (SCHOLAR)

DR. MADEEHA SADIQ  
ASSOCIATE PROFESSOR  
MBBS, M.PHIL, CHPE, CFM, PHD (SCHOLAR)

DR. MUBINA  
ASSISTANT PROFESSOR  
BDS, M.PHIL, CHPE, PHD (SCHOLAR)

DR. TABINDA  
ASSISTANT PROFESSOR  
MBBS, M.PHIL, PHD (SCHOLAR)

DR. INAYATULLAH  
ASSISTANT PROFESSOR  
MBBS, M.PHIL, CHPE, PHD (SCHOLAR)

DR. GULRAIZ KARIM RIND BALOCH  
ASSISTANT PROFESSOR  
MBBS, M.PHIL, PHD (SCHOLAR)

DR. ALI SALEEM LALANI  
LECTURER  
MBBS

### BIOCHEMISTRY

SYED ZARYAB AHMED  
HOD & ASSOCIATE PROFESSOR  
MBBS, M.PHIL, CHPE, CFM, PHD (SCHOLAR)

DR. SHAMIM MUSHTAQ  
PROFESSOR & DIRECTOR POSTGRADUATE  
PROGRAMME (BHS)  
BS, MSC, PH.D

DR. AFREEN BHATTY  
ASSISTANT PROFESSOR  
BDS, MPHIL, PHD (SCHOLAR)

DR. ALIYA IRSHAD SANI  
ASSISTANT PROFESSOR  
MBBS, MPHIL, PHD (SCHOLAR)

DR. HAFIZ SYED MUHAMMAD OSAMA JAFRI  
ASSISTANT PROFESSOR  
BDS, MPHIL, PH.D. (SCHOLAR)

DR. TEHREEM KANWAL  
ASSISTANT PROFESSOR  
MBBS, MPHIL

### PHYSIOLOGY

SYED TOUSIF AHMED  
PROFESSOR  
MBBS, M.PHIL., PH.D. (SCHOLAR)

SHAZIA HASHMAT  
ASSOCIATE PROFESSOR  
BDS, MPHIL

HUMA ASIF  
ASSISTANT PROFESSOR  
MBBS, MPHIL., PH.D. (SCHOLAR)

HIRA ATTIQUE  
ASSISTANT PROFESSOR  
MBBS, M.PHIL., PH.D. (SCHOLAR)

DR. MURK FATIMA  
ASSISTANT PROFESSOR  
MBBS, M.PHIL

DR. MAHREEN INAM  
ASSISTANT PROFESSOR  
MBBS, M.PHIL

### PATHOLOGY

PROF. DR. FOUZIA SHAIKH  
HOD AND PROFESSOR  
MBBS, MPHIL, PHD

DR. FARAZ AHMED BAIG  
PROFESSOR  
MBBS, M.PHIL., PH.D. (SCHOLAR)

DR. NAJIA TABASSUM  
ASSOCIATE PROFESSOR  
MBBS, M. PHIL, PH. D (SCHOLAR)

DR. ZEHRA  
ASSITANT PROFESSOR,  
BDS, MPHIL

DR. MARVI  
ASSISTANT PROFESSOR  
MBBS, MPHIL

### MICROBIOLOGY - PATHOLOGY

PROF. FAISAL IQBAL AFRIDI  
ASSISTANT PROFESSOR  
MBBS, MPHIL, PH.D.

### HISTOPATHOLOGY - PATHOLOGY

FOUZIA LATEEF  
MBBS, MCPS, FCPS

AZIZ UN NISA  
MBBS, FCPS

### CHEMICAL PATHOLOGY - PATHOLOGY

KASHIF HAFEEZ SHAIKH  
ASSISTANT PROFESSOR  
MBBS, FCPS

NOUREEN SHAKIL  
ASSISTANT PROFESSOR  
MBBS, FCPS

ZULQARNAIN  
ASSISTANT PROFESSOR  
MBBS, FCPS

### HEMATOLOGY - PATHOLOGY

KASHIF HAFEEZ SHAIKH  
ASSISTANT PROFESSOR  
MBBS, FCPS

NOUREEN SHAKIL  
ASSISTANT PROFESSOR  
MBBS, FCPS

ZULQARNAIN  
ASSISTANT PROFESSOR  
MBBS, FCPS

**PHARMACOLOGY**

DR. M. OWAIS ISMAIL  
PROFESSOR AND HOD  
MBBS, MPHIL, PH.D. (SCHOLAR)

DR. SHEHLA SHAHEEN  
PROFESSOR  
MBBS, MPHIL, PH.D. (SCHOLAR)

DR. KAUSER MOIN MIRZA  
ASSOCIATE PROFESSOR  
MBBS, MPHIL, PH.D. (SCHOLAR)

DR. ABDUL JABBAR QURESHI  
ASSISTANT PROFESSOR  
BDS, M.PHIL., PH.D. (SCHOLAR)

DR. AKHTAR ALI  
ASSISTANT PROFESSOR  
BDS, M.PHIL., MS-HCM, PH.D. (SCHOLAR)

DR. SOHA HAQUE  
ASSISTANT PROFESSOR  
MBBS, M.PHIL.

DR. HAROON UR RASHEED  
ASSISTANT PROFESSOR  
BDS, M.PHIL.

**FORENSIC MEDICINE**

PROF. DR. QUDISA HASSAN  
PROFESSOR  
M.B.B.S, DMJ, FCPS, PH.D., DIP. BIOMEDICAL ETHICS

DR. MUHAMMAD IKRAM ALI  
ASSOCIATE PROFESSOR  
M.B.B.S, DMJ, DIP. BIOMEDICAL ETHICS

**COMMUNITY HEALTH SCIENCES**

DR. IMRAN SHAIKH  
PROFESSOR/HOD  
MBBS, MPH (AUST.), FCPS, FELLOW OF FAIMER – ECFMG (USA)

DR. FARAH AHMED  
PROFESSOR  
MBBS, DCPS, MSBE, MCPS, CHPE, PH.D. (SCHOLAR)

DR. SYED HASSAN DANISH

ASSOCIATE PROFESSOR  
MBBS, MPH (USA), CHPE, FCPS

DR. BINA FAWAD  
ASSISTANT PROFESSOR  
MBBS, DCPS (CPSP), FCPS, PHD (SCHOLAR)

**FAMILY MEDICINE**

FATIMA JEHANGIR  
PROFESSOR, HOD & ASSOCIATE DIRECTOR  
ACADEMICS  
MBBS, FCPS

YASEEN USMAN  
ASSISTANT PROFESSOR  
MBBS, MCPS, MRCGP

RIZWANA HASHMI  
ASSISTANT PROFESSOR  
MBBS, MCPS, MRCGP

DR. VINOD KUMAR  
ASSISTANT PROFESSOR  
MBBS, FCPS

MADIHA ATHAR  
SENIOR REGISTRAR  
MBBS, MCPS, DFM

NAUREEN KAZMI  
SENIOR REGISTRAR  
MCPS, DFM, MBBS

AROOSA JEHAN  
SENIOR REGISTRAR  
MBBS, MCPS, MRCGP, DFM

JAWAID HABIB  
SENIOR REGISTRAR  
MBBS, MCPS, MRCGP

NAWAB BIJARANI  
SENIOR REGISTRAR  
MBBS, DFM

TALAT PARVEEN  
SENIOR REGISTRAR  
MBBS, MCPS

DR. FARHAN ZAIDI  
SENIOR REGISTRAR  
MBBS, DFM, MCPS

**ONCOLOGY**

DR. ADNAN ABDUL JABBAR  
PROFESSOR MEDICAL ONCOLOGY &  
CHAIRMAN OF DEPARTMENT OF ONCOLOGY  
MBBS, MD, PH.D., DIPLOMATE AMERICAN  
BOARD OF INTERNAL MEDICINE, DIPLOMATE  
AMERICAN BOARD OF MEDICAL ONCOLOGY

DR. JAWAID MALLICK  
ASSOCIATE PROFESSOR CLINICAL ONCOLOGY  
MBBS, MCPS, MD CLINICAL ONCOLOGY

DR. ABNE HASAN  
CONSULTANT RADIATION ONCOLOGIST  
RADIATION ONCOLOGIST, RESIDENCY  
TRAINING AT THOMAS JEFFERSON UNIVERSITY  
HOSPITAL PHILADELPHIA, USA

DR. ASIF HUSSAIN OSMANI  
ASSOCIATE PROFESSOR MEDICAL ONCOLOGY  
MBBS, MCPS (MEDICINE), FCPS (MEDICINE),  
FCPS (MEDICAL ONCOLOGY), FRCP  
(GLASGOW), CLINICAL FELLOWSHIP MEDICAL  
ONCOLOGY (AKU).

DR. MUHAMMAD NAUMAN ZAHIR  
ASSOCIATE PROFESSOR MEDICAL ONCOLOGY  
MBBS, FCPS (INTERNAL MEDICINE), FCPS  
(MEDICAL ONCOLOGY), FACP, SCE MEDICAL  
ONCOLOGY (UK)

DR. QURRATULAIN BADAR  
ASSISTANT PROFESSOR RADIATION  
ONCOLOGY  
MBBS, FCPS (RADIATION ONCOLOGIST)

DR. AMNA QAMMAR-US- ZAMAN  
SENIOR REGISTRAR HEMATOLOGY  
ONCOLOGY  
MBBS, FCPS (HEMATOLOGY)

DR. SHABBIR HUSSAIN ASHIQ ALI  
ASSISTANT PROFESSOR CLINICAL ONCOLOGY  
MBBS, MD (CLINICAL ONCOLOGY) FELLOWSHIP  
IN LUNG AND PROSTATE CANCER ROYAL  
MARSDEN HOSPITAL NHS

DR. FARRUKH ASHRAF  
SENIOR REGISTRAR RADIATION ONCOLOGY  
MBBS, DMRT, MD (CLINICAL ONCOLOGY)

DR. REENA KUMARI  
SENIOR REGISTRAR CONSULTANT MEDICAL

ONCOLOGIST  
MBBS, FCPS (MEDICAL ONCOLOGY)

**CLINICAL  
KDLB**

DR. FASIHA SOHAIL  
ASSISTANT DIRECTOR /ASSOCIATE PROFESSOR

DR. AMBER KHALID  
ASSISTANT PROFESSOR  
OPHTHALMOLOGY

PROF. IJAZ AHMED  
PROFESSOR  
DERMATOLOGY  
DR. FATIMA AKHUND  
REGISTRAR  
DERMATOLOGY DIP MBBS DERM

PROF. HABIBA SHARAF ALI  
PROFESSOR  
GYNAECOLOGY

DR. UROOJ MALIK  
PROFESSOR  
GYNAECOLOGY

PROF. FAISAL ZIAUDDIN  
PROFESSOR  
MEDICINE MBBS, MCPS, FCPS

DR. ARFEEN AZAM  
ASSISTANT PROFESSOR  
MEDICINE MBBS, FCPS (MEDICINOLOGIST) SCE ( ACUTE MEDICINE)

DR. NAEEM A QURESHI  
SURGERY  
MBBS, DFM

DR. ZAIN ALLY  
SENIOR REGISTRAR  
PAEDIATRICS

DR. TAYYABA ANWAR  
ASSISTANT PROFESSOR  
PAEDIATRICS

DR. HEENA RAIS  
ASSOCIATE PROFESSOR  
PAEDIATRICS MBBS, FCPS (PAEDS)

DR. NADEEM A BALOCH



PROFESSOR  
ORTHOPEDICS

DR. SAMEEHA ALEEM  
ASSISTANT PROFESSOR  
PSYCHIATRY

MS. QURAT UL AIN ARIF  
CLINICAL PSYCHOLOGIST  
PSYCHIATRY

DR. OME KULSOOM  
ASSISTANT PROFESSOR  
GYNAECOLOGY

DR. SHAHBAZ  
SENIOR REGISTRAR  
ORTHOPEDICS, MBBS, FCPS , MRCS

DR. SADAF CHISTI  
SENIOR REGISTRAR  
SURGERY

DR. MUBASHIR IKRAM  
PROFESSOR  
ENT

DR. WASIF  
ASSISTANT PROFESSOR  
ENT

DR. ZAHID ALI  
ASSISTANT PROFESSOR  
SURGERY MBBS, FCPS

DR. BILQEES SABA  
SENIOR REGISTRAR  
NEPHROLOGY, MBBS FCPS

DR. MARIA ABID  
ASSISTANT PROFESSOR  
INTERNAL MEDICINE

DR. RAJA KHETPAL  
SENIOR REGISTRAR  
PSYCHIATRY

DR. ALI AKBER  
SENIOR REGISTRAR  
ENT

DR. SHARJEEL SULTAN  
PROFESSOR  
OPHTHALMOLOGY

DR. SUMERA NAWAZ  
ASSISTANT PROFESSOR  
MEDICINE, MBBS, MCPS MD ( INTERNAL MED)

DR. SABA SAFDAR  
SENIOR REGISTRAR  
PAEDS, MBBS, DCH

**CLIFTON  
DEPARTMENT OF MEDICINE**

PROF. DR. UZMA GHORI  
PROFESSOR, HOD & ASSOCIATE DIRECTOR  
ACADEMIC, MBBS, FCPS  
PROF. DR. NIDA HUSSAIN  
PROFESSOR & PRO CHANCELLOR  
MBBS, MD DIPLOMAT AMERICAN BOARD

PROF. DR. UMER JAHANGIR  
PROFESSOR  
MBBS FCPS

DR. KHURRAM BAQAI  
ASSISTANT PROFESSOR  
MBBS, FCPS

DR. OSAMA KHALID  
ASSISTANT PROFESSOR  
MBBS, MRCP

DR. NADEEM AHMED MEMON  
ASSISTANT PROFESSOR  
MBBS, FCPS, POST FELLOWSHIP CLINICAL  
NEUROPHYSIOLOGY

DR. ALI HASSAN  
ASSOCIATE PROFESSOR  
MBBS, FCPS

DR. HASSAN SHAIKH  
ASSISTANT PROFESSOR  
MBBS MRCP

DR. KANEEZ ZEHRA  
ASSISTANT PROFESSOR  
MBBS, FCPS, EUS

DR.ASHOK KUMAR  
ASSOCIATE PROFESSOR  
MBBS, FCPS, PULMONOLOGY HERMES MRCPS

DR. NADIA JAWAD  
REGISTRAR  
MBBS, FCPS

**DEPARTMENT OF FAMILY MEDICINE**

DR. FATIMA JAHANGIR  
PROFESSOR, HOD & ASSOCIATE DIRECTOR  
ACADEMICS  
MBBS, FCPS

DR. YASEEN USMAN  
ASSISTANT PROFESSOR  
MBBS, MCPS MRCGP MES

DR. VINOD  
ASSISTANT PROFESSOR  
MBBS, FCPS

DR. RIZWANA HASHMI  
ASSISTANT PROFESSOR  
MBBS, MCPS, MRCGP

DR. NAWAB BIJRANI  
SENIOR REGISTRAR  
MBBS, DFM

DR. JAWED HABIB  
SENIOR REGISTRAR  
MBBS MCPS MRCGP

DR. FARHAN ZAIDI  
SENIOR REGISTRAR  
MBBS, DFM MCPS

DR. NAUREEN KAZIM  
SENIOR REGISTRAR  
MBBS, DFM, MCPS

DR. MADIHA ATHAR  
SENIOR REGISTRAR  
MBBS DFM MCPS

DR. AROOSA JAHAN  
SENIOR REGISTRAR  
MBBS, DFM, MCPS, MRCGP

**DEPARTMENT OF SURGERY**

PROF. DR. WAJAHAT WASTY  
PROFESSOR & HOD  
MBBS, FCPS

PROF. DR. TARIQ MUHAMMAD  
PROFESSOR  
MBBS, FCPS

PROF. DR. SOHAIL RAFI  
PROFESSOR & HOD  
MBBS, FCPS

DR. IDRESS SHAH  
ASSOCIATE PROFESSOR  
MBBS, FCPS

DR. NADIA HAROON  
ASSISTANT PROFESSOR  
MBBS, FCPS

**DEPARTMENT OF RADIOLOGY**

PROF. DR. MUHAMMAD ALI  
PROFESSOR & HOD  
MBBS FCPS EDIR (EUROPEAN FELLOWSHIP  
VIR)AKU MSC ONCOLOGIC IMAGING (ITALY)

DR. FARHAN AHMED  
MBBS, FCPS EDIR FELLOWSHIP VIR

DR. GULRAIZ HIKMATYAR  
MBBS, MD

DR. ANUM SULTAN  
ASSISTANT PROFESSOR  
MBBS, FCPS, EDIR (EUROPEAN BOARD),  
FELLOWSHIP PET-CT IMAGING (SKCMH)

DR. AFSHAN SHAIKH  
MBBS, FCPS, FELLOWSHIP IMAGING (AKUH)

**DEPARTMENT OF PEDIATRICS**

DR. ZAIN ALY  
MD( USA),  
FELLOWSHIP IN PEDIATRIC NEUROLOGY (USA)

DR. SHAISTA EHSAN  
( PEDIATRIC UNIT HEAD ) PROFESSOR  
PEDIATRICS,  
FCPS ,MCPS-HPE

DR. MUHAMMAD SHAHMUDDIN  
FRCPCH ( LONDON ),  
PEDIATRIC NEONATOLOGIST

**DEPARTMENT OF GYNAE & OBS**

PROF. DR. RUBINA HUSSAIN  
PROFESSOR & HOD  
MBBS, FCPS  
PROF. DR. SUMBUL SOHAIL  
PROFESSOR  
MBBS, FCPS

DR. MEHREEN AHSAN  
ASSOCIATE PROFESSOR  
MBBS, FCPS

DR. MARIA KHALID  
SENIOR REGISTRAR  
MBBS, FCPS  
DR. FATIMA BIBI  
SENIOR REGISTRAR  
MBBS, FCPS

**DEPARTMENT OF SKILLS LAB**

DR. QASIM AHMED  
DIRECTOR  
MBBS, DCN

DR. WAJEEHA MANSOOR  
ASSISTANT DIRECTOR  
MBBS

DR. AMBER HAMEED  
INSTRUCTOR  
MBBS

**DEPARTMENT OF ENT**

PROF. DR. MUBASHER IKRAM  
PROFESSOR  
MBBS (PAK), FACS, (USA) FRCS, (GLAG) FRCS,  
(ED)

ACADEMIC COORDINATOR  
MS. MARIAM BHOJANI  
ACADEMIC COORDINATOR  
MCOM, BCOM

**NORTH  
ANESTHESIOLOGY**

SAJID SAIF  
SR. REG.  
ANESTHESIOLOGY

S. M. SHAIQUE  
SR. REG.  
ANESTHESIOLOGY

ZEESHAN MIRZA  
SR. REG.  
ANESTHESIOLOGY

**BIOCHEMISTRY**

DR. RIZMA KHAN  
ASSISTANT PROFESSOR  
BIOCHEMISTRY

**CARDIOLOGY**

NAHEED HANIF  
ASSOCIATE PROFESSOR  
CARDIOLOGY

MUHAMMAD JAWAID ANSARI  
ASSOCIATE PROFESSOR  
CARDIOLOGY

**CHEMICAL PATHOLOGY**

DR. KASHIF SHAIKH  
ASSISTANT PROFESSOR  
CHEMICAL PATHOLOGY

DR.SABA RAZA  
DR. SABA RAZA  
ASSISTANT PROFESSOR  
CHEMICAL PATHOLOGY

**CRITICAL CARE**

QURATULAIN KHAN  
ASSISTANT PROFESSOR  
CRITICAL CARE

**EMERGENCY MEDICINE**

SHUA NASIR  
ASSISTANT PROFESSOR  
EMERGENCY MEDICINE

LAL SHEHBAZ  
ASSISTANT PROFESSOR  
EMERGENCY MEDICINE

**ENT**

SYED HAIDER ABBAS RIZVI  
SR. REG.  
ENT

**GASTROENTEROLOGY**

SOHAIL HUSSAIN  
ASSISTANT PROFESSOR  
GASTROENTEROLOGY

NASIR LAIQUE AHMED  
ASSISTANT PROFESSOR  
GASTROENTEROLOGY

QAMARUL ARFIN  
ASSISTANT PROFESSOR  
GASTROENTEROLOGY

**GENERAL SURGERY**

HARIS RASHID SHAIKH

**PROFESSOR-CHAIRMAN**

GEN. SURGERY - ALLIED

SYED ASHRAF HASSAN  
PROFESSOR  
GEN. SURGERY

MIR ARSALAN ALI  
ASSISTANT PROFESSOR  
GEN. SURGERY

DR.FATIMA ZEHRA KHAN  
SENIOR REGISTRAR  
GEN. SURGERY

**HISTOPATHOLOGY**

DR. AZIZ-UN-NISA  
ASSOCIATE PROFESSOR  
HISTOPATHOLOGY

**INFECTIOUS DISEASES**

MUHAMMAD JAMEEL MUQTADIR  
ASSISTANT PROFESSOR  
INFECTIOUS DISEASES

**INTERNAL MEDICINE**

MAHMUD JILANI  
PROFESSOR  
INTERNAL MEDICINE

IMTIAZ KHALID  
ASSOC. PROF  
INTERNAL MEDICINE

SYED ALI RAZA  
ASSIST. PROF.  
INTERNAL MEDICINE

TAUSEEF AHMAD  
ASSIST. PROF  
INTERNAL MEDICINE

**MEDICAL ONCOLOGY**

DR.AMNA QAMAR-UZ-ZAMAN  
SENIOR REGISTRAR  
MEDICAL ONCOLOGY  
DR. MUHAMMAD NAUMAN ZAHIR  
ASSOCIATE PROFESSOR  
MEDICAL ONCOLOGY

DR. ADNAN ABDUL JABBAR  
PROFESSOR  
MEDICAL ONCOLOGY

**MICROBIOLOGY**

DR. FAISAL IQBAL AFRIDI  
PROFESSOR  
MICROBIOLOGY

**NEPHROLOGY**

SUMBAL NASIR MAHMOOD  
PROFESSOR  
NEPHROLOGY

FAIZA NAFEEES  
ASSISTANT PROFESSOR  
NEPHROLOGY

**NEUROLOGY**

BASHIR AHMED SOOMRO  
ASSOCIATE PROFESSOR  
NEUROLOGY

SHAZMA KHAN  
ASSISTANT PROFESSOR  
NEUROLOGY

**NEUROSURGERY**

INAYAT ALI KHAN  
ASSISTANT PROFESSOR  
NEUROSURGERY

**OBS. GYNECOLOGY**



RUBINA HUSSAIN  
PROFESSOR  
OBS. GYNECOLOGY

NIGAR SADAF  
ASSOC. PROFESSOR  
OBS. GYNECOLOGY

SHAMA CHAUDHRY  
ASSOC. PROFESSOR  
OBS. GYNECOLOGY

SHAZIA SULTANA  
ASSOC. PROFESSOR  
OBS. GYNECOLOGY

REHANA YASMEEN  
ASSIST. PROFESSOR  
OBS. GYNECOLOGY

DR. HUMA MUZAFFAR  
SENIOR REGISTRAR  
OBS. GYNECOLOGY

**ONCOLOGY / RADIOTHERAPY / NUCLEAR  
MEDICINE**

JAWAID A. MALICK  
ASSOC. PROFESSOR  
ONCOLOGY / RADIOTHERAPY / NUCLEAR  
MEDICINE

ASIF OSMANI  
ASSOC. PROF  
ONCOLOGY / RADIOTHERAPY / NUCLEAR  
MEDICINE

QURATUL AIN BADAR  
ASSIST. PROF.  
ONCOLOGY / RADIOTHERAPY / NUCLEAR  
MEDICINE

**ORTHOPEDICS**

DR. ATHAR MUNIRUDDIN SIDDIQUI  
ASSISTANT PROFESSOR  
ORTHOPEDICS

NASIM MUNSHI  
ASSIST. PROFESSOR  
ORTHOPEDICS

**PATHOLOGY**

DR. ARIF HUSSAIN  
PROFESSOR

**PATHOLOGY**

PEDIATRICS  
MUHAMMAD IQBAL  
PROFESSOR  
PEDIATRICS

FARHANA ZAFAR  
ASSOC. PROFESSOR  
PEDIATRICS

**PULMONOLOGY**

FATIMA ZAINA  
ASSIST. PROF.  
PULMONOLOGY

SYED ALI ABBAS  
ASSOC. PROF  
PULMONOLOGY

**RADIATION ONCOLOGY**

DR. FURRUKH  
SENIOR REGISTRAR  
RADIATION ONCOLOGY

**RADIOLOGY**

KAMRAN HAMID  
ASSOC. PROF  
PULMONOLOGY

AMMAD HUSSAIN  
ASSOC. PROF  
RADIOLOGY

DR. MUNAZA IRSHAD  
SENIOR REGISTRAR  
RADIOLOGY

DR. RAFAY GUL  
ASSIST. PROF.  
RADIOLOGY

**RADIOTHERAPY / NUCLEAR MEDICINE**

SAJID SATTAR  
ASSOC. PROF  
RADIOTHERAPY / NUCLEAR MEDICINE

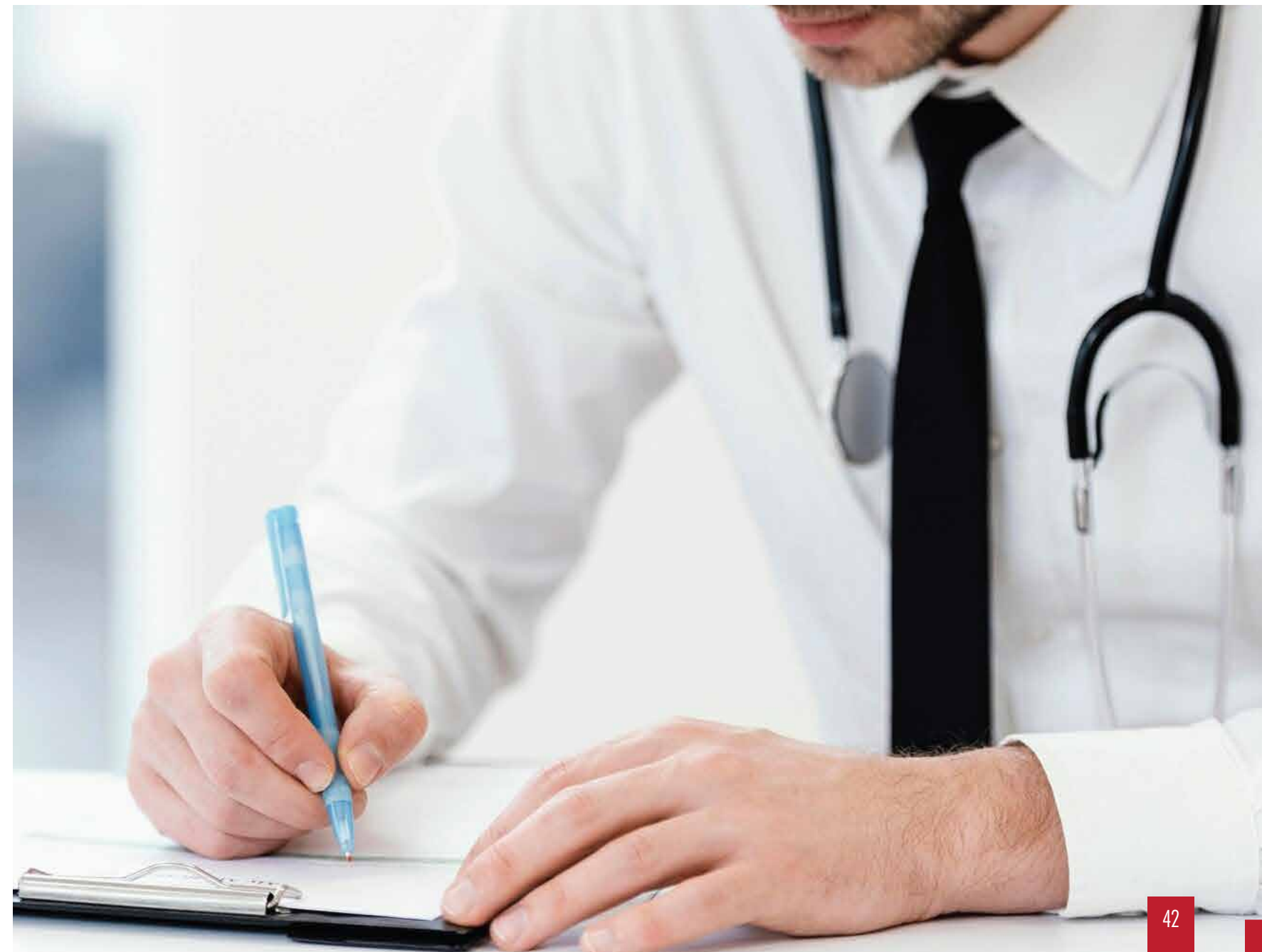
**UROLOGY**

AHMED FAWAD  
PROFESSOR  
UROLOGY

ATIF JAVED  
ASSIST. PROF  
UROLOGY

**RADIOTHERAPY / NUCLEAR MEDICINE**

DR. AHSAR EKHLAQ AHMED  
ASSOCIATE PROFESSOR OF MEDICINE AND  
CONSULTANT RHEUMATOLOGIST  
MBBS, FRCP, MRCP (UK), (RHEUMATOLOGY),  
CCT RHEUMATOLOGY  
&G(I)M (UK)



# COLLEGE OF DENTISTRY

## KEY INFORMATION

### PRINCIPAL

Prof. Dr. Wahab Buksh Kadri

### CONTACT INFORMATION

Website:

<https://zu.edu.pk/college-of-dentistry>

Telephone:

+92-21-35862937-9 Ext: 2219 - 2228

Email:

[zcd@zu.edu.pk](mailto:zcd@zu.edu.pk)

Locate Us:

4/B, Shahrah-e-Ghalib, Block 6, Clifton,  
Karachi.



Commencing a four-year dental programme at Ziauddin University was a significant undertaking, packed with obstacles that required tenacity and resolve. I am pleased to have conquered these hurdles and secured triumph as I stand on the verge of completion today. In addition to being a personal victory, receiving the gold medal for leading the entire 2024 batch is evidence of the perseverance, hard work, and restless nights I have gone through. It took blood, sweat, and tears to be in this position, but by the will of Allah, I achieved this feat. I would like to take a moment to appreciate my parents for their unconditional love and support throughout this rollercoaster journey. Their direction has been my compass and my courage.

To every mentor who believed in my potential, I extend my deepest gratitude. This honour fills me with profound pride and appreciation as I reflect on the transformative nature of these four years.

I am very grateful for this honour. With this newfound knowledge and skill set from Ziauddin University, I eagerly anticipate making a positive impact in the field of dentistry.

**RABEEA SALMAN**  
BDS



## INTRODUCTION

College of Dentistry started its BDS programme in January 2010 with the mission to prepare confident dental professionals who are committed to excellence in the field of patient care and research that widens the horizon of knowledge regarding to community health problems.

At College of Dentistry, a student is identified as an adult learner and is expected to develop as a responsible individual by taking care of the community's dental problems.

## VISION

To be recognized as a leading dental institution known nationally and internationally for providing academic excellence of the highest professional standards to enable dental graduates to be the leaders in delivering quality oral healthcare services.

## MISSION

To develop dental health professionals from diverse groups of people as leaders, possessing virtues of dignity and humanity, with clinical excellence, to meet the primary oral health care needs. Emphasis is placed on promoting critical reasoning, self-directed and lifelong learning competencies to research, communicate and lead efficiently. Community-oriented, evidence-based, and innovative technology-enhanced teaching enables students to be ethically and socially accountable in treating patients and addressing the challenges of the dental healthcare industry.

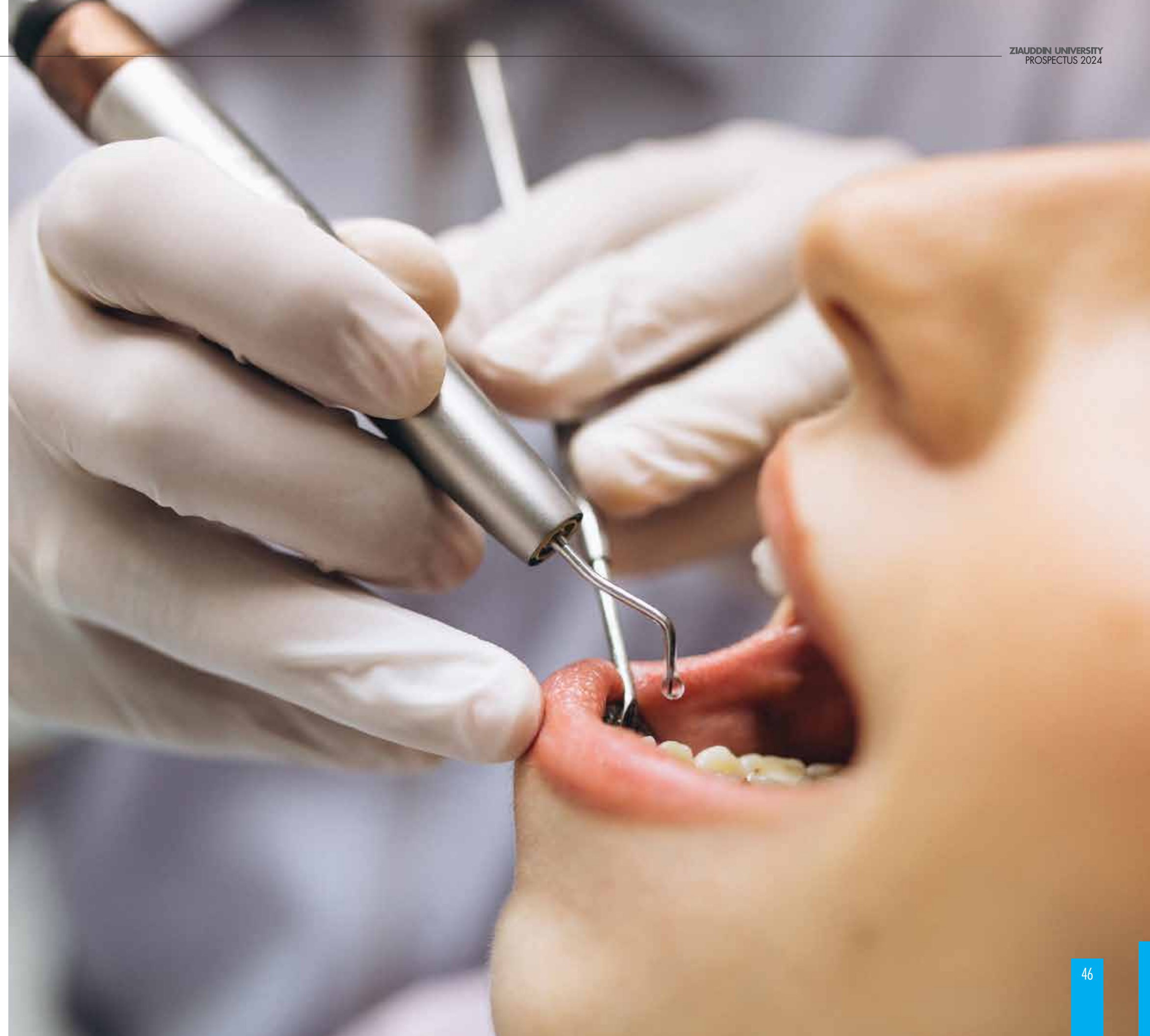
## COMPETENCIES OF ZU GRADUATES:

At Ziauddin University we expect to develop in you the following competencies:

- I. Skillful
- II. Self-directed and life-long learner
- III. Communicator
- IV. Collaborator
- V. Professional
- VI. Researcher
- VII. Leader

## PROGRAMMES OFFERED

College of Dentistry offers BDS undergraduate programme, recognised by the Pakistan Medical and Dental Council (PMDC). PMDC is the regulatory body responsible for issuing a license to practice dentistry.



## BACHELOR OF DENTAL SURGERY (BDS)

College of Dentistry offers a four-year undergraduate degree programme leading to Bachelor of Dental Surgery (BDS).

### MISSION

To develop dental health professionals from diverse groups of people as leaders, possessing virtues of dignity and humanity, with clinical excellence, to meet the primary oral health care needs. Emphasis is placed on promoting critical reasoning, self-directed and lifelong learning competencies to research, communicate and lead efficiently. Community-oriented, evidence-based, and innovative technology-enhanced teaching enables students to be ethically and socially accountable in treating patients and addressing the challenges of the dental healthcare industry.

### COURSE DETAILS

The BDS programme is divided into four academic years; each year comprises a number of modules related to subject specific scientific information, in accordance with PMDC recognised curriculum. College of Dentistry has taken the initiative of developing and implementing a horizontally integrated curriculum. The curriculum makes use of the latest teaching strategies, which are aimed at providing better quality of education to the students.

### LEARNING AND TEACHING STRATEGIES

The college recognises the challenges met by students once they enter into professional lives. Therefore, students are empowered to adapt to the different ways of absorbing information and take responsibility of their own learning using student centered learning strategies such as Problem Based Learning (PBL) and Case Based Sessions (CBS). Community Oriented Education is also given its due importance in the College of Dentistry.

Students are actively involved in the learning process by interacting in small groups and by collecting, analysing and synthesising information relevant to the problems they are going to face in their professional lives.

### PROBLEM-BASED LEARNING

PBL is one of the strategies adopted for learning at the College of Dentistry. This approach is characterised by:

- Opportunities to deal with problems students face in later professional practice.
- Emphasis on self-motivation and responsibility for learning on their own.
- Training for learning professional skills, leadership qualities and team work.

The aim of problem based learning is to overcome various drawbacks in the traditional methods of instruction; for instance the passive role of students during lectures, irrelevant subject matter in the curriculum and a lack of integration between disciplines.

### LABORATORIES

Basic Dental and Medical Science laboratories and Dental OPDs are fully equipped with state of the art equipment, models and other teaching aids ensuring an excellent academic environment for students.

We are proud to have the first and only dental simulation devices with 3D integration in Pakistan. These simulation devices help students learning the clinic skills from their 1st year of studies.

### STUDY GUIDE BOOK

On the commencement day, students are given course/study guides which contain the course objectives and teaching strategies for the 1st year of BDS with the planner for the entire academic year. The study guide also identifies all rules and regulations that the student is required to abide by. Likewise, for the subsequent academic years, study guides are supplied to all promoted students on the respective orientation days.

### CLINICAL TRAINING

In addition to the theoretical knowledge, it is important that the students have a significant exposure to the curative, preventive and reha-

bitative facets of oral and general healthcare. The first exposure of the dental students to a clinical environment starts in their 2nd professional year, where students are first trained on phantom heads about the clinical aspects of treatment and soon after it, they are taken for field visits to the community settings as part of their community dentistry training; they are primarily trained for detailed history taking or dental records.

Third year BDS students receive clinical training for General Medicine, General Surgery and other Clinical subjects of BDS curriculum at the following hospitals:

- Dr. Ziauddin Hospital, Clifton Site – 150-bedded Hospital
- KDLB Kemari Site -125-bedded Hospital.
- Clinical Departments (OPD) for College of Dentistry, Clifton Site 75 dental Units.

The students attend OPDs and wards where they obtain first-hand knowledge by dealing with patients under faculty supervision. Apart from clinical learning under the supervision of Faculty of Health Sciences, the students also work in the clinical departments, where they gain experience with patients and are trained in different clinical procedures.

In the final year, students spend most of their time in Dental OPDs. Their training not only includes performing procedures on patients, but also learning crucial skills that help to groom their interpersonal and professional behaviour and attitudes.

### STUDENT ASSESSMENT

#### GENERAL PRINCIPLES

It is recognised that the methods of assessment have a strong influence on shaping students' learning approach. At College of Dentistry, the structure, content and process of all assessments are designed to reflect and reinforce the specified learning objectives at each stage of the programme. Assessments serve the purpose of providing feedback to the students and the faculty as well as certification.

### EXAMINATIONS

Examinations are conducted by the examination department of Ziauddin University. Continuous Assessment Tests (CAT) are held at the end of each module. At least 80% attendance in each course is mandatory for eligibility to appear in the final examination. Promotion to the next classes is based on clearance in all the courses scheduled in a year.

### TOOLS OF ASSESSMENT

- BCQ and Multiple Choice Questions (BCQs/MCQs).
- Short essay questions (SEQs).
- Objective Structured Practical/Clinical Examinations (OSPE/OSCE).
- Viva voce is used to assess knowledge mainly of a higher level.

### BDS GRADUATES REGISTRATION

As per Pakistan Medical and Dental Council (PMDC) rules, registration of BDS graduates is mandatory for dental practice and postgraduate education in Pakistan and abroad.

### HOUSE-JOB TRAINING

Ziauddin University Hospitals offer a house job to its graduates. A structured training programme has been designed that allows appropriate training for house officers in all domains of dentistry. In addition, house officers have the opportunity to participate in multidisciplinary seminars and academic or clinical conferences. House job training is conducted strictly according to PMDC guidelines.

### ADMISSION POLICY

#### BDS

Admission to College of Dentistry for a four year BDS degree course is open to all individuals who meet the selection criteria.

#### NOTIFICATION OF ADMISSION

The Registrar of the university will notify students who are successful in the admission process. Successful applicants are given a deadline by which to accept the offer of admission. Offers not accepted by the given deadline are cancelled.



### REQUIREMENTS FOR SELECTED STUDENTS

Successful students selected for BDS programme are expected to fulfill the following:

#### a) Verification of Educational Testimonials

Original transcripts, mark sheets and certificates to be brought for verification by the university.

#### b) Medical Examination

The undergraduate medical programme is both physically and mentally demanding. Students offered admission are required to undergo a comprehensive medical examination including laboratory investigations and chest X-ray, before they are allowed to join classes.

#### c) Immunisation

Clinical experience carries a small personal risk of infection. In their own interest, and also in the interest of the patients and others, students must provide evidence of immunisation against the following:

Tuberculosis (BCG), Diphtheria, Poliomyelitis, Pertussis, Hepatitis B, Tetanus, Measles/Mumps (and Rubella for females).

### FINANCIAL POLICY

Students seeking admission to BDS first year of Ziauddin University are expected to pay the fee approved by the Governing Body of the University and as per guidance provided by PMDC. Admission fee is submitted only once, at the time of admission.

For local students, fee will be paid in Pakistani currency and for overseas students in US dollars.

Parents/guardians are advised to ensure that the fee for each academic year is paid by the due date.

The university reserves the right to cancel admission if the fee is not paid by the due date.

### CONTACT INFORMATION

**Mr. Bilal Ahmed**

**P.A. to Principal, College of Dentistry,**

+92-21-35862937 (Ext: 2219)

zcd@zu.edu.pk

**Prof. Dr. Shoaib Khan**

**Professor, College of Dentistry,**

(Incharge Admission Cell)

+92-21-35862937 (Ext: 2216)

## MPHIL

The postgraduate programme for basic dental science subjects started at College of Dentistry in 2011. The programme is recognised by Pakistan Medical and Dental Council (PMDC & HEC) and follows regulations for registration to research studies leading to the degree of M.Phil. in the subjects of Oral Biology and Oral Pathology.

M.Phil. programme of Ziauddin University has been devised with a view to produce self-motivated individuals who wish to further their careers by gaining a higher qualification.

### LEARNING AND TEACHING STRATEGIES

At Ziauddin University, candidates are given an opportunity to learn the fundamentals of Educational Methodology while participating in conducting an undergraduate programme. This is achieved by means of regular meetings and workshops held by the Department of Education. In addition to this, candidates are encouraged to gain on job experience by engaging in academic activities comprising of latest teaching methodologies. Following are the teaching strategies used to improve student learning:

- Seminars, demonstrations and presentations
- Case discussions
- Rotations in Clinical laboratories for relevant training
- Update of knowledge through study of recent journals and internet browsing. Journal clubs and group discussion.

### SEMESTER SUMMARY

#### CURRICULUM

The curriculum of M.Phil. in Basic Dental Sciences is covered in one and half years. First year comprise of two.

#### YEAR ONE

The curriculum content for two semesters of year one is arranged in different modules. The student evaluation is carried out at the end of modules and at the end of each semester.

#### YEAR TWO

As recommended by HEC second year of M.Phil. is spread over 16 weeks of course/laboratory work and research. In the second year students are required to submit their synopsis in the field of their interest.

In year two candidates are also required to carry out their research work and are exposed to advance techniques and finally present their thesis for defense.

#### EVALUATION

Semester examinations include written as well as Viva Voce/Oral components.

### ADMISSION POLICY

#### ELIGIBILITY CRITERIA

- Candidates possessing BDS degree from a HEC recognised university
  - M.Phil. entry test/NTS GAT
  - Interviews of candidates short-listed on the basis of performance in the M.Phil. entry test.
- Final selection of the candidates is based on the previous academic records, experience, entry test and interview.

### CONTACT INFORMATION

#### Prof. Dr. Imran Alam Moheet

*Professor,*

M.Phil. Co-ordinator, College of Dentistry

+92-21-35862937 Ext: 2227

## FACULTY MEMBERS

#### PRINCIPAL

PROF. DR. WAHAB BUKSH KADRI

#### ORAL BIOLOGY

DR. FIZZA SAHER  
ASSISTANT PROFESSOR/HOD  
BDS, M PHIL, CHPE

DR. HIRA BATOOL  
ASSISTANT PROFESSOR  
BDS, M PHIL

DR. KUSHBU LOHANA  
SENIOR LECTURER  
BDS, MSC

DR. NASEER KHAN  
LECTURER  
BDS

#### SCIENCE OF DENTAL MATERIALS

PROF. DR. SHOAIB KHAN  
PROFESSOR /HOD  
BDS, MSC, FICCD

PROF. DR. IMRAN ALAM MOHEET  
PROFESSOR  
BDS, MSC, PHD, CHPE, M-BIOETHICS

DR NAZISH FATIMA  
PROFESSOR  
BDS, MDS, MCPS (HPE)

DR. MAHNOOR MOIZ KHAN  
LECTURER  
BDS, MHM

DR. SAIMA TAHEEM  
LECTURER  
BDS

DR. DUAA RAHEEL  
LECTURER  
BDS

#### COMMUNITY DENTISTRY

DR. SIDRA MOHIUDDIN  
PROFESSOR/HOD  
BDS, MDS, CHPE

DR MARYAM PANHWAR  
ASSISTANT PROFESSOR  
BDS, MSC

DR. YOUSRA ALTAF  
LECTURER  
BDS

DR. AMMARAH M. NAUMAN  
LECTURER  
BDS

#### ORAL PATHOLOGY

DR. SAIMA AKRAM BUTT  
PROFESSOR/HOD  
BDS, BSC, MDS, CHPE, MHM. CHQP

DR. FIZZA ABIDI  
ASSISTANT PROFESSOR  
BDS, M. PHIL

DR. KANWAL IQBAL  
SENIOR LECTURER  
BDS, M. PHIL

DR. SANA FATIMA  
SENIOR LECTURER  
BDS, MDS

DR. ALINA AMIR  
LECTURER  
BDS

DR. SHANEEL NAEEM  
LECTURER  
BDS



### OPERATIVE DENTISTRY

PROF. DR. ASMAT JAMEEL  
PROFESSOR/HOD  
BDS, FCPS

PROF. DR. HINA AHMED  
PROFESSOR  
BDS, FCPS

DR. SADAF FIROZ ALI  
ASSISTANT PROFESSOR  
BDS, FCPS

DR. POOJA BALANI  
ASSISTANT PROFESSOR  
BDS, MDS

DR. FARAH AMIN  
LECTURER  
BDS

DR. ZAIN AHMED FAROOQUI  
LECTURER  
BDS

DR. AREESHA KHAN  
LECTURER  
BDS

DR. TAFSEER FATIMA  
LECTURER  
BDS

DR. MAH LAQA MAROOF  
LECTURER  
BDS

DR. M. HASAN RAFIQUE  
LECTURER  
BDS

DR. HIJRA  
FCPS TRAINEE  
BDS

DR. SAIMA MUSHTAQ  
FCPS TRAINEE  
BDS

DR. HINA  
FCPS TRAINEE  
BDS

DR. MARIA SOHAIL GHAZI  
FCPS TRAINEE  
BDS

### ORAL & MAXILLOFACIAL SURGERY

PROF. DR. NOOR-UL-WAHAB  
PROFESSOR/HOD  
FDSRCS(EDUK), FFDRCSI, FCPS, BDS

DR. ATIF IQBAL BUTT  
ASSOCIATE PROFESSOR  
BDS, MDS, MCPS

DR. SAIRISH SALEEM  
LECTURER  
BDS

DR. RAZAN AHMED  
FCPS TRAINEE  
BDS

DR. KOMAL SHAHZAD  
FCPS TRAINEE  
BDS

DR. HAFIZ MUJTABA HUSSAIN  
FCPS TRAINEE  
BDS

DR. UJALA KUMARI  
FCPS TRAINEE  
BDS

DR. BUSHRA TAHIR  
FCPS TRAINEE  
BDS

DR. MUSHTAQ AHMAD  
FCPS TRAINEE  
BDS

DR. HUMAIRA MALIK  
FCPS TRAINEE  
BDS

DR. MERWAN AHMED  
FCPS TRAINEE  
BDS

### PROSTHODONTICS

DR. HAROON RASHID BALOCH  
PROFESSOR/HOD  
BDS, MDSC

DR. USMAN BASHIR SHAIKH  
ASSISTANT PROFESSOR  
BDS, FCPS

DR. MUSTAFA SHAHZAD  
LECTURER  
BDS, MHM

DR. FATIMA  
LECTURER  
BDS

DR. MUNTAZAR ALI MEHDI  
LECTURER  
BDS

DR. BISMA ARSHAD  
LECTURER  
BDS

### ORAL MEDICINE & DIAGNOSIS

PROF DR. AFIFA RAZI  
PROFESSOR/HOD  
BDS, FCPS, MHP

DR. SAMEERA ASIF  
ASSISTANT PROFESSOR  
BDS, MCPS

DR. AEMAN ALI  
SENIOR REGISTRAR CLINICAL  
BDS, MSC

DR. NOSHEEN NAZIR  
LECTURER  
BDS

DR. AMINA  
LECTURER  
BDS

### PERIODONTOLOGY

DR. SAIMA SAMEER QURESHI  
ASSOCIATE PROFESSOR/HOD  
BDS, FCPS

DR. KAPIL KUMAR  
ASSISTANT PROFESSOR  
BDS, FCPS

DR. AYESHA SAGHIR BUTT  
LECTURER  
BDS

DR. ATIR ATEEQ  
LECTURER  
BDS

DR. ALI MUSTAFA  
LECTURER  
BDS

### ORTHODONTICS

PROF DR. SARWAT MEMON  
PROFESSOR/HOD  
BDS, FCPS, CHPE

DR. RABIA ANWAR  
SENIOR LECTURER CLINICAL  
BDS, FCPS

DR. FARHAN QADEER SHAIKH  
SENIOR REGISTRAR CLINICAL  
BDS

DR. HAFSA KHALID MAHIDA  
LECTURER  
BDS

DR. SUMITA  
LECTURER  
BDS

DR. FAROOQ AHMED KHAN  
LECTURER  
BDS

DR. JAWERIA MEMON  
LECTURER  
BDS

# COLLEGE OF PUBLIC HEALTH

## KEY INFORMATION

### PRINCIPAL

Dr. Shahkamal Hashmi

### CONTACT INFORMATION

Website:

<https://zu.edu.pk/college-of-public-health/>

Telephone:

+92 21 35862937-9

Email:

[info@zu.edu.pk](mailto:info@zu.edu.pk)

Locate Us:

Ground Floor, H.A Arcade, B.C-05,  
Block-1, Clifton, Karachi-75600



## INTRODUCTION

Welcome to the College of Public Health, a pioneering institution dedicated to advancing the field of public health and shaping the future of population well-being. We are thrilled to embark on this transformative journey, committed to equipping our students with the knowledge, skills, and passion to address the complex health challenges of our time.

In an era where health concerns transcend borders, where the global population faces emerging diseases, environmental threats, and health disparities, the need for qualified public health professionals has never been more crucial. At Ziauddin College of Public Health, we believe that through education, research, and community engagement, we can drive positive change and create healthier societies for generations to come.

Our college's foundation is built upon a multidisciplinary approach that encompasses the social, biological, environmental, and behavioral aspects of public health. By integrating diverse disciplines such as epidemiology, biostatistics, health policy, environmental health, and health promotion, we provide a comprehensive education that prepares students to tackle complex health issues from multiple perspectives.

The faculty at Ziauddin College of Public Health consists of renowned scholars, practitioners, and researchers who bring a wealth of expertise and experience to the classroom. With their guidance and mentorship, students will have the opportunity to engage in cutting-edge research, participate in community-based projects, and collaborate with local and global partners to implement evidence-based interventions.

One of our core principles is to foster an inclusive and collaborative learning environment that embraces diversity and promotes cultural competency. We believe that the richness of perspectives and backgrounds within our student body and faculty enhances the educational experience,

equipping graduates with the necessary skills to address health disparities and promote health equity across diverse populations.

At Ziauddin College of Public Health, we recognize that the future of public health lies not only in academia but also in real-world application. Therefore, we have established strong partnerships with public health agencies, non-profit organizations, healthcare systems, and governmental bodies to provide students with invaluable hands-on experiences and internships that bridge theory and practice.

Through our commitment to excellence, innovation, and social responsibility, we aim to become a global leader in public health education and research. We aspire to produce graduates who possess the analytical rigor, critical thinking, and leadership skills necessary to navigate the complexities of public health and drive meaningful change in their communities.

We invite you to join us on this transformative journey as we embark on a mission to improve population health, advocate for social justice, and create a healthier and more equitable world. Together, let us shape the future of public health and inspire a new generation of public health leaders and champions. Welcome to Ziauddin College of Public Health, where we empower individuals to make a difference in the health of populations.



## BACHELORS IN PUBLIC HEALTH (BSPH)

A Bachelor's in Public Health programme at Ziauddin University is designed to provide students with a comprehensive understanding of public health principles and practices. This undergraduate degree typically covers a range of topics related to promoting and protecting community health. The curriculum often includes courses in epidemiology, biostatistics, environmental health, health policy, social and behavioural sciences, and global health.

Students in a Bachelor's in Public Health programme learn to analyse health trends, assess community needs, and develop strategies to address public health challenges. They gain knowledge about disease prevention, health promotion, and the social determinants of health. Additionally, students may explore issues such as healthcare ethics, healthcare management, and the impact of cultural diversity on public health outcomes.

### CURRICULUM

S.NO.	Categories	Credit Hours
1.	Probability and Biostatistics-I	3
2.	English for General Purposes	3
3.	Life Sciences Biology	3
4.	Mathematics	3
5.	Sociology of Health and Disease	3
6.	Islamic Studies/Ethics	2
		<b>Total=17</b>

### CAREER OPPORTUNITIES

Hands-on experiences, internships, or fieldwork are often integral components of the programme, allowing students to apply theoretical knowledge to real-world public health scenarios. Graduates of a Bachelor's in Public Health programme are prepared for entry-level positions in public health agencies, non-profit organisations, healthcare settings, and other related fields. This degree also serves as a foundation for those who wish to pursue advanced degrees in public health or related disciplines. Overall, the programme equips students with the skills and knowledge to contribute to the improvement of

### Fee Structure

Student Activity Charges	10,000
Admission Fee	20,000
Tuition Fees (Per Semester)	80,000
Examination Fee ( By Semester)	10,000
<b>Total</b>	<b>120,000</b>

## MASTERS OF SCIENCE IN PUBLIC HEALTH (MSPH)

The Masters of Science in Public Health (MSPH) Programme offered by Ziauddin University is a comprehensive postgraduate programme designed to enhance the health status of the population by equipping public health and healthcare professionals with the necessary knowledge and skills. This programme focuses on providing high-quality education and training in public health sciences. The MSPH Programme prepares graduates to make a significant impact on the health and well-being of populations by contributing to research, policy development, programme management, and the overall improvement of public health outcomes.

### CAREER OPPORTUNITIES

Upon completion of the MSPH programme, graduates will be well-prepared to pursue a wide range of career opportunities in the field of public health. Some potential career paths include:

- **Public Health Officer:** Work in governmental agencies, such as ministries of health, to develop and implement public health policies and programme.
- **Epidemiologist:** Conduct research and investigate patterns and causes of diseases and injuries to improve public health outcomes.
- **Health Educator:** Design and implement educational programmes to promote healthy behaviors and prevent diseases within communities.
- **Health Policy Analyst:** Analyze health policies and their impact on public health and provide recommendations for improvement.
- **Programme Manager:** Oversee the planning, implementation, and evaluation of public health programmes and initiatives.

These are just a few examples, and the MSPH Programme opens doors to various other positions in governmental agencies, non-governmental organizations, research

institutions, and community health organizations.

### PROGRAMME DURATION, CREDITS AND TRACKS:

- The MSPH programme "A" consists of 39/42 credits including 12 core courses, (3 elective courses in the specialized track) and a project or thesis. One credit is equivalent to 16 hours of formal teaching/contact hours or 45 hours of practical fieldwork. Practical fieldwork is defined as consisting of individual fieldwork, group fieldwork, field visits, individual assignments and class exercises.
- The MSPH programme "B" consists of 60 credits for Bachelor's degree with 16 years of education other than the core medical degrees.

### ELIGIBILITY CRITERIA

To be eligible for the MSPH Programme, candidates must meet the following criteria:

#### 1. MSPH Programme "A" (30/42 credits):

- MBBS (Registered with PMDC)
- BDS (Registered with PMDC)
- MD (Registered with PMDC)
- BSc Nursing 4 Years (Registered with PNC)
- DVM (Registered with Veterinary Council)
- BSc Paramedics-4 years
- BSPH
- Pharm D/Equivalent (Registered with Pharmacy Council)
- BS Physiotherapy/Equivalent

#### 2. MSPH Programme "B" (60 credits):

- Bachelor's degree with 16 years of education other than core medical degrees.

### OUTCOME

- **Educate and Train Public Health Leaders:** The programme provides comprehensive training and education to equip students with the skills necessary to address public health challenges and become effective leaders in the field.

- **Conduct Research to Improve Public Health:** Students engage in cutting-edge research to identify social causes of diseases, design interventions, and develop evidence-based solutions to address public health challenges.
- **Collaborate to Improve Public Health:** The programme fosters partnerships with various stakeholders, including government agencies, non-governmental organizations, and community groups, to improve public health

outcomes through collaboration and collective efforts.

- **Practical Application of Public Health Knowledge:** Through practicum placements and a supervised dissertation, students integrate their public health knowledge, skills, and methods in real-world practice contexts, ensuring they are well-prepared for the challenges of the field.

## FACULTY MEMBERS

Dr. Shahkamal Hashmi  
Principal,  
College of Public Health  
MBBS, MS, MPH, PH.D.

Dr. Farhana Shahid  
Associate Professor,  
College of Public Health  
MBBS, MPH, PHD.

Dr. Rozina Mistry  
Assistant Professor,  
College of Public Health  
MBBS, MS ( Health Promotion) , Fellow (Yale University).

Dr. Mehak Muhammad Ashfaq  
Senior Lecturer,  
College of Public Health  
MSPH-NS.

Dr. Farhana Shams Abbasi  
Senior Lecturer and Coordinator,  
College of Public Health  
MSPH.

Dr. Warda Shujra  
Senior Lecturer  
MSPH

Dr. Anum Khan Kasi  
Senior Lecturer  
MSPH

Dr. Sumbul Wahab  
Senior Lecturer  
MSPH

Ms. Saranga  
Academic Coordinator  
MSPH

### CONTACT INFORMATION

021-35862937-9 EXT: 2578





# COLLEGE OF MOLECULAR MEDICINE

## KEY INFORMATION

DEAN, FACULTY OF HEALTH SCIENCES  
Prof. Dr. Abbas Zafar

## PRINCIPAL

Prof. Dr. Talat Mirza

## CONTACT INFORMATION

Website:

<https://zu.edu.pk/college-of-molecular-medicine/>

Telephone:

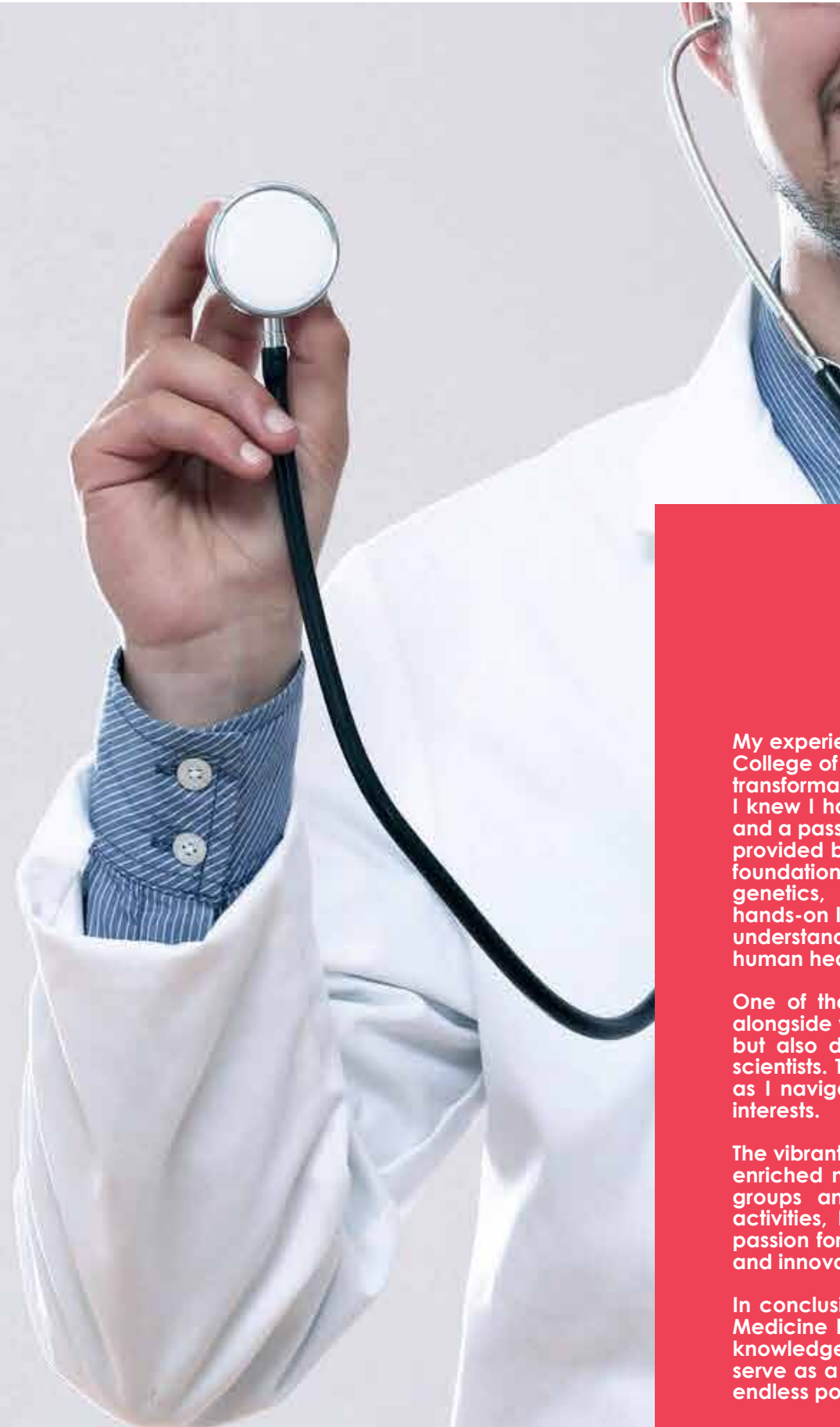
+92-21-35862937-9 Ext 2366, 2850, 2851

Email:

[info@zu.edu.pk](mailto:info@zu.edu.pk)

Locate Us:

4/B, Shahrah-e-Ghalib, Block 6, Clifton,  
Karachi.



My experience as a student in the Bachelors of Science (BS) programme at the College of Molecular Medicine at Ziauddin University has been nothing short of transformative. From the moment I stepped into the vibrant halls of the College, I knew I had found my academic home, a place where curiosity, innovation, and a passion for scientific discovery converge. The comprehensive curriculum provided by the College of Molecular Medicine has equipped me with a solid foundation in the principles of molecular biology, molecular pathology, genetics, pharmacology, biochemistry, etc. through engaging lectures, hands-on laboratory sessions, and interactive seminars, I have gained a deep understanding of the intricate mechanisms that govern cellular processes and human health.

One of the highlights of my experience has been the opportunity to work alongside world-class faculty who are not only experts in their respective fields but also dedicated mentors committed to nurturing the next generation of scientists. Their guidance, encouragement and support have been invaluable as I navigate the complexities of scientific inquiry and explore my research interests.

The vibrant and inclusive community at the College of Molecular Medicine has enriched my student experience in countless ways. From collaborative study groups and research seminars to networking events and extracurricular activities, I have had the privilege of interacting with peers who share my passion for science and who inspire me to push the boundaries of knowledge and innovation.

In conclusion, my experience as a student in BS at the College of Molecular Medicine has been both enriching and empowering. I am confident that the knowledge, skills, and experiences gained during my time at the college will serve as a solid foundation for future endeavours, and I am excited about the endless possibilities that lie ahead in the future of Molecular Medicine.

HAFIZA SALEHA SOHAIL  
BATCH-I, 2ND YEAR

## INTRODUCTION

Ziauddin College of Molecular Medicine (ZCMM) stands as a trailblazer in Pakistan, pioneering advancements in the study of diseases at the molecular and genetic levels, with strong research perspective. The college offers a comprehensive array of programmes, including BS, MPhil and PhD degrees. The college utilises state-of-the-art technologies to unravel the molecular foundations of diseases and drive innovative treatments.

The focus is to translate fundamental research findings into clinical and translational applications, ultimately aiming to enhance patient care. Beyond training young minds, ZCMM is committed to providing advanced education to clinicians, offering a unique molecular perspective on disease. By bridging the gap between physicians and scientists, the college fosters collaboration and strengthens the healthcare system's essential pillars for optimal services.

Through this interdisciplinary approach, ZCMM promotes synergistic partnerships to propel transformative advancements in medical research and practice. Graduates emerge with a profound understanding of disease mechanisms at the molecular level, equipped with extensive hands-on training in basic and clinical research methodologies. They are prepared to play pivotal roles in developing novel therapies and driving medical innovation on a global scale.

In a world where healthcare demands continue to escalate alongside rapid scientific and technological progress, Ziauddin College of Molecular Medicine stands at the forefront of basic, translational, and clinical research. The college is

dedicated to harnessing the latest advances in molecular biology to revolutionise clinical medicine and advance healthcare technology.

### VISION

The vision is to advance world-class biomolecular research and education in medicine with translational impact, addressing clinical needs and striving for both local and global recognition while providing high-quality healthcare benefits.

### MISSION

The mission is to develop a deep insight into the biomolecular and genetic mechanisms of human health and disease with recent advances in technology for translation into effective preventive, diagnostic and therapeutic tools. We aspire to create transformative evidence-based medicine for medical scientists to delve into critical health challenges and promote innovations and discoveries into optimal healthcare.

### SALIENT FEATURES:

- State-of-the-art multidisciplinary labs
- Wide spectrum of courses and research areas
- Highly qualified and foreign trained PhD faculty members
- Opportunities to collaborate with local and foreign universities
- Leading tertiary care hospitals
- Participation in workshops, conferences and seminars
- Cost-effective fee structure

### DEGREE PROGRAMMES OFFERED

Bachelor of Science (BS)  
Master of Philosophy (MPhil)  
Doctor of Philosophy (PhD)

## BS MOLECULAR MEDICINE

### INTRODUCTION

The BS Molecular Medicine programme was launched in 2022 to meet the growing demand for specialised education in this field of medical research. This programme at Ziauddin University presents a distinctive opportunity for aspiring scientists to explore the future of healthcare. The curriculum covers essential topics in basic and pre-clinical sciences, including Molecular Genetics, Cellular and Molecular Biology, Microbiology, Molecular Pathology, Physiology, Immunology, Cancer Biology, Biotechnology, Proteomics, Regenerative Medicine, Stem Cell Therapy, Molecular Pharmacology, and Bioinformatics. This comprehensive curriculum bridges the gap between fundamental science and clinical application, emphasising the close relationship between Molecular Medicine and broader medical fields. By choosing the BS in Molecular Medicine at Ziauddin University, students join a dynamic community committed to excellence in research and education. This programme not only offers a pathway to a fulfilling career but also empowers students to make significant contributions to global healthcare.

### ELIGIBILITY:

HSC in science / A-levels or equivalent. Admission test and interviews will be conducted for final selection.

**Programme Duration:** 4 years (8 semesters)

**Course Load Per Semester:** 5-6 courses (15-18 Cr Hrs.)

### SCOPE

Upon completion of the BS Molecular Medicine programme, graduates will be well-prepared to pursue a wide range of career opportunities in the field of public health. Some potential career paths include:

**Research/Biomedical Scientist:** Working in laboratories to conduct experiments and develop new scientific knowledge.

**Clinical Research Coordinator:** Managing clinical trials and studies to test new treatments and drugs.

**Regulatory Affairs Specialist:** Ensuring that products meet all regulatory requirements and guidelines.

**Quality Assurance Analyst:** Maintaining standards and compliance in biotech and pharmaceutical production processes.

**MPhil in Molecular Medicine:** The degree can serve as a solid foundation for a career opportunity by leveraging it as a pathway to enrol in MPhil programme in Molecular Medicine.

**Academic roles:** Teaching and mentoring students in universities and contributing to scholarly research.

**Scientific Journalism/Writer:** Communicating scientific information to the public, writing for scientific journals, magazines, and online platforms.

**Forensic Scientist:** Applying molecular techniques in forensic investigations to analyse biological samples, aiding in legal and criminal cases.

**Clinical Laboratory Technologist:** Performing complex tests in medical laboratories to aid in the diagnosis and treatment of diseases.

**Sales and Marketing in Biotech/Pharma:** Promoting and selling advanced scientific products and technologies, requiring a strong understanding of molecular medicine.

**Environmental Scientist:** Applying molecular techniques to address environmental issues, such as pollution control and sustainable practices.

### FEE STRUCTURE:

Description	Per Semester
Application Fee	5,000
Admission Fee	50,000
Tuition Fee	120,000/per semester
Examination Fee	10,000/per semester
Library Fee	5,000/per semester
Lab Charges	5,000/per semester



## MPHIL MOLECULAR MEDICINE

### INTRODUCTION

The MPhil programme in Molecular Medicine, launched in Spring 2021 at Ziauddin College of Molecular Medicine, represents a pioneering initiative in Pakistan tailored to cultivate a new cadre of researchers proficient in cutting-edge molecular biology and genetics. This programme uniquely caters to individuals with backgrounds in medical, dental, and biological or pharmaceutical sciences, offering a robust curriculum that spans from foundational principles to advanced research methodologies.

Our M.Phil. programme is structured to provide a balanced blend of theoretical knowledge and practical skills essential for conducting impactful research in basic, translational, and clinical settings. Students engage deeply with the latest technological innovations in molecular medicine, positioning them to contribute significantly to the evolution of innovative healthcare practices.

Recognised by both the Higher Education Commission (HEC) and Pakistan Medical and Dental Council (PMDC), the programme underscores its commitment to academic excellence and professional accreditation. By fostering a collaborative learning environment and encouraging interdisciplinary approaches, we aim to empower our graduates to address complex medical challenges and drive transformative advancements in healthcare.

### ELIGIBILITY:

Sixteen years of education in Biological Sciences (Biochemistry, Genetics, Microbiology, Biotechnology, Medical Technology, Physiology etc.), M.B.B.S., B.D.S., D.V.M., Eastern Medicine and Pharm.D. or equivalent degree from HEC-recognised institutions with a minimum CGPA of 2.5 on a scale of 4.00 in B.S./M.Sc. in semester system or 60% marks in annual system.

**Programme Duration:** 2-4 years

**Total Credit Hours:** 30

### SCOPE

An MPhil in Molecular Medicine provides a broad range of career opportunities, both within academia and in various sectors of the biomedical and healthcare industries. Here is a detailed overview of the career opportunities available to graduates:

**Faculty Positions:** With sufficient experience and publications, individuals can secure academic positions such as lecturers, and assistant professors.

**Clinical Research:** Graduates can work as clinical research associates or coordinators, where they oversee clinical trials, manage patient data, and ensure compliance with regulatory standards.

**Genetic Counseling:** With additional certification, or having undergraduate degree in genetics, individuals can become genetic counselors, helping patients understand genetic conditions and make informed medical decisions.

**Biotechnology and Pharmaceutical Companies:** Opportunities in R&D roles involve developing new drugs, diagnostics, and therapeutic strategies.

**Diagnostics and Personalized Medicine:** Graduates can work in companies focusing on developing diagnostic tools and personalized medicine approaches.

**Public Health and Policy:** Roles in public health agencies or policy organizations involve using molecular medicine expertise to inform public health strategies, disease prevention programmes, and health policy decisions.

**Science Communication and Outreach:** Graduates can work in science communication, writing for scientific journals and popular science magazines.

**Ph.D. Programmes:** Many MPhil graduates continue their academic journey by enrolling in Ph.D. programmes. This path allows for deeper specialisation in molecular medicine and related fields such as cancer biology, immunology, or genetics.

### FEE STRUCTURE

M.Phil. Fee Structure on PKR (Rs.)	
GAT Exam	5000
Admission Fee	50,000
Semester I	
Tuition fees 10000/credit hr (12 cr. hr)	120000
Examination fees Semester	11,500
Total Payable Amount	131500
Semester II	
Tuition fees 10000/credit hr (12 cr. hr)	120000
Examination fees Semester	11,500
Total Payable Amount	131500
Semester III	
Supervision Fees 10000/credit hr (6 cr. hr)	60000
Semester IV	
Supervision Fees 10000/credit hr (6 cr. hr)	60000
Payable Amount	438,000
Thesis Defense Fee	75000
Total Payable amount (if completed in 4 semesters)	513,000
Scholarship	N/A
Total Payable amount	513,000

## PHD MOLECULAR MEDICINE

### INTRODUCTION

Expanding upon its innovative undergraduate and Masters in Molecular Medicine, Ziauddin Medical College launched a PhD programme in Molecular Medicine in 2023, endorsed by the HEC and PMDC. This programme stands out for its emphasis on integrating basic and translational research, providing advanced training in theory and practice applicable to clinical practice.

Candidates with backgrounds in Science and Medicine gain a comprehensive understanding of disease mechanisms at the molecular level, aligned with global standards. The programme's primary objective is to equip the medical scientists with advanced molecular knowledge and techniques essential for deep understanding and practice of human diseases.

Moreover, this initiative fosters unprecedented collaboration between clinicians and scientists, forging a pioneering clinician-scientist relationship in Pakistan. By bridging these disciplines, the programme catalyzes innovative approaches to medical research and practice, positioning graduates at the forefront of molecular medicine advancements.

**ELIGIBILITY:** Candidates applying for admission to the Molecular Medicine PhD programme should have a minimum of 18 years of education, MS/MPhil/MD/MS/FCPS, FRCS, MRCP or equivalent degree with first division and CGPA of 3.00 on a scale of 4.00 or overall, 60% marks in annual system or equivalent in the relevant subject is a prerequisite from any recognized University. In the case of a foreign degree, it will be ascertained that it is equivalent to a Paki-

stani MPhil/ MS degree from any recognized University / Institution. Admission will be confirmed only after passing the ZU entry test (GAT) and an interview conducted by ZU. The test carries both the subject-specific components (70%) along with English Language and Analytical/Logical Reasoning (30%). The final selection of candidates will be based on cumulative merit determined from the previous academic record, experience, entry test and interview.

Programme Duration: 3-8 years  
Total Credit Hours: 48

### SCOPE

**Principal Investigator (PI):** Leading research projects and laboratories, securing funding, and guiding research teams in innovative studies.

**Biotechnology Research Scientist:** Developing new biotechnological products and applications, such as gene therapies, vaccines, and diagnostic tools.

**Academic Researcher:** Working in universities or research institutes, conducting fundamental or applied research, and publishing findings in scientific journals.

**Clinical Scientist:** Collaborating with healthcare providers to integrate molecular research into clinical practice, improving patient diagnostics and treatment plans.

**Healthcare and research Consultant:** Advising healthcare organisations and researchers on the implementation of molecular medicine advancements.

**Policy Advisor:** Working with government agencies or NGOs to develop policies that incorporate molecular medicine advancements into public health strategies.

### FEE STRUCTURE

Ph.D. Fee Structure in PKR (Rs.)	
GAT Fees	5,000
Admission fees	200,000
<b>Semester I</b>	
Tuition Fees 20000/credit hr (9 cr. hr)	180000
Examination fees Semester	20000
Payable Amount	200000
<b>Semester II</b>	
Tuition Fees 20000/credit hr (9 cr. hr)	180000
Examination fees Semester	20000
Comprehensive Exam	25,000
Payable Amount	225000
<b>Semester III</b>	
Supervision Fees 20000/credit hr (7.5 cr. hr)	150000
<b>Semester IV</b>	
Supervision Fees 20000/credit hr (7.5 cr. hr)	150000
<b>Semester V</b>	
Supervision Fees 20000/credit hr (7.5 cr. hr)	150000
<b>Semester VI</b>	
Supervision Fees 20000/credit hr (7.5 cr. hr)	150000
Foreign Evaluation Fee \$750	170250 167116
Thesis Defense Fee	100000
Total Payable Amount (External)	1,500,250
Scholarship (Internal)	200000





## FACULTY MEMBERS

### PROF. DR. TALAT MIRZA

MBBS, M.PHIL., PH.D.  
PRINCIPAL  
EXECUTIVE DIRECTOR RESEARCH FHS  
COLLEGE OF MOLECULAR MEDICINE

### DR. SHUMAILA USMAN

B.S. (BIOCHEMISTRY), PH.D. (MOLECULAR MEDICINE)  
HEAD OF RESEARCH STREAM- STEM CELL AND  
REGENERATIVE MEDICINE,  
COORDINATOR BS MOLECULAR  
MEDICINE PROGRAMME,  
ASSOCIATE PROFESSOR  
COLLEGE OF MOLECULAR MEDICINE

### DR. AMBRINA KHATOON

BSC. (HONS), MSC, PH.D. (BIOTECHNOLOGY)  
HEAD OF RESEARCH STREAM - GENOMIC  
SCIENCES  
ASSOCIATE PROFESSOR  
COLLEGE OF MOLECULAR MEDICINE

### DR. ABDUL HAMEED

BSC. HONS (MICROBIOLOGY), PH.D. (MOLECULAR MEDICINE), POST DOC (MOLECULAR MEDICINE)  
HEAD OF RESEARCH STREAM - MOLECULAR  
ENDOCRINOLOGY AND METABOLIC DISORDERS,  
ASSOCIATE PROFESSOR  
COLLEGE OF MOLECULAR MEDICINE

### DR. REHAN IMAD

BS (MLT), PH.D. (MOLECULAR MEDICINE)  
HEAD OF RESEARCH STREAM - MEDICAL  
SCIENCES AND MOLECULAR PATHOLOGY,  
DEPUTY COORDINATOR BS MOLECULAR  
MEDICINE PROGRAMME,  
ASSISTANT PROFESSOR  
COLLEGE OF MOLECULAR MEDICINE

### DR. AISHA ISHAQUE

BS (BIOCHEMISTRY), PH.D. (MOLECULAR MEDICINE)  
ASSISTANT PROFESSOR  
COLLEGE OF MOLECULAR MEDICINE

### MR. MOAZZAM ALI SHAHID

BS (BIOCHEMISTRY), PH.D. SCHOLAR (BIOCHEMISTRY)  
SENIOR LECTURER  
ZIAUDDIN COLLEGE OF MOLECULAR MEDICINE

### MS. URFA KIYANI

BS (MICROBIOLOGY), M.PHIL. SCHOLAR (MOLECULAR MEDICINE)  
LECTURER  
ZIAUDDIN COLLEGE OF MOLECULAR MEDICINE

### MS. LAIBA JAWED

BS (CLINICAL LABORATORY SCIENCES), M.PHIL. SCHOLAR (MOLECULAR MEDICINE)  
LECTURER  
ZIAUDDIN COLLEGE OF MOLECULAR MEDICINE

### MR. ZIA UR REHMAN

MPA (MASTER OF PUBLIC ADMINISTRATION)  
BS ACADEMIC COORDINATOR  
ZIAUDDIN COLLEGE OF MOLECULAR MEDICINE

## CONTACT INFORMATION

COLLEGE OF MOLECULAR MEDICINE, BLOCK-1, CLIFTON, KARACHI  
4/B SHAHRAH-E-GHALIB RD, BLOCK 6 CLIFTON, KARACHI, KARACHI  
TEL: +92 21 35862397-9, EXT. 2365, 2366, 2851  
EMAIL: saba.farooq@zu.edu.pk  
FAX: +92 21 35862940  
WEBSITE: <https://zu.edu.pk/college-of-molecular-medicine>



# FACULTY OF ALLIED HEALTH SCIENCES





# COLLEGE OF PHYSICAL THERAPY

## KEY INFORMATION

### DEAN

Prof. Dr. Sumaira Imran Farooqui  
(DEAN, FAHS)

### PRINCIPAL

Dr. Qurat ul Ain Adnan (Karachi  
Campus)  
Dr. Muhammad Usman Khan (Sukkur  
Campus)

### CONTACT

#### Website:

<https://zu.edu.pk/zcpt-campuses/>

#### Telephone:

North: +92-21-36629250-51  
Boat Basin: +92-21-35157572  
Sukkur: 071-2050000 ext; 8190, 8192 &  
+92-21-3660104

### LOCATE US

#### North Nazimabad:

E/40/1/1 Wahid Colony, Wahid  
Colony, Karachi, Karachi City, Sindh  
74600.

#### Boat Basin:

F-6 Block-5 Khayaban-e-Saadi, Boat  
Basin, Karachi

#### Sukkur:

Ziauddin University, Village Dehra,  
Shikarpur Road, (Near Sports  
Complex) Sukkur, Pakistan.

"I never imagined that I could accomplish this. This achievement is just the beginning of a bigger and better vision for me as a physiotherapist.

Choosing ZCPT was one of the best decisions that I could have possibly made for myself, as this platform not only gave me academic excellence but also a dynamic learning environment and a harmonious blend of theoretical knowledge and its practical implementation.

The experienced faculty who shaped me into a professional with their unwavering support and dedication made these five years the best and most remarkable years of my life.

I feel privileged to be honoured for my academic skills on this occasion. ZCPT has given me a lifetime experience to cherish forever.

I would like to take this opportunity to express my gratitude to my parents for their support, faith in me, and provision. Their guidance and encouragement have been the cornerstone of my journey, making every achievement possible. It brings me immense joy to know that I have made them proud.

Last but not least, I would like to thank myself for five years of dedication to my education and professionalism.

Thank you, ZCPT, for being a catalyst in my journey for growth and success".

**MOHIBA AKHTER**  
DPT

## INTRODUCTION

Ziauddin University laid the foundation of the 'College of Physical Therapy' (ZCPT) in 1999, initially offering a four-year BS in Physical Therapy with the aim of providing quality education and producing clinically competent physical therapists who meet international standards. With consistent development in the field, Ziauddin College of Physical Therapy, under the umbrella of the Faculty of Allied Health Sciences, offers five-year graduate (DPT), postgraduate-MPhil, and doctoral-level programmes in Physical Therapy. To meet the demands of the time, ZCPT also provides degree upgrade programmes and various diplomas for continuous professional development. The proud alumni of ZCPT, actively contributing to major healthcare facilities globally, serve as a testament to the quality education and training provided by the university.

## VISION

A global hub for academic, clinical, and research in the field of physical therapy with integrated rehabilitation.

## MISSION

College of Physical Therapy is committed to produce competent physical therapists by providing knowledge and skill-based education, also inculcating the element of research with the intent to improve patient care.

## DOCTOR OF PHYSICAL THERAPY OFFERED AT; Karachi Campus Sukkur Campus

### PROGRAMME OFFERED AT KARACHI

- Ph.D., Doctor of Philosophy In Physical Therapy
- M.Phil., Master of Philosophy In Physical Therapy
- DPT Doctor of Physical Therapy
- BPEHSS, Bachelors of Physical Education, Health And Sports Sciences
- ADPEHSS, Associate Degree In Physical Education Health & Sport Sciences
- DFT, Diploma In Fitness And Training

### PROGRAMME OFFERED AT SUKKUR

- DPT, Doctor of Physical Therapy

## DOCTOR OF PHYSICAL THERAPY

Doctor of physical Therapy is a five-year semester based degree programme.

### LEARNING AND TEACHING STRATEGIES

Both national and international qualified teaching faculty is involved to promote better understanding through:

- Presentation/Assignment/Seminar
- Tutorials
- Skill based labs
- Projects
- Clinical Practice (Supervised)

### CLINICAL TRAINING

Students of Ziauddin College of Physical Therapy have an exclusive advantage to be a part of an organisation with a large setup of tertiary care hospitals. The clinical training provides a better chance of learning and practicing the skills in the field. Hence, it prepares future therapists to play an important role in the improvement of healthcare quality in society. Students of 3rd, 4th and 5th professionals complete their clinical training in physical therapy at all three sites at Dr. Ziauddin Hospital and the Primary Health Care Centre (PHC), Sikandarabad, for community services. In addition, ZCPT started their clinical collaboration with other major healthcare institutions like DOW University of Health Sciences—OJHA and SIPM&R campus (DUHS), Abbasi Shaheed Hospital, National Institute of Cardiovascular Diseases (NICVD), National Institute of Child Health (NICH), Sindh Govt. Hospital, Tabba Heart Institute of Cardio Vascular Diseases, Al Umeed Rehabilitation Association (AURA), Rabia Moon Trust and Association for Children with Emotional Learning Problems (ACELP) and Department of Empowerment of Persons with Disabilities (DEPD). ZCPT has now spearheaded its wings to Sukkur City, where Clinical training of the students is provided at Dr. Ziauddin Hospital Sukkur. DZH has launched 225 bedded fully equipped health care facility offering Emergency care, Surgical and Medical ICU, fully equipped Radiology department with MRI, CT Scan, X-ray, Mammography, OPG etc, Cath

lab, Pharmacy, Rehabilitation services including Physical Therapy, Occupational therapy, Speech therapy and clinical psychology, OPDs of Orthopedic, Cardiac, Dental, Nephrology, Gynecology and much more. Minor and Major Operation theatres are also functional. Moreover, MOU's have been signed with different private and public health care centres and hospitals like NICVD-Sukkur, DEPD, Civil Hospital and other facilities.

### SEMESTER SUMMARY

#### a. Basic Health Sciences

- Anatomy
- Physiology
- Exercise Physiology
- Biochemistry
- Pharmacology
- Microbiology & Pathology
- Movement Sciences
- Biomechanics & Ergonomics
- Medical Physics
- Molecular Biology & Genetics

#### b. Clinical Sciences

- Medicine
- Surgery
- Radiology & Diagnostic Imaging
- Emergency Procedures & Primary Care in Physical Therapy

#### c. Physical Therapy

- Manual Therapy
- Physical Agents and Electrotherapy
- Musculo-skeletal Physical Therapy
- Health & Wellness
- Neurological Physical Therapy
- Integumentary Physical Therapy
- Therapeutic Exercises
- Cardiopulmonary Physical Therapy
- Gerontology and Geriatric Physical Therapy
- Paediatric Physical Therapy
- Clinical Decision Making and Differential Diagnosis
- Sports Physical Therapy
- Prosthetics & Orthotics
- Obstetrics & Gynaecological Physical Therapy





#### d. Social Sciences and Research

- Sociology
- Community Medicine & Rehabilitation
- Scientific Inquiry & Research Methodology
- Ethics & Administration
- Biostatistics
- Research Synopsis & Project
- Evidence-Based Practice
- Entrepreneurship course

#### e. Compulsory Subjects:

- Pakistan Studies
- Introduction to Computers
- Islamic Studies/Ethics
- Functional English
- Academic reading and writing
- Technical and professional writing

### STUDENT ASSESSMENT METHODS

- BCQs
  - Short answer written examination
  - Viva, OSPE/OSCE
  - Group or individual presentation/ assignments
  - Student log books or written reports
- Students are continuously assessed during the semester by the aforementioned methods.

### ADMISSION CRITERIA

Doctor of Physical Therapy is a five-year semester based degree programme which is open to all science stream (Pre-Medical) students with minimum 50% marks from an accredited institution in Pakistan or equivalent to international standards. Therefore, candidates with O/A Levels must acquire equivalency before taking admission.

All candidates are selected on merit, according to the following criteria:

- SSC Marks
- HSSC Marks
- Entrance Test Marks
- Interview Applications are invited to all three sites Clifton, North and Education City Link road. (The final allocation of the site will be at the discretion of Ziauddin University depending upon the number of applications.)

### CAREER OPPORTUNITIES

There are several career opportunities available for

DPT graduates nationally and internationally. They can work in hospitals, rehabilitation centers, sports clubs, fitness centers, and private clinics. DPT graduates can specialize in various fields of physiotherapy, such as sports physiotherapy, neuro physiotherapy, Paediatric physiotherapy, and orthopedic physiotherapy.

The demand for DPT graduates is more comprehensive than in Pakistan. With the increasing demand for physiotherapy services globally, DPT graduates can also find employment opportunities in foreign countries. The incorporation of research and evidence based practice in the curriculum has opened doors for autonomous practice.



## MPHIL IN PHYSICAL THERAPY

ZCPT is aiming to create a dynamic research community, enabling physical therapists to fully equip themselves with the skills they require to excel in this field through Higher Degree programmes such as MPhil. ZCPT is offering MPhil in the following Specialties:

- Musculoskeletal Rehabilitation
- Cardiopulmonary Rehabilitation
- Neuromuscular Rehabilitation
- Exercise Physiology and Sports Sciences
- Women Health
- Paediatric Rehabilitation
- Applied Biomechanics and Anatomy

### LEARNING AND TEACHING STRATEGIES

Both national and international qualified teaching faculty promote better understanding through:

- Presentation/Assignment/Seminar
- Tutorials
- Skill-based labs
- Projects
- Clinical Practice (Supervised/Independent)

### ELIGIBILITY CRITERIA

- At least 16/17 years of education in the relevant discipline, Minimum CGPA 2.0/4.00 or 60% marks from HEC recognized institute (preferably the undergraduate degree should be HEC attested or having HEC Equivalence certificate in case of foreign university education).
- Passed NTS GAT (General C)/ HAT or equivalent test with 50%, the University GAT (General) test with 50% marks or GRE subject by HEC authorized testing services.
- An interview with MPhil Admission committee.

### SEMESTER SUMMARY

#### Semester I

##### 2 Core Courses

- Research, Biostatistics and Critical Appraisal in Physical Therapy
- Multimorbidity & Disability: Assessment and Management

##### 2 Elective Courses

- Elective I
- Elective II

#### Semester II

##### 2 Core Courses

- Assistive and Rehabilitative Technology
- Health and Sustainable Development

##### 2 Elective Courses

- Elective I
- Elective II

#### Semester III

##### For Course Base:

##### 2 Elective Courses

- Elective I
- Elective II

##### For Research Base:

Research Thesis

### STUDENT ASSESSMENT EXAMINATION POLICY

- BCQs
- Viva
- Short answer written examination
- Directly Observed Clinical Skills
- Group or individual presentation/assignments
- Semester Examination Students are continuously assessed during the semester by the above methods.

### ADMISSION CRITERIA

Physical therapy graduates who have completed their 4-year BPT or 5-year of DPT or equivalent from an accredited institution in Pakistan or equivalent to international standards. All candidates are selected on merit, fulfilling the following criteria:

- DPT/BPT/or equivalent
- Interviews of short listed candidates
- GAT General (50% cumulative score)
- ZU GAT

Applications are invited for North locations.

### CAREER OPPORTUNITIES

This degree provides a foundation for PhD, This degree will provide students with professional skills and equip them to compete in the job market. There are opportunities in teaching, research and clinical institutions both nationally and internationally

## DOCTOR OF PHILOSOPHY - PHYSICAL THERAPY

The aim of pursuing a PhD in Physical Therapy is to prepare physical therapy researchers to make significant enhancements in the field through research, specialization, leadership, and teaching, preparing them for careers in universities as educators, research scientists, policymakers, and entrepreneurs within the field of physical therapy.

### LEARNING AND TEACHING STRATEGIES

Better understanding is promoted by both national and international qualified teaching faculty through presentation, audiovisual aids, hands on skilled based learning, research colloquia, collaborative learning, evidence-based practice, critical analysis, case-based presentations, proposals and thesis writing.

### SEMESTER SUMMARY

#### Semester I

- Research Methodology-I
- Fundamentals Of Biomedical Sciences, Advancement In Molecular Biology & Genetics
- Major Discipline – I

#### Semester II

- Research Methodology-II
- Major Discipline-II
- Major Discipline-III

#### Semester III Onwards

Thesis

### ELIGIBILITY CRITERIA

- At least 18 years of education in the relevant

discipline, Minimum CGPA 3.0/4.00 from HEC recognized institute (essentially the undergraduate and postgraduate degrees should be HEC attested or / and having HEC Equivalence certificate in case of foreign university education or equivalent local education).

- The candidate should pass the university aptitude test equivalent to GRE/HAT General with the passing score of 60%.
- An interview with faculty/Departmental Admission Committee

### ADMISSION CRITERIA

- At least 18 years of education in the relevant discipline, Minimum CGPA 3.0/4.00 or 60% marks from HEC recognized institute (preferably the undergraduate and postgraduate degrees should be HEC attested or having HEC Equivalence certificate in case of foreign university education).
- Passed NTS GAT (subject) test with 60%, the University GAT (subject) test with 70% marks, or international GRE subject.
- An interview with Ph.D. Admission committee

### CAREER OPPORTUNITIES

The Doctor of Philosophy offers several opportunities that involve academic roles, leadership, and research. A PhD holder can work in an academic institution as an associate professor or a professor. As a research scientist and clinical researcher in academic institutions, research centers, or even private organizations, the doors are open. Career as a Policy advisor/advocate, director of clinical programmes or research is also open for both the national and international market



## FACULTY MEMBERS

### DEAN , PROFESSOR

Prof. Dr. Sumaira Imran Farooqui  
Dean, FAHS, Professor BSPT, MPA, DPT (D)  
Ph.D. in Physical Therapy

### PRINCIPAL, ASSISTANT PROFESSOR

Dr. Qurat ul Ain Adnan, PT  
Principal ZCPT (Karachi Campus) / HOD  
PEHSS / Assistant Professor  
PhD Scholar, MSPT (Cardiopulmonary  
Rehabilitation), BSPT

### PRINCIPAL, ASSISTANT PROFESSOR

Dr. Abid Mehdi Kazmi  
Professor/Clinical group head  
PhD Physical Therapy, MPT, DPT (D), BSPT

### ASSOCIATE PROFESSOR

Dr. Amna Aamir Khan  
Director PG studies/ Associate Professor  
PhD, MSc.PT, BSPT

### ASSISTANT PROFESSORS

Dr. Abid Khan, PT  
MPhil Coordinator/ Assistant Professor  
PhD Scholar, MSPT, ADPT, BSPT

Dr. Asma Hameed, PT  
DPT Coordinator-Clifton/ Assistant Professor  
MSPT, DPT-D, BSPT

Dr. Ahad Hassan, PT  
DFT Coordinator, Assistant Professor  
PhD (Scholar), MSPT (Musculoskeletal  
Rehabilitation), DPT-D, BSPT

Dr. Zuhaira Farooqui, PT  
Assistant Professor/Senior Physiotherapist  
PPDPT Equivalent to MPhil

Dr. Syed Irfan Haider Naqvi, PT  
Assistant Manager Boat Basin/ Assistant  
Professor  
MSPT, DPT

Dr. Al Wardha Zahoor, PT  
Assistant Professor  
MSc.PT, DPT

Dr. Jaza Rizvi, PT  
Assistant Professor  
PhD Scholar, MPhil, DPT

Dr. Meeran Hasnain, PT  
Assistant Professor  
MSPT, BSPT, DPT-D

Dr. Sabika Zehra, PT  
Assistant Professor  
MSPT, DPT-D, BSPT

Dr. Saima Ali, PT  
Assistant Professor  
MSPT, DPT-D, BSPT

Dr. Sana Mehmood, PT  
Assistant Professor  
MPhil, DPT

Dr. Shahrukh Abbasi, PT  
Assistant Professor  
MSPT, ADPT, BSPT

Ms. Shaista Tariq  
Assistant Professor  
PhD in Process, MS Economics & Finance,  
MBA Finance, B.Com

Mr. Zaki Hasan  
Assistant Professor  
PhD (Scholar), MBA, BBA

### SENIOR LECTURERS

Dr. Areeba Khan, PT  
DPT Coordinator-North/ Senior Lecturer  
MPhil (Enrolled), DPT

Dr. Zarmina Qazi, PT  
DPT Coordinator-Link Road/ Senior Lecturer  
DPT

Ms. Amna Munir  
Senior Lecturer  
MPhil (Enrolled), MSc (Physiology)

Dr. Angela John, PT  
Senior Lecturer  
MPhil (Enrolled), DPT

Dr. Ather Hashmi, PT  
Senior Lecturer  
MPhil, DPT

Dr. Bushra Mehwish, PT  
Senior Lecturer  
MSAPT, DPT

Dr. Faraz Iqbal Tipu, PT  
Senior Lecturer  
DPT-D, BSPT

Dr. Faryal Shoukat, PT  
Senior Lecturer  
MPhil (Enrolled), DPT

Dr. Fasiha Lareb, PT  
Senior Lecturer  
DPT

Dr. Fatima Hamza, PT  
Senior Lecturer  
MPhil (Enrolled), ADPT, BSPT

Dr. Fouzia Hussain, PT  
Senior Lecturer  
MPhil (Neuromuscular Rehabilitation), DPT

Ms. Hina Asif  
Senior Lecturer  
MSc

Ms. Humaira Ansari  
Senior Lecturer  
MPhil (Physiology), MSc (Physiology)

Mr. Huzaifa Ather Rajar, PT  
Senior Lecturer  
MPhil (Enrolled), DPT

Dr. Iqra Salahuddin, PT  
Senior Lecturer  
MPhil (Enrolled), ADPT, BSPT

Dr. Kiran Yameen, PT  
Senior Lecturer  
MPhil (Enrolled), DPT

Dr. Maha Siddiqui, PT  
Senior Lecturer  
MPhil (Enrolled), DPT

Dr. Mahnoor Khursheed, PT  
Senior Lecturer  
MPhil, DPT

Dr. Muhammad Faisal, PT  
Senior Lecturer  
MSPT, DPT

Dr. Muhammad Hamza Khalid, PT  
Senior Lecturer  
DPT

Dr. M. Haris Raza, PT  
Senior Lecturer  
MPhil (Enrolled), DPT

Mr. M. Saad Akhtar  
Senior Lecturer  
M.Sc. HPESS (UoK) EMBA Enrolled (UoK)

Dr. Rabeiya Tazeem, PT  
Senior Lecturer  
MSAPT, DPT-D, BSPT

Mr. Sajjad Ahmed  
Senior Lecturer  
MPhil (Enrolled), MSc (Statistics), BSc (H) in  
Statistics

Ms. Sumera Afzal  
Senior Lecturer  
MPhil (Enrolled), MSc (Physiology), BSc  
(Physiology)

Ms. Syeda Zeerak  
Senior Lecturer  
MS & MBA (HR), BA

Dr. Tabassum Zubair, PT  
Senior Lecturer  
MPhil, EMBA, DPT

Dr. Talala Bashir, PT  
Senior Lecturer  
MPhil, DPT

Dr. Zahra Khan Afridi, PT  
Senior Lecturer  
DPT

#### LECTURERS

Dr. Abid Gill, PT  
Lecturer  
DPT

Dr. Akber, PT  
Lecturer  
DPT

Dr. Arfa Dawood, PT  
Lecturer  
DPT

Dr. Ayesha Sonia, PT  
Lecturer  
MPhil (enrolled), DPT

Dr. Danish Zaman, PT  
Lecturer  
MPhil (enrolled), DPT

Dr. Maria Parvez, PT  
Lecturer  
DPT

Dr. Meer Bilawal, PT  
Lecturer  
DPT

Dr. Memoona Taj, PT  
Lecturer  
DPT

Dr. Misbah, PT  
Lecturer  
DPT

Dr. Muhammad Usman, PT

Lecturer  
DPT

Ms. Nisha Rafique  
Lecturer  
MSc (Microbiology)

Dr. Sana Shahzad, PT  
Lecturer  
MPhil (Enrolled). DPT

Dr. Summayia Rubab, PT  
Lecturer  
DPT

Dr. Uroosa Amin, PT  
Lecturer  
MPhil (enrolled), DPT

Mr. Zain Khan Jadoon  
Lecturer  
MSc (Physiology), BSc (Physiology)

Ms. Aqsa Sajjad  
Lecturer/Physiotherapist  
DPT

Dr. Rahat Akhlaq, PT  
Senior Physiotherapist  
MSPT, ADPT, BSPT

#### COLLEGE OF PHYSICAL THERAPY (SUKKUR)

##### PRINCIPAL, ASSOCIATE. PROFESSOR SUKKUR

Dr. Muhammad Usman Khan  
PRINCIPAL, ASSOCIATE. PROFESSOR SUKKUR  
BPT, PPDPT, MSPT, Ph.D. in progress

##### ASSISTANT PROFESSOR

Dr. Atta Muhammad(PT)  
ASSISTANT PROFESSOR  
PhD Scholar MSPT, DPT

##### SENIOR LECTURERS

Dr. Noor Ul Ain Komal (PT)  
Senior Lecturer  
MSPH DPT

Dr. Saiqa Jalil (PT)  
Senior Lecturer  
MPhil., DPT

Dr. Zohaib Hussain  
Senior Lecturer  
MSc-PT, DPT

#### LECTURERS

Dr. Sain (PT)  
Lecturer  
MSPT(enrolled),DPT

Dr. Kiran Bibi (PT)  
Lecturer  
DPT

Dr. Farkhunda Feroz (PT)  
Lecturer  
DPT

Ms. Ghulam Zohra  
Lecturer  
MPhil (enrolled), MA English

Ms. Kiran

#### LOCATION

North Nazimabad: Plot # E/40/1/1 – Wahid Colony, Block – B, Karachi.  
Boat Basin: F-6 Block-5 Khayaban-e-saadi, Boat Basin, Karachi.  
Sukkur: Ziauddin University, Village Dreha, Shikarpur Road, Sukkur.

#### CONTACT INFORMATION

Website: <https://zu.edu.pk/zcpt-campus/>  
Telephone:  
North: +92-21-36629250-51  
Clifton: +92-21-35148594, +92-21-35148642  
Sukkur: 071-2050000 ext; 8190, 8192 & 0321-3660104.



# COLLEGE OF OCCUPATIONAL THERAPY

## KEY INFORMATION

### DEAN

Prof. Dr. Sumaira Imran Farooqui  
(DEAN, FAHS)

### PRINCIPAL

Prof. Neelum Zehra (Karachi  
Campus)  
Dr. Muhammad Usman Khan (Sukkur  
Campus)

### CONTACT

#### Website:

<https://zu.edu.pk/college-of-occupational-therapy/>

#### Telephone:

Boat Basin: +92-32-42277550  
Sukkur: +92-321-3660104,  
+92-3213660190,  
+92-3213660191

### LOCATE US

#### Boat Basin:

F-6 Block-5 Khayaban-e-Saadi, Boat  
Basin, Karachi

#### Sukkur:

Ziauddin University, Village Dehra,  
Shikarpur Road, (Near Sports  
Complex) Sukkur, Pakistan.



"In December 2019, I started studying at Ziauddin University, choosing ZCOT as my preferred platform. The university is well-known for its commitment to academic excellence, combining theory with practical learning, and supporting a balance between studies and extracurricular activities.

During my time at Ziauddin University, the experienced faculty guided my personal and professional development. Their unwavering support transformed me into a compassionate and skilled occupational therapist, driven to contribute to healthcare and serve humanity.

Ziauddin University supported not only my academic journey but also opened doors for leadership. I began as a Ziauddin Debate Championship volunteer, expanded my roles, and grew by taking on responsibilities as a Teacher's Assistant. Participating in various student activities became a vital part of shaping my overall development.

I embraced challenges as opportunities to learn during my academic journey at Ziauddin University. Maintaining a healthy balance between academics and personal life posed a significant challenge, but with determination, hard work, and self-belief, I overcame obstacles. The unwavering support from Ziauddin University and my mentors have shaped me into a confident, competent individual, ready to tackle real-life and professional challenges with strength and resilience. As I graduate, my goal is to be a source of pride for my parents, teachers, friends, and most importantly, myself".

**KANZAA RAHIM**  
DOT

## INTRODUCTION

The College of Occupational Therapy (ZCOT) represents the evolution of the Occupational Therapy (DOT) programme, which was initially introduced in 2018 under the Department of Occupational Therapy at Ziauddin College of Rehabilitation Sciences (ZCRS) in Karachi, Pakistan. This transition occurred in December 2023, marking a significant milestone as ZCOT integrated into the Faculty of Allied Health Sciences.

As there is a critical need for Occupational Therapy services at national level, Ziauddin University has taken a significant step forward. We are proud to be the sole institution offering a five-year degree programme in Occupational Therapy. This initiative is crucial in bridging the gap in education, enhancing clinical practices, and integrating

Occupational Therapy into rehabilitation teams across various care continuums.

## VISION

Leading institute of Occupational Therapy in academics, services, and research for the well-being of society.

## DOCTOR OF OCCUPATIONAL THERAPY OFFERED AT;

Karachi Campus  
Sukkur Campus

## PROGRAMME OFFERED AT KARACHI

- DOT, Doctor of Occupational Therapy
- ADOT, Accelerated Doctor of Occupational Therapy

## PROGRAMME OFFERED AT SUKKUR

- DOT, Doctor of Occupational Therapy

## DOCTOR OF OCCUPATIONAL THERAPY

Doctor of Occupational Therapy is a five-year semester based degree programme.

## LEARNING AND TEACHING STRATEGIES

Both National and International qualified teaching faculty is involved to promote better understanding through:

- Presentation/Assignment/Seminar
- Tutorials
- Skills-based labs
- Projects
- Clinical Practice (Supervised)

## CLINICAL TRAINING

Students of Doctor of Occupational Therapy have an exclusive advantage to be a part of an organizations with a large setup. The clinical training provides a better chance of learning and practicing the skills in the field hence, prepares future therapists to play an important role in the improvement of healthcare quality in the society. Students of 3rd, 4th & 5th professional years complete their clinical training to the following continuum of care.

## CONTINUUM OF CARE

Following are the practices providing consistent and coordinated health care for a patient/client/community across the life span where students of ZCOT learn and practice knowledge clinical skills and research

- Neurodevelopmental
- Acute Care Tertiary Hospital
- School-based rehabilitation
- Mental Health
- Vocational Rehabilitation
- Geriatric Care
- Community Health
- Forensic Rehabilitation

## INDUSTRIAL COLLABORATIONS

Following are the prestigious institutions with which ZCOT has signed MOUs

- Sindh Institute of Physical Medicine and Rehabilitation (SIPMR),
- Sindh Institute of Child Health & Neonatology (SICHN),
- Dar-ul-Sukun (Paediatric setting),

- Shifaam Pead's and Neurology Center,
- Department of Empowerment of Persons with Disabilities (DEPD),
- Pakistan Center of Autism (PCA), Karachi Down Syndrome Program (KDSP),
- Milestone Charitable Trust (MCT), and
- Imran Rehabilitation Centre (IRC).
- The Aster School and AMI School.
- Shaheed Mohtarma Benazir Bhutto Institute of Trauma (SMBBIT)
- Dr. Ayesha Memorial Hospital.
- Anti-Narcotics Force Drug Rehabilitation Centre (MATRC)
- Karwan-e-Hayat.
- Dar-ul-Sukun (Old Age Home)
- JDC Old Age Home, while
- Karachi Vocational Training Centre (KVTC)
- Deewa Academy.

## SEMESTER SUMMARY

### FIRST YEAR SEMESTER-I

#### Subjects

- Anatomy-I
- Physiology-I
- Kinesiology-I
- Functional English
- Pakistan Studies
- Biostatistics-I

### FIRST YEAR SEMESTER II

#### Subjects

- Anatomy-II
- Physiology-II
- Kinesiology-II
- Expository Writing
- Islamic Studies/Moral Ethics
- Introduction to Computers

### SECOND YEAR SEMESTER III

#### Subjects

- Introduction to Occupational Therapy
- Biomechanics
- Professional Practice (Ethics, law, and administrations) and contemporary issues
- biochemistry and genetics
- Biostatistics-II
- Introduction to Psychology





## SECOND YEAR SEMESTER IV

### Subjects

- Occupational Therapy Assessment and Evaluation-I
- Developmental and Abnormal Psychology
- Pathology and Microbiology
- Sociology-I
- Therapeutic Activities and their Techniques-I
- Medical condition -I

## Third Year Semester V

### Subjects

- Medical condition II
- Sociology-II
- Therapeutic Activities and their Techniques-II
- Occupational Therapy Assessment and Evaluation-II
- Psychiatric Conditions
- Supervised Clinical Practices-I

## THIRD YEAR SEMESTER VI

### Subjects

- Sensory Integration
- Occupational Therapy in Acute Care
- Occupational Therapy Intervention in Physical health
- Pharmacology
- Surgery-I
- Supervised Clinical Practices-II

## FOURTH YEAR SEMESTER VII

### Subjects

- Scientific Inquiry and Research Methodology
- Surgery-II
- Applied geriatric for occupational therapy
- Prosthetics and Orthotics
- Occupational Therapy Intervention in Mental health
- Supervised Clinical Practices-III

## Fourth Year Semester VIII

### Subjects

- Civic Engagement
- Occupational Therapy in Acute Care-II
- Evidence-Based Practice
- Radiology & Diagnostic Imaging
- Applied Pediatrics for Occupational Therapy
- Supervised Clinical Practices-IV

## FIFTH YEAR SEMESTER IX

### Subjects

- Community Based Rehabilitation and Teaching Methodology

- Entrepreneurship
- Health and Wellness in Occupational Therapy
- Supervised Clinical Practices-V
- Ergonomics

## FIFTH YEAR SEMESTER X

### Subjects

- Assistive Technology and Rehabilitation Environment
- Management and Leadership
- Supervised clinical practices- VI
- Research Project

## ADMISSION CRITERIA

The Doctor of Occupational Therapy is a five-year semester based degree programme which is open to all science stream (Pre-Medical) students with minimum 50% marks from an accredited Institution in Pakistan or equivalent to international standards. Therefore, candidates with O/A levels must acquire equivalency before taking admission. All candidates are selected on merit, according to the following criteria:

- SSC Marks
- Entrance Test Marks
- HSSC Marks
- Interview

\*All science student (Pre-Medical or Pre-Engineering)

Programme is offered at Boatbasin, Karachi and Sukkur Campus.

## CAREER OPPORTUNITIES

There are a growing number of career opportunities available to occupational therapists, Professional occupational work with individuals from every age group and community, and they may work in a variety of settings as independent practitioner including; business and industrial workplaces, community-based programmes (homeless shelters, athletic clubs, and group homes), health agencies, hospitals, schools, and rehabilitation centers. More experienced practitioners can advance into management, specialization, teaching, or research.

# ACCELERATED DOCTOR OF OCCUPATIONAL THERAPY

Accelerated Doctor of Occupational Therapy is a one-year semester based degree programme for professional occupational therapists, keen to upgrade their degrees for their professional growth and enhance their expertise within the respected field of science.

## LEARNING AND TEACHING STRATEGIES

Both national and international qualified teaching faculty promote better understanding through:

- Presentation/Assignment/Seminar
- Online learning
- Online International courses professional growth
- Tutorials
- Projects

## SEMESTER SUMMARY

### • Semester - I

- Introduction to Computers
- Biomechanics and Ergonomics
- Professional Practices and teaching methodology
- Islamic studies/Pakistan studies
- Biostatistics
- Technical and professional writing

### • Semester - II

- Health and Wellness in Occupational Therapy
- Applied Paediatric and Sensory Integration
- Community Based Rehabilitation and Contemporary Issues

- Pathology and Microbiology
- Occupational Therapy in Acute Care
- Assistive Technology and Rehabilitative Environment
- Research

## STUDENT ASSESSMENT EXAMINATION POLICY

- BCQs
- Short answer written examination
- Viva
- Group or individual presentation/assignment

Students are continuously assessed during the semester by the above techniques. This carries 30% weightage for each course.

## ADMISSION POLICY

Occupational therapy graduates who have completed their 4-year BOT/BSOT or equivalent from an accredited institution in Pakistan or equivalent to international standards. All candidates are selected on merit, fulfilling the following criteria:

- BOT/BSOT/or equivalent
- Interviews of shortlisted candidates

## CAREER OPPORTUNITIES

Professional occupational therapists will be able to deliver evidence based occupational therapy treatment and evolve with changes within the healthcare system.



## FACULTY MEMBERS

### KARACHI / SUKKUR CAMPUS

#### DEAN, FACULTY OF ALLIED HEALTH SCIENCES

PROF. DR. SUMAIRA IMRAN FAROOQUI  
PH.D. PHYSICAL THERAPY, MPA, DPT (D), BSPT

#### PRINCIPAL, COLLEGE OF OCCUPATIONAL THERAPY

NEELUM ZEHRA  
MSHCM (ENROLLED) PGD-HCM, ADOT, TBSOT, BSCOT

#### ASSISTANT PROFESSOR

MR. ZAKI HASAN  
(PHD SCHOLAR, MBA, BBA)

#### SENIOR LECTURER

MR. SHAHIB DIN  
(BSOT) (ADOT)

MS. MAHA SOHAIL  
(BSOT) (ADOT)

MS. AREEBA KHAN  
(DPT) (MPHIL (ENROLLED))

MR. SAJJAD AHMED  
MPHIL (ENROLLED), MSC (STATISTICS), MSC (STATISTICS), BSC (HONS) STATISTICS

MS. AMNA MUNIR  
(M.SC. PHYSIOLOGY, B.SC PHYSIOLOGY)

MS. FATIMA HAMZA  
(MPHIL IN PHYSICAL THERAPY (ENROLLED), ADPT, BSPT)

MS. KIRAN YAMIN  
(DPT) (MPHIL (ENROLLED))

#### LECTURER

MS. HIBA KHAN  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MS. NABEELA WALI  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MS. SHAIKH MARIA TABASSUM  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MS. UROOJ SAGHIR  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MS. SHARIN ROBINSON  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MS. KANZAA RAHIM  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MS. ERAJ ASIF  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MS. FASIHA SHAH  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MS. SYEDA ARFA FATIMA  
(DOT)  
(OCCUPATIONAL THERAPIST / LECTURER)

MR. ZAIN JADOON  
(M.SC. PHYSIOLOGY, B.SC HONOURS)

### LOCATION

Boat Basin: F-6 Block-5 Khayaban-e-saadi, Boat Basin, Karachi.  
Sukkur: Ziauddin University, Village Dreha, Shikarpur Road, Sukkur.

### CONTACT INFORMATION

Website: <https://zu.edu.pk/college-of-occupational-therapy/>

Telephone:

Clifton: +92-32-42277550

Sukkur: +92-321-3660104





# COLLEGE OF CLINICAL PSYCHOLOGY

## KEY INFORMATION

**Principal**  
Ms. Sarah Jahangir

## CONTACT INFORMATION

Website:  
<https://ccp.zu.edu.pk/>  
Telephone:  
021-35810547  
Email:  
[info@zu.edu.pk](mailto:info@zu.edu.pk)  
Locate Us:  
Ground Floor, H.A Arcade, B.C-05,  
Block-1, Clifton, Karachi-75600

I have been a student at this university for the past three years now and it has been an incredible experience. From the moment I stepped onto the campus, I was impressed by the state-of-the-art facilities, engaging faculty, and diverse student community.

The faculty and staff truly care about helping us reach our academic and personal goals. I have received invaluable guidance from my professors, who have challenged me to think critically and pushed me to achieve my full potential.

One of the highlights of my time here has been the many opportunities for hands-on learning, such as research projects, extracurricular activities and various programs. These experiences have not only deepened my understanding of my chosen field of study but also broadened my horizons in terms of cultural awareness and global perspectives.

Lastly, campus life is vibrant and engaging, with a wide range of student activities and clubs to suit every interest. I have made lifelong friends here and feel a strong sense of community among my fellow students.

**FARZEEN SHAH**  
COLLEGE OF CLINICAL PSYCHOLOGY



## INTRODUCTION

The College of Clinical Psychology is providing quality education and clinical services.

Our mission is to create an inclusive community dedicated to innovation and excellence in teaching and research, as well as public service and engagement through hard work, integrity, freedom and discovery.

Psychology is the scientific study of the mind and behaviour, according to the American Psychological Association. Psychology is a multifaceted discipline and includes many sub-fields of study, such as human development, sports, health, clinical, social behavior and cognitive processes. In the discipline of psychology, the College offers a variety of programs:

1. BS in Clinical Psychology
2. MS in Applied Psychology (Postgraduate)

## VISION

The College of Clinical Psychology is rooted in Ziauddin University's strong commitment to become the most distinguished provider of quality education and clinical services. It envisions applying scientific knowledge of human behavior to benefit individuals and society.

## MISSION

College of Clinical Psychology is committed to equip students with rigorous academic knowledge, evidence-based clinical practice, and critical thinking abilities through education, research, and training in the psychological arena. The College prepares the next generation of ethical, knowledgeable, and innovative professionals using models emphasizing scientific rigor and experiential learning in conjunction with the academic programmes.

# BS CLINICAL PSYCHOLOGY

## INTRODUCTION

This 4-year BS is a unique programme designed to develop trained professionals in the field of Clinical Psychology. Ziauddin University initiated the programme to meet the urgent demand for trained clinical psychologists across the country and to provide graduates with the world-class theoretical and clinical experience required to practise mental health evaluation and treatment of diverse populations.

The BS Clinical Psychology programme emphasises both knowledge and skill development. The curriculum places a strong emphasis on comprehensive instruction, including theoretical and clinical training that involves performing and observing clinical tasks in mainstream, special education, and Ziauddin Hospitals.

The BS CP Programme offers the evidence-based supervised internship, which is mandatory for the specialised courses in clinical psychology.

## CAREER PROSPECTS

Graduates will be able to find numerous job opportunities in government and private organisations, NGOs and service sector institutions such as hospitals, rehabilitation centers and healthcare management programmes.

- Clinical psychologist
- Child psychologist
- Counsellors
- School Psychologist
- Armed Force Psychologist
- Clinical Case Manager

## COURSE OUTLINE FOR BS CLINICAL PSYCHOLOGY

### Semester 1

No.	Course Code	Course Name	Category
1.	ZUGE 001	Functional English	(Gen Ed)
2.	IPSY-112	Introduction to Psychology	(A)
3.	ISPY-113	Introduction to Social Psychology	(M)
4.	ZUGE-002	Introduction to Human Biology	(Gen Ed)
5.	ZUGE-003	Elementary Math & Stats	(Gen Ed)
6.	ZUGE 004	Pakistan Studies	(Gen Ed)

### Semester 2

No.	Course Code	Course Name	Category
7.	ZUGE 005	Expository Writing	(Gen Ed)
8.	ZUGE 006	History and Schools of Psychology	(Gen Ed)
9.	NUAY-123	Neuro- Anatomy	(M)
10.	ZUGE-007	Intro to ICT & Digital Literacy	(Gen Ed)
11.	ZUGE 008/	Islamic Studies	(Gen Ed)
12.	ZUGE-009	Moral Ethics	(Gen Ed)
13.	HDPY-127	Human Development & Psychology	(M)



### Semester 3

No.	Course Code	Course Name	Category
1.	ZUGE-010	Entrepreneurship	Gen Ed)
2.	ZUGE-011	Intro to Statistics	Gen Ed)
3.	ECPY-213	Elements of Clinical Psychology	(M)
4.	NRPY-214	Neurophysiology	(M)
5.	PYTH-215	Personality Theories	(M)
6.	PYCP-216	Psychology of Cognition and Perception	(M)

### Semester 4

No.	Course Code	Course Name	Category
7.	ZUGE-012	Bio statistics	(Gen Ed)
8.	HPSY-222	Health Psychology	(M)
9.	PCPT-223	Principle of Counseling & Psychotherapy I	(M)
10.	CDMH-224	Child Development & Mental Health	(M)
11.	AGPY-225	Ageing Psychology	(M)
12.	POPY-226	Positive Psychology	(M)

### Semester 5

No.	Course Code	Course Name	Category
13.	RMPY-311	Research Methods in Psychology	(M)
14.	FNPY-312	Fundamentals of Neuropsychology	(M)
15.	MHPY-313	Mental Health & Psychopathology	(M)
16.	PTMT-314	Psychological Test & Measurement I	(M)
17.	EDPY-315	Educational Psychology	(M)
18.	PCPT-316	Principle of Counseling & Psychopathology II	(M)

### Semester 6

No.	Course Code	Course Name	Category
1.	ABAS-321	Applied Behavior Analysis	(M)
2.	PTMT-322	Psychological Test & Measurement II	(M)
3.	ORPY-323	Organizational Psychology	(M)
4.	ZUGE-013	Community Psychology	Gen Ed)
5.	FOPY-325	Forensic Psychology	(M)
6.	SPPY-326	Sports Psychology	(M)

### Semester 7

No.	Course Code	Course Name	Category
1.	PPEP-411	Professional Practices & Ethics in Psychology	(M)
2.	PPGY-412	Psychopharmacology	(A)
3.	SPED-413	Special Education	(A)
4.	SPCP-414	Supervised Clinical Practice	
5.	CDMD-415	Clinical Decision Making & Differential Diagnosis	(M)
6.	QAQR-416	Qualitative and Quantitative Research	(M)

### Semester 8

No.	Course Code	Course Name	Category
7.	CIDM-421	Crisis Intervention (Trauma/Disaster/Management) (M)	(M)
8.	CBTY-422	Cognitive Behavior Therapy (M)	(M)
9.	SPCP-423	Supervised Clinical Practice	
10.	RHSC-424	Rehabilitation Sciences	(A)
11.	RPTH-425	Research Project/Thesis	

### ELIGIBILITY CRITERIA

- Minimum 50% marks in Intermediate/ A Level
- Commitment towards a helping profession
- Admission test and interview will also be conducted for admission purposes.

### PROGRAMME DURATION

BS Clinical Psychology is a four-year undergraduate programme comprising of 138 credit hours and 47 courses. These courses can be completed within the duration of 4 years.

### FEE STRUCTURE

Application Processing Fee	5,000 One time Only
Security Deposit	10,000 One Time Only
Admission Fee	50,000 One time Only
Tuition Fee	240,000 Per Semester
Examination Fee	10,000 Per Semester
Student Activity	8,000 Per Semester
Library Fee	20,000 Yearly
<b>TOTAL</b>	<b>338,000</b>

## MS APPLIED PSYCHOLOGY

The demanding 1.5–4 year MS Applied Psychology programme aims to produce highly qualified practitioners and researchers by offering advanced level knowledge, training, and research.

### PROGRAMME OBJECTIVES

The programme objectives are to

1. Empirically appraise the delivery of psychological services to users.
2. Extensively use a variety of research methodologies and psychological approaches to generate new knowledge in a broad range of professional contexts.
3. Apply the knowledge and skills in diverse specialised fields of Psychology.

### AREAS OF SPECIALISATION:

1. Clinical Psychology
2. Health Psychology
3. Child Psychology
4. Organisational Psychology

\* Specialisations available may change in accordance with university policy.

### SEMESTER-WISE BREAKDOWN

#### MS APPLIED PSYCHOLOGY

Semester I		
Code	Title	Credits
MSAP 701	Core-I	3 (3+0)
MSAP702	Core-II	3 (3+0)
MSAP703	Elective I	3 (2+1)
MSAP 704	Elective II	3 (2+1)
<b>Total</b>		<b>12</b>

### SCHEME OF STUDY FOR MS APPLIED PSYCHOLOGY

There are two streams offering for MS Applied Psychology.

#### MS (COURSE-BASED STREAM)

Core Courses: 04 (12 credit hours)

Elective courses/placements: 06 (18 credit hours)

Total Credit: 30

#### MS (RESEARCH-BASED STREAM)

Core Courses: 04 (12 credit hours)

Elective courses: 04 (12 credit hours)

Thesis: 06 (6 credit hours)

Total Credit 30

Semester II		
Code	Title	Credits
MSAP 705	Core-III	3 (3+0)
MSAP 706	Core-IV	3 (3+0)
MSAP 707	Elective III	3 (2+1)
MSAP 708	Clinical Placement	3 (0+3)
<b>Total</b>		<b>12</b>
Semester III		
Code	Title	Credits
MSAP 801	Elective IV	3(0+3)
MSAP 802	Elective V	3 (3+0)
	Thesis	6 credits

#### MS (Course-based stream)

Core Courses: 04 (12 credit hours)

Elective courses/placements: 06 (18 credit hours)

Total Credit: 30

#### MS (Research-based Stream)

Core Courses: 04 (12 credit hours)

Elective courses: 04 (12 credit hours)

Thesis: 06 (6 credit hours)

Total Credit 30

### CAREER PROSPECTS

Graduates will be able to find numerous job opportunities in government and private organisations, NGOs and service sector institutions such as hospitals, rehabilitation centers and healthcare management programmes.

- Clinical psychologist
- Child psychologist
- Counsellors
- School Psychologist
- Armed Force Psychologist
- Clinical Case Manager
- Research Organisation

### ELIGIBILITY CRITERIA

1. BS/MA/MSc degree in Psychology or Post Magistral Diploma in Clinical Psychology (PMDCP)
2. BS degree in Psychology
3. Clearance of the GAT OR Ziauddin University admission test with 50% marks.
4. Interview and Psychological Assessment: This will be conducted to determine the suitability of the candidates for MS in Applied Psychology Programme





## FEE STRUCTURE

<b>MS Applied Psychology</b>	
Duration	1.5-4 Years
Admission Fee	50,000 (One time)
Application Processing Fee	5,000 (One time)
Tuition Fee	80,000 Per-semester
Number of Courses Per Semester	04
Examination Fee	10,000 Per-semester
Security Deposit (Refundable)	10,000 (One time)
Student Activity Fund	10,000 Per year
Total Fee 1st Semester	165,000
<b>For Research Students only</b>	
Research Supervision Fees	28000, 3 <sup>rd</sup> semester
GEC Supervision Fees	8000, 3 <sup>rd</sup> semester
Total	36000

## PROGRAMME DURATION

MS Applied Psychology is a 1.5–4 year postgraduate programme comprising of 30 credit hours.

UNDERGRADUATE ACADEMIC CALENDAR 2024-2025						
KARACHI CAMPUS						
		Semester	Event	Start	End	Duration
FACULTY OF ALLIED HEALTH SCIENCES	ZCCP	Spr	Semester Start	Monday, 23rd Dec, 2024 (1,2,3,4,5year)		
		Spr	Pre Midterm Classes	Mon23rd Dec,2024	Friday, February 14, 2025	8 weeks
		Spr	Mid terms	Monday, February 17, 2025	Friday, February 21, 2025	1 week
		Spr	Post Midterm Classes	Monday, February 24, 2025	Friday, April 18, 2025	8 weeks
		Spr	Termination of Classes	Friday, April 18, 2025		
		Spr	Preparation week	Monday, April 21, 2025	Friday, April 25, 2025	1 week
		Spr	Final Exams	Monday, April 28, 2025	Friday, May 9, 2025	2 weeks
		Spr	End of Semester	Friday, May 9, 2025		
		BREAK		Monday, May 12, 2025	Friday, May 16, 2025	1 week
		Fall	Admission Commencemen †			
		Fall	Semester Start	Monday, 19th may, 2025		
		Fall	Pre Midterm Classes	Monday, 19th May,2025	Friday, July 11, 2025	8 weeks
		Fall	Mid terms	Monday, July 14, 2025	Friday, July 18, 2025	1 weeks
		Fall	Post Midterm Classes	Monday, July 21, 2025	Friday, September 12, 2025	8 weeks
		Fall	Termination of Classes	Friday, September 12, 2025		
		Fall	Preparation week	Monday, 15 Sept, 2025	Friday, 19th Sept, 2025	1 week
		Fall	Final Exams	Monday, 22 Sep, 2025	Friday, October 3, 2025	2 weeks
		Fall	End of Semester	Friday, October 3, 2025		

	<b>BREAK</b>	Break	Monday, October 6, 2025	Friday, October 10, 2025	1 week
	<b>Winter</b>	Admission Commencement	Subjected to declaration of results from ZU Examination Department		
	<b>Winter</b>	Semester Start	Monday, October 13, 2025		
	<b>Winter</b>	Pre Midterm Classes	Monday, October 13, 2025	Friday, October 31, 2025	3 weeks
	<b>Winter</b>	Mid terms	Monday, November 3, 2025	Friday, November 7, 2025	1 week
	<b>Winter</b>	Post Midterm Classes	Monday, November 10, 2025	Friday, November 28, 2025	3 weeks
	<b>Winter</b>	Termination of Classes	Friday, November 28, 2025		
	<b>Winter</b>	Final Exams	Monday, December 1, 2025	Friday, December 5, 2025	1 week
	<b>Winter</b>	End of Semester	Friday, December 5, 2025		
	<b>BREAK</b>	Break	Monday, December 8, 2025	Friday, December 19, 2025	2 weeks

## FACULTY MEMBERS

### Ms. Sarah Jehangir

Principal, College of Clinical Psychology,  
Ziauddin University

MS in Clinical Psychology, PMDCP in Clinical Psychology, Diploma in Healthcare management

### Dr. Sadaf Hafeez Chohan

Assistant Professor PhD in Clinical Psychology, PMDCP, DCT, MSc, Consultant Clinical Psychologist, Certified Hypnotherapist (NGH, USA). NLP Practitioner. Academic and Clinical Incharge Post Graduate Program.

### Mr. Aoun Ali

Senior Lecturer/Clinical Psychologist  
MPhil in Clinical Psychology and PhD Fellow.

### Ms. Shumaila Atif

Senior Lecturer/ Clinical Psychologist  
MPhil in Clinical Psychology

### Ms. Syeda Sania Khalid

Lecturer/ Lab Psychologist  
BS (Honors) Psychology, MSc Psychology

### Ms. Muqadas Kainat

Lecturer/ M. Phil in Clinical Psychology  
(Research Fellow)

### Muhammad Abdullah Ali Farhan

Lecturer/ M. Phil in Clinical Psychology  
(Research Fellow)

### LOCATION:

The programme is offered at College of Clinical Psychology, Ziauddin University, Clifton Campus.

### CONTACT INFORMATION

#### Address

College Clinical Psychology, Block-1, Clifton, Karachi (75600)

#### Phone

021-35810547

#### Email

info@zu.edu.pk

#### Website

<https://lahs.zu.edu.pk>





# COLLEGE OF SPEECH LANGUAGE & HEARING SCIENCES

## KEY INFORMATION

### PRINCIPAL

Ms. Amina Siddiqui

### CONTACT INFORMATION

Website:

<https://zcslhs.zu.edu.pk/>

Telephone:

+92-21-35862937

+92-21-35148625-6

Locate Us:

D-24, Block 1, Clifton, Karachi

"The path of academia is never a straight line; it's a tapestry woven with moments of triumph and tribulation. These four years have been marked by challenges, hardships, and late-night study sessions, but through it all, we emerged stronger and ready to face the world.

Achieving a gold medal in the Audiology and Speech Therapy programme has been a remarkable journey, and the unwavering support of my parents played an instrumental role in this accomplishment. Their belief in my abilities motivated me to persistently work towards improvement. This achievement is not just a personal triumph but a testament to the power of a supportive network, highlighting the significance of genuine connections in overcoming obstacles and reaching one's goals.

As we turn the page to a new chapter, let us carry the lessons learned from our academic challenges into the world, where new obstacles await. Let this convocation be a reminder that we have the strength to overcome any adversity and the resilience to thrive in the face of uncertainty.

Congratulations, fellow graduates! May our journey beyond these academic walls be as remarkable as the one that brought us here today. Wishing you all continued success and fulfilment".

**MAHA FAROOQ**  
BS AUDIOLOGY AND SPEECH  
LANGUAGE THERAPY

## INTRODUCTION

The establishment of the College of Speech Language and Hearing Sciences (CSLHS) in Karachi, Pakistan, in 2007 is a significant step in addressing the vast demand for speech-language therapists and audiologists in the country. With a population of over 250 million and an estimated 22 million individuals suffering from communication, swallowing, and/or hearing disorders, the shortage of qualified professionals in this field is evident.

CSLHS plays a crucial role in bridging this gap by offering a comprehensive curriculum that prepares students to become skilled and knowledgeable professionals in speech-language pathology and audiology. The college provides undergraduate programme in audiology and speech language therapy (BS- ASLT); postgraduate programme in speech and language pathology (MS-SLP), along with a diploma namely the Diploma of Childhood Development Programme (DCDP), Diploma in Multi-Rehabilitation of Children with Special Needs (MRSN), Diploma in Learning Disability (DLD).

The curriculum at CSLHS covers a wide range of subjects related to speech-language pathology and audiology, including linguistics, anatomy, and physiology of speech and hearing mechanisms, assessment and intervention techniques, auditory rehabilitation, neurology, and research methodology. By providing theoretical knowledge, practical training, and clinical experience, the college equips students with the necessary skills to assess, diagnose, and treat various communication disorders.

Practical training opportunities in the form of clinical practicum experiences are also offered, allowing students to gain hands-on experience by working with clients in on-campus clinics or externship placements in various healthcare settings. This exposure helps students apply their knowledge and develop their clinical skills under the supervision of experienced professionals.

The faculty at CSLHS consists of experienced professionals; including speech-language pathologists, audiologists, psychologists, and researchers, who are dedicated to providing quality education and mentorship to students. Their engagement in research activities contributes to advancements in the field and enhances the quality of education provided to the students.

Upon graduation, students from CSLHS have various career options, including working in hospitals, clinics, schools, research institutions, private practice, or academic settings. They can provide assessment, diagnosis, and intervention services to individuals with communication and hearing disorders, assist individuals with augmentative and alternative communication (AAC) needs, conduct research, or contribute to policy development in the field.

Overall, the establishment of the College of Speech Language and Hearing Sciences in Pakistan represents a significant milestone in addressing the shortage of speech-language therapists and audiologists and is instrumental in improving the quality of life for individuals with communication and hearing disorders in the country.





## BS AUDIOLOGY & SPEECH LANGUAGE THERAPY

### INTRODUCTION

The Bachelor of Science (BS) programme in Audiology and Speech-Language Therapy is an undergraduate programme that aims to equip students with a solid foundation in audiology and speech-language pathology. This comprehensive programme integrates coursework in communication sciences, human anatomy and physiology, linguistics, psychology, and other relevant disciplines. Its primary goal is to prepare students for a profession focused on diagnosing and providing treatment for individuals with communication and hearing disorders.

**Overview of the programme and its key components:** The Audiology and Speech-Language Therapy Bachelor of Science (BS) programme emphasizes the assessment, diagnosis, and treatment of individuals experiencing speech, language, and hearing disorders. Students enrolled in this programme acquire a comprehensive understanding and proficiency in evaluating and managing a wide range of communication disorders. These disorders include speech disorders, language delays, language disorders, dysfluency, voice disorders, feeding difficulties, adult neurogenic disorders, as well as hearing impairments. Through coursework and practical training, students develop the necessary knowledge and skills to address the diverse needs of individuals with these communication challenges.

**Core Curriculum:** The curriculum typically includes a combination of core coursework, specialized courses, and clinical practicum experiences. Core courses cover subjects such as normal language development, anatomy and physiology of the speech and hearing mechanisms, phonetics, audiology, speech and language assessment, therapeutic techniques, and research methods.

**Clinical Practicum:** The programme places a strong emphasis on practical, hands-on learning through clinical experiences. Students are provided with valuable opportunities to work directly with individuals who have communication disorders, all under the guidance and supervision of experienced professionals. These clinical practicum experiences are conducted in diverse settings such as university clinics, hospitals, rehabilitation centers, and community-based facilities. By participating in these practical training opportunities, students gain essential skills and invaluable exposure to different populations and real-world contexts.

**Professional Development:** In addition to the core curriculum, the programme places importance on fostering professional development among students. This includes instilling ethical standards, promoting cultural sensitivity and awareness, and enhancing effective communication skills with clients, families, and other professionals. Students are educated on the significance of audiologists and speech-language pathologists as vital members of multidisciplinary teams and the value of ongoing education and professional growth in the field. While a Bachelor of Science (BS) degree in Audiology and Speech-Language Therapy provides a strong foundation, graduates may be required to pursue further education, such as a master's degree, and obtain licensure or certification to practice as professionals in audiology or speech-language pathology.

Overall, a BS in Audiology and Speech-Language Therapy programme provides a solid academic foundation and practical experience for individuals interested in helping individuals with communication and hearing disorders. It serves as a stepping stone for further education and professional development in the fields of audiology and speech-language pathology.

### CAREER PROSPECTS OF PROGRAMME

A BS programme in Audiology and Speech-Language Therapy can provide graduates with a range of career prospects in the field of communication sciences and disorders. The followings are some potential career paths and job opportunities for individuals with a BS degree in Audiology and Speech-Language Therapy:

**Rehabilitation Centers:** Graduates can find employment in rehabilitation centers, where they work with individuals who have communication disorders resulting from stroke, traumatic brain injury, or other neurological conditions. They may assist in speech and language therapy sessions or provide support in augmentative and alternative communication (AAC) techniques.

**Schools and Education Settings:** Graduates may work in schools and educational institutions, providing support to students with communication disorders. They may assist in the implementation of Individualized Education Programmes (IEPs) and collaborate with teachers and parents to support student's communication needs.

**Early Intervention Programmes:** Graduates can work in early intervention programmes that support infants and young children with communication delays or disorders. They may assist in conducting assessments, implementing therapy plans, and providing family-centered support.

**Research and Academic Institutions:** Graduates may pursue research positions or work in academic institutions, assisting in research projects related to communication sciences and disorders or contributing to teaching and training future professionals in the field.

**Non-profit Organizations:** Graduates can work in non-profit organizations that focus on supporting individuals with communication disorders and their families. They may be involved in community outreach programmes, advocacy efforts, and providing resources and

support to individuals and families affected by communication disorders.

Individuals interested in pursuing a career in audiology and speech-language therapy should consider gaining practical experience through internships, volunteering, or observation opportunities, as well as pursuing advanced education and certifications to enhance their career prospects and professional growth in the field.

### ELIGIBILITY CRITERIA

#### Educational Qualifications:

- Applicants should have completed a Higher Secondary School Certificate (HSSC) or equivalent 12th Grade Qualification and have obtained a minimum of 55% marks in any discipline.
- Candidates who are waiting for their HSSC or equivalent 12th Grade results are also eligible to apply on a provisional basis.

#### Prerequisites:

- Applicants should have studied Sciences with Biology in Secondary School Certificate (SSC) or Biology in equivalent 10th Grade.
- Applicants having non-medical background should complete "Biology" as a foundation course in zero semester.

#### Entrance Test:

- Applicants are required to take entrance tests, conducted by the Ziauddin University Examination Department.
- The entrance test assesses the applicant's cognitive abilities, problem-solving skills, logical reasoning, and language proficiency and also knowledge in areas like biology, physics, chemistry, mathematics, and English language or communication sciences.

#### English Language Proficiency:

- Applicants are required to demonstrate proficiency in written and spoken English language.
- BS in Audiology and Speech-Language Therapy programme is conducted in English. English language proficiency is crucial in these fields as effective communication with clients and colleagues is essential.

**Personal Statement or Essay:**

• Applicants are required to submit a personal statement or essay detailing their interest in audiology and speech-language therapy, relevant experiences, and career goals. This provides an opportunity for applicants to showcase their passion and commitment to the field.

**Interviews:**

• The interview may be conducted by faculty members or professionals in the fields of audiology and speech-language therapy. It allows the institute to assess the applicant's communication skills, interpersonal abilities, commitment toward a helping profession, and suitability for the programme.

**FEE STRUCTURE**

Application Processing Fees	Rs. 5,000/-
Admission Fees	Rs. 50,000/-
Tuition Fees	Rs. 175,000/- (per semester)
Examination Fees	Rs. 11,000/- (per semester)
Library Fees	Rs. 9,000/-
Student Activity	Rs 6,500/-

**Note:**

- Any additional taxes imposed by the government will be the responsibility of the students/parents/guardians.
- The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.
- Advance fee to be paid semester wise.
- All dues need to be cleared within two weeks of the commencement of the semester.
- A 2% surcharge per month will be levied on outstanding fees after the due date.

**DURATION OF PROGRAMME**

The minimum duration of a BS programme in Audiology and Speech-Language Therapy is 4 years.

During this time, students will typically complete a combination of core coursework, specialized courses in audiology and speech-language therapy, clinical practicum experiences, and possibly an internship or capstone project. The programme is designed to provide students with a comprehensive understanding of the field and prepare them for entry-level positions or further education in audiology and speech-language pathology.





## ACADEMIC CALENDAR

Event	Start	End	Duration
Semester Start	Thursday, January 18, 2024		
Pre-Midterm Classes	Thursday, January 18, 2024	Friday, March 15, 2024	8 weeks
Mid Semester Exams	Monday, March 18, 2024	Friday, March 22, 2024	1 week
Post Midterm Classes	Monday, March 25, 2024	Friday, May 17, 2024	8 weeks
Termination of Classes	Friday, May 17, 2024		
Preparation week	Monday, May 20, 2024	Friday, May 24, 2024	1 week
Semester Final Exams	Monday, May 27, 2024	Friday, June 07, 2024	2 weeks
End of Semester	Friday, June 07, 2024		



## MS SPEECH LANGUAGE PATHOLOGY

### INTRODUCTION

The College of Speech Language & Hearing Sciences introduced Post Graduation in Speech Language Pathology (MS-SLP) in the year 2019, following the success of the BS-SLT programme, following the success of the BS-SLT programme which was upgraded to the BS-ASLT in 2015.

### OBJECTIVES

The graduates of the MS SLP programme will teach and train undergraduates in the field of speech-language pathology and conduct awareness and advocacy for the profession in Pakistan, upholding its professional ethics and dignity. They shall actively engage in research and development for construction of assessment and therapeutic tools that are culturally and linguistically appropriate for the Pakistani population.

- The students will show a complete understanding of biological and medical sciences, social and behavioural sciences as well as statistics and research methods.
- The students are well versed with the human communication, the feeding and swallow processes in children and adults; as well as the biological, neurological, psychological, social, linguistic and cultural bases to them.
- The student should demonstrate the ability to integrate and differentiate between the normal and abnormal human development across the lifespan; and the disorders and differences thereof.
- The students must be well versed with the etiologies of the communication and swallow disorders and their relevant anatomy/physiological disorders of voice and resonance, as well as respiration and phonation;
- Such as disorders in receptive and expressive language (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication and paralinguistic communication) in speaking, listening, reading, writing in children and adults;
- Hearing impairment and its impact on speech and language development;
- Disorders in the functions of feeding and swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding, orofacial myology);
- Disorders of cognition in all aspects of com-

munication (attention, memory, sequencing, problem-solving, executive functioning);  
 l) Socio-communicative disorders (including challenging behaviour, ineffective social skills, and lack of communication opportunities);  
 m) The selection and utilisation of augmentative and alternative communication modalities.

j) For all items from (a) - (l) above, the students must exhibit knowledge current procedures of intervention including assessment, evaluation, and treatment; as well as demonstrate knowledge of ethical procedures within. [Details for knowledge and skills in professional practice here have been adapted from the ASHA policies of evaluation and examination see below (o) to (q)].

### EVALUATION

- Conduct screenings and prevention procedures (including prevention activities).
- Collect case history information and integrate information from clients/patients, family, caregivers, teachers, and relevant others, including other professionals.
- Select and administer appropriate evaluation procedures, such as behavioural observations, non-standardised and standardised tests, and instrumental procedures.
- Adapt evaluation procedures to meet client/patient needs.
- Interpret, integrate, and synthesise all information to develop diagnosis and make appropriate recommendations for intervention.
- Complete administrative and reporting functions necessary to support evaluation.
- Refer clients/patients for appropriate services.

### INTERVENTION

- Develop setting-appropriate intervention plans with measurable and achievable goals that meet clients'/patients' needs. Collaborate with clients/patients and relevant others in the planning process.
- Implement intervention plans (involve clients/patients and relevant others in the intervention process).
- Select or develop and use appropriate materials and instrumentation for prevention

and intervention.

d. Measure and evaluate clients'/patients' performance and progress.

e. Modify intervention plans, strategies, materials, or instrumentation as appropriate to meet the needs of clients/patients.

f. Complete administrative and reporting functions necessary to support intervention.

g. Identify and refer clients/patients for services as appropriate.

### INTERACTION AND PERSONAL QUALITIES

a. Communicate effectively, recognising the needs, values, preferred mode of communication, and cultural/linguistic background of the client/patient, family, caregivers, and relevant others.

b. Collaborate with other professionals in case management.

c. Provide counseling regarding communication and swallowing disorders to clients/patients, family, caregivers, and relevant others.

r) The student must demonstrate knowledge of research principles and evidence based clinical practice.

s) The students must demonstrate appropriate skills in oral and written or other forms of communication required by a professional in the field of speech language pathology.

### THE STUDENT MUST DEMONSTRATE KNOWLEDGE OF THE FOLLOWING

Intervention, assessment and evaluation procedures with patients/clients. (adopted from ASHA).

Entry Requirement of Programme or Eligibility for admission into MS SLP.

o Candidates with a 4 year BS (Speech Language Therapy/Pathology) degree from any recognized University are eligible for admission to the course.

o CGPA of 2.5 in the Undergraduate BS SLT or BS ASLT degree

o GAT (General). In case GAT (General) is not done at the time of entry into this programme, then candidates MUST PASS GAT (General) BEFORE completion of second semester as recommended by HEC.

o There is no upper age limit for admission to the course.

### SCOPE

• (Market and Social employment perspective) Candidates graduating with the MS SLP

degree shall be eligible for clinical practice in a hospital, and rehab setting as well as at mainstream and special schools, where in they shall independently screen, assess, evaluate, diagnose, and treat all disorders of speech, language, hearing, feeding and swallowing in children and adults as well as provide feedback and counselling to the caregivers, and other support personnel.

- The graduates shall successfully utilise AAC tools (Alternative – Augmentative Communication) as and when required after a complete assessment of the needs of the patient.

- The graduates shall indulge in research and development nationally and internationally towards strengthening their own knowledge and skills as well as for establishing their profession in Pakistan.

- The graduates shall develop indigenous tools of assessment and therapy that are culturally and linguistically appropriate to the Pakistani fabric and to the Indian sub-continent.

- They shall be eligible to teach and train students in a college/university setting.

- Graduates shall also teach and train educationists and special educationists for identification and classroom management of children with speech, language, hearing and feeding disorders.

- They shall teach and train parents for management of the child at home.

- The graduates shall work in a team of professionals whenever and wherever required, wherein other members of the team shall include neurologists, paediatricians, otolaryngologists, maxillofacial surgeons, dentists, orthodontists, prosthodontists, psychologists, audiologists, occupational therapists, physical therapists, special educationists, educationists, teachers' aides and parents.

### DURATION OF THE PROGRAMME

- 4 Semesters/2-years (with additional 1 year for students unsuccessful in either semester)

- Note: Each semester shall extend over a period of 16-18 weeks

- The MS SLP programme shall be of not more than 48 months in duration.

## DIPLOMA IN CHILDHOOD DEVELOPMENT AND PSYCHOPATHOLOGY

The CSLHS commenced a Diploma in Childhood Development and Psychopathology (DCDP) in August 2013. The programme caters towards teachers, remedial and early childhood educationists, and parents who want to enhance their knowledge in this area of early childhood development.

DCDP follows a modular curriculum, which emphasises on in-depth training and 7 modules covering human development from conception through Adolescence and Childhood Disorders are taught. In addition 16 hours of observations (practical component) is mandatory at CSLHS recommended schools. Assistance is provided for the observation placement at the schools.

This programme examines the physical, cognitive and social development with diagnostic and intervention techniques for early childhood disorders.

### LEARNING AND TEACHING STRATEGIES

The following teaching/learning methods/strategies are used to promote better understanding:

- Lectures
- Case studies
- Small Group discussions
- Observation of children in mainstream and special schools shall be a mandatory component of the course.

### SEMESTER SUMMARY

The programme comprises two semesters.

1st semester: August – December

2nd semester: January - May

### STUDENT ASSESSMENT

Examinations:

- Quizzes- 20% of final grade
- Assignments- 10% of final grade
- Mid Term Examination- 20% of final grade
- Viva- 10% of final grade

Final Exam- 40% of final grade

### ADMISSION POLICY

Intermediate/A level from all disciplines

### FEE STRUCTURE

Application Fees:	Rs. 5,000/-
Tuition Fees:	Rs. 132,000/-
Examination Fee:	Rs. 18,000/-

**Note:** Any additional taxes imposed by the government will be the liability of the students/parents/guardian.

The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.

Advance fees to be paid semester-wise. All dues need to be cleared within two weeks of commencement of the academic year. 2% surcharge per month will be levied on outstanding fees after the due date.

### CAREER OPPORTUNITIES

The diploma programme is framed to endow students with the foundation knowledge needed to work with children and adolescent that are identified with development delays and disorders. The course is structured to provide students with a wide range of knowledge (both theoretical and practical) to improve screening and referral practices; thereby promoting early intervention.

After completion of the diploma, trainees can utilise their expertise in counselling and assessment of children behaviour and help them to cope with their problems and grow into successful, well-adjusted adults.



## DIPLOMA IN MULTI RE/HABILITATION OF CHILDREN WITH SPECIAL NEEDS (Dip MRSN)

The College of Speech Language and Hearing Sciences (CSLHS) and the Association of Children with Emotional and Learning Problems (ACELP) are partnering to offer a Diploma in Multi-Rehabilitation of Children with Special Needs (Dip MRSN). This programme is designed for teachers and therapists working with special needs children in mainstream schools, special schools, and rehabilitation centres.

The Dip MRSN will teach you how to identify different types of disabilities in children (physical, sensory, emotional, and cognitive), as well as how to use effective teaching practices for children with special needs. The curriculum employs adult learning concepts (andragogy) to foster a collaborative learning environment in which participants can share their experiences and expand their understanding of special education.

### COURSE VENUE:

ACELP, Institute of Child Development, Rafiqi Shaheed Road, Karachi.

### DURATION OF DIPLOMA:

The duration of the course will be six months, during which course participants will be expected to study on Friday evening and Saturday morning, defining this as a part time program.

### TIME OF THE COURSE:

For theory classes::

Friday, 3 pm to 5:15 pm

Saturday, 9 am to 1:30 pm

For practical training, trainees are required to make themselves available on working days

### EXAMINATION:

The examination will be conducted jointly by the ACELP and CSLHS-ZIAUDDIN UNIVERSITY.

### ELIGIBILITY CRITERIA:

The course participants who are teachers should have at least 2 years' experience teaching in a school and have at least a graduate degree.

### COURSE DESCRIPTION:

This course is designed for educators (teachers, teacher aides), related school personnel, and parents of children with special needs. The programme- equips participants with knowledge and strategies to identify and teach these students.

The course uses a blend of instructional methods:

- Building a strong knowledge base
- Providing practical tools and strategies
- Completing a case study on a student with special needs
- Identifying physical, behavioral, and educational needs
- Developing a customised educational plan
- Implementing and monitoring the plan
- Group activities to enhance learning and collaboration
- Reflection on learning experiences

### For Further Details:

ACELP 197/8 Rafiqi Shaheed Road, Karachi, Sindh, Pakistan-75530

Phone: 0330-3002839

Email: [diploma.acelp@gmail.com](mailto:diploma.acelp@gmail.com)

<http://www.acelp.org.pk/>

## READ DIPLOMA COURSE (RDC)

### INTRODUCTION

The READ Diploma Course (RDC) is a six-month programme offered by READ in collaboration with the College of Speech Language & Hearing Sciences, Ziauddin University. The course focuses on teaching participants about learning difficulties in children, with an emphasis on dyslexia and related issues. It covers assessment and remediation techniques. The programme has been improved with new resources and updated research. RDC emphasizes research-based theories and practical application through a practicum component.

This course is designed for educators (teachers, tutors, and special needs specialists), therapists, and other professionals who work with students who have learning issues, as well as parents and caregivers who want to help their children with dyslexia.

### COURSE VENUE:

READ, 40/C, Lane 5, Bukhari Commercial Area, Phase 6, DHA, Karachi - 75500, Pakistan.

Duration of Diploma:

The duration of RDC will be six months, with 20 hours of practicum training.

### Time of the Course:

- Three days a week for three hours in the morning and afternoon.
- Additional hours at the centre for familiarization with research, teaching, and learning materials.

### EXAMINATION:

The examination will be conducted jointly by the READ and CSLHS, Ziauddin University.

### ELIGIBILITY CRITERIA:

An undergraduate degree, A level, or acceptable teacher-certification. English language/math teaching experience is advantageous.

### COURSE DESCRIPTION:

This comprehensive course delves into the world of learning differences, equipping educators with the knowledge and tools to support students effectively. Through engaging modules on background theory, learning modalities (visual, auditory, and kinesthetic), reading & spelling, comprehension, and assessment, you'll gain a strong foundation. Additionally, the course explores dyslexia and related issues, providing practical teaching strategies and materials. Theory is interwoven with practical application through assignments at the end of each unit and a focus on research-backed teaching methods.

### FOR FURTHER DETAILS:

READ, 40/C, Lane 5, Bukhari Commercial Area, Phase 6, DHA, Karachi - 75500, Pakistan.

Phone: +92 21 3745-3693, +92 307 2202424

Email: [info@readkarachi.com](mailto:info@readkarachi.com), [readyslexics@gmail.com](mailto:readyslexics@gmail.com)

Web: [www.readkarachi.com](http://www.readkarachi.com)

## FACULTY MEMBERS

<b>Ms. Amina Siddiqui</b>	Associate Professor
<b>Ms. Fatima Yousuf</b>	Assistant Professor
<b>Ms. Kehkashan Kanwal</b>	Assistant Professor
<b>Mr. Muhammad Asif Ramzani</b>	Assistant Professor
<b>Ms. Samina Masood</b>	Assistant Professor
<b>Mr. Shahid Ali</b>	Assistant Professor
<b>Dr. Tahmeena Tabish</b>	Assistant Professor
<b>Ms. Anusha Abdul Samad</b>	Senior Lecturer
<b>Ms. Ayesha Siddiqa</b>	Senior Lecturer
<b>Ms. Faryal Qayyum</b>	Senior Lecturer
<b>Mr. Hafeez Punjani</b>	Senior Lecturer
<b>Ms. Mariyah Zahid</b>	Senior Lecturer
<b>Ms. Rabika Amanullah</b>	Senior Lecturer
<b>Ms. Sonia Shah</b>	Senior Lecturer
<b>Ms. Taleah Tariq</b>	Senior Lecturer
<b>Ms. Zafar Wafai</b>	Senior Lecturer
<b>Ms. Zahra Ibrahim</b>	Senior Lecturer
<b>Ms. Zainab Sadiq</b>	Senior Lecturer
<b>Ms. Zoha Asif</b>	Senior Lecturer
<b>Ms. Mahnoor Faisal</b>	Lecture
<b>Mr. Parvin Athwani</b>	Lecturer
<b>Ms. Pashmina Imran</b>	Lecturer
<b>Ms. Rimsha Khalid</b>	Lecturer

### LOCATION

#### College Campus Site:

D, 24, Block-1, Clifton, Karachi - 75600.

#### Clinic Campus Site:

BC-06 Ground floor, Khayaban e Bedil, Block 1, Clifton, Karachi - 75600.  
College of Speech Language & Hearing Sciences, Ziauddin University

#### Nazimabad Speech Clinic Site:

OPD Building, Basement 1, Allama Rasheed Turabi Rd. Block B, North Nazimabad Town, Karachi -74700.  
Dr. Ziauddin Hospital North Nazimabad

### CONTACT INFORMATION

- College Campus Site: +92 21 35148625-26
- Clinic Campus Site: +92 21 35862937
- Email: info@zu.edu.pk
- Web: zu.edu.pk





# COLLEGE OF PODIATRIC MEDICINE

## KEY INFORMATION

### PRINCIPAL

Matthew T.J. Fitzpatrick

### CONTACT INFORMATION

Website:

<https://zcpm.zu.edu.pk/>

Telephone:

+92-21-35305790, +92-21-35148626

Email:

[info@zu.edu.pk](mailto:info@zu.edu.pk)

### LOCATE US:

MBBS Building, Ground Floor,  
Opposite To Auditorium





## INTRODUCTION

Welcome to the College of Podiatric Medicine at Ziauddin University, a pioneer in launching Podiatric Medicine in Pakistan. We are proud to be at the forefront of introducing this vital field of healthcare in the country, addressing the growing need for specialised care in foot and lower limb health. Our esteemed faculty comprises a blend of national and internationally qualified podiatric experts, ensuring that our students receive a world-class education. With a strong emphasis on clinical skills, research, and patient-centred care, our programme prepares students to excel in the prevention, diagnosis, and treatment of disorders and conditions affecting the feet and lower limbs.

At Ziauddin University, we are committed to advancing the field of podiatric medicine through innovative research and collaboration. Our research focus areas include diabetic foot care, sports podiatry, and pediatric podiatry, among others. With our state-of-the-art facilities and cutting-edge technology, we provide students with hands-on experience in research and clinical practice.

## VISION

To produce competent and dedicated healthcare professionals committed to leading the field in podiatric medical education through research and community service efforts, aiming for better patient care outcomes.

## MISSION

To inspire and educate future podiatric medicine professionals, equipping them with the knowledge skills and compassion to excel in the field. We are committed to providing a comprehensive and innovative educational experience that fosters excellence, integrity, and professionalism in all aspects of podiatric medicine.



## DOCTOR OF PODIATRIC MEDICINE

### ELIGIBILITY CRITERIA

- SSC Marks
- Minimum 50% marks in intermediate/A-Level (Science group)
- Entrance Test
- Interview
- The course is offered at Clifton, Main Ziauddin University Building.

### CAREER PROSPECTS

A career in Doctor of Podiatric Medicine (DPM) offers diverse prospects, including autonomous practice, where podiatrists can independently

manage foot and ankle disorders in clinics. In tertiary care hospitals, DPM graduates can serve as specialised clinicians, collaborating with multidisciplinary teams for complex cases. Additionally, DPMs can pursue academic roles, contributing to medical education and research and shaping future podiatric professionals. The combination of clinical practice, academic involvement, and the potential for leadership in specialised healthcare makes DPM a dynamic and rewarding career path.

### DURATION OF PROGRAMME

Doctor of Podiatric Medicine is a five-year semester based degree programme.

## FACULTY MEMBERS

Mr. Matthew T.J. Fitzpatrick  
Principal

Mr. Ian N. Reilly  
Associate Professor

Dr. Ali Farhad  
Assistant Professor/ Acting Principal

Dr. Jean Mooney  
Associate Professor

Dr. Mukesh Kumar  
Assistant Professor

Mr. Alan Borthwick OBE  
Associate Professor

Dr. Huma Bukhari  
Senior Lecturer

Mr. Matthew Collison  
Assistant Professor

Dr. Hafsa Tajwar  
Lecturer

Mr. Trevor Prior  
Assistant Professor

Dr. Sharmeen Fatima  
Lecturer

Mr. Francis Webb  
Assistant Professor

Mr. Ian Griffiths  
Lecturer



# COLLEGE OF MEDICAL TECHNOLOGY

## KEY INFORMATION

### PRINCIPAL

Ms. Ayesha Iqbal

### CONTACT INFORMATION

#### Website:

<https://zcmt.zu.edu.pk/>

#### Telephone:

+92-2136648237-9 Ext: 5406, 6389

#### Fax:

+92-2136640670

#### Email:

admission@zu.edu.pk

#### Locate Us:

Oncology Building near Cafeteria,  
Ziauddin Hospital, Block B,  
North Nazimabad.

College of Medical Technology  
E40/1, 3rd Floor, Wahid Colony near  
CNG Station, North Nazimabad.



"I aspired to serve the community and build a promising future, which led me to join Ziauddin University for a Bachelor of Studies in Medical Technology, Neurosciences programme. Upon enrollment in the College of Medical Technology, I found myself in an encouraging and healthy learning environment. The programme provided me with both theoretical knowledge and hands-on experience in diagnostic techniques, procedures, and patient care within real-time clinical settings. My sincere appreciation goes to all the faculty members for their unwavering guidance, which instills in me a desire for continuous growth and exploration.

I am sincerely grateful to Ziauddin University for offering me an outstanding education and an enriching academic environment".

SAIF UR REHMAN  
BS MEDICAL TECHNOLOGY (BSMT)

## COLLEGE OF MEDICAL TECHNOLOGY

Ziauddin University laid the foundation of the College of Medical Technology in 1998; it was then named the College of Allied Health Sciences which initially offered Bachelor's degree in Medical Technology (B.Sc. in MT). Since then, it has successfully enrolled sixteen batches. Recognizing the growing challenges, the college was renamed Ziauddin College of Medical Technology in 2016; Ziauddin University initiated the BS programme in Medical Technology in March 2011, to pace with modern techniques and knowledge. Ziauddin will be commencing an MS programme in Medical Technology this academic year.

## ABOUT MEDICAL TECHNOLOGY

Technology plays an eminent role in today's world. It is a need in almost every field. Similarly, the Medical Technology Industry has a significant role in the Healthcare sector. It functions on modern electronic medical devices that simplify the diagnosis, analysis and treatment of diseases. Physicians, surgeons and pathologists rely on the skills and expertise of the medical technologists and therefore they have a responsibility of diagnosing, analyzing, and reporting findings to the treating doctors.

## VISION

ZCMT aspires to become center of excellence for interdisciplinary education, research, and continuous professional development which contributes to healthcare and community services.

## MISSION

College of Medical Technology endeavors to impart holistic theoretical education, hands on clinical skills, and supervised clinical practice for crafting future technologists, scientists, researchers, educators and leaders. These international standard graduates will strengthen interprofessional collaboration in healthcare and community.

## SCOPE

The Bachelor of Studies in Medical Technology Programme provides students with a scientific and conceptual understanding of specialized analyses. It aims to train, skill and edify medical technologists by accrediting their clinical skills and providing in-depth training on clinical procedures, practices and management.

## PROGRAMMES OFFERED

- BS Medical Technology (4 years)

# BS MEDICAL TECHNOLOGY 4 YEAR PROGRAMME

## MISSION

The mission of BS Medical Technology commits to instill technical competencies, orientation to research and readiness for long life learning by

utilizing integrated curriculum, andragogy and standardized Assessments to ever-evolving health care systems.

## OVERVIEW OF SPECIALISED FIELDS IN MEDICAL TECHNOLOGY:

### CARDIOVASCULAR SCIENCES

Cardiovascular science is a study of the heart and its function, blood vessels in human beings, cardiac disorders and diseases associated with cardiovascular systems. The students are taught and trained in diagnostics, treatment and preventive techniques used in Cardiovascular Sciences and its application in clinical and healthcare settings.

Cardiovascular Professionals or Technologists work with cardiac physicians to assist in providing treatment, monitoring and diagnosing patients with Cardiac problems. They can also enrich students with knowledge through their teaching and producing research. Furthermore, cardiovascular technologists pursue their careers as in diagnostic and interventional cardiac catheterization labs in acute care hospitals, electrophysiology and echocardiography.

Cardiovascular Technology is a challenging and growing profession. The BS MT in Cardiovascular sciences programme trains students with advance didactic basic and specialized courses and clinical trainings mandatory to marvel at their major studies.

### Courses Taught

#### 1st Year

1. Functional English
2. Fundamental Chemistry
3. Islamiyat / Moral Ethics
4. Mathematics
5. Human Biology
6. Introduction to Health Education
7. Basic Health Sciences
8. Academic Reading and
9. Human Behavior
10. Physics
11. Introduction to Statistics
12. General Pharmacology
13. Biochemistry
14. General Microbiology
15. Radiation Protection

#### 2nd Year

1. Technical and Professional Writing
2. Pak Studies
3. Introduction to Law
4. Computer Literacy
5. Professional Ethics and Behavior
6. Basic Hematology
7. Cardiovascular Anatomy
8. Cardiovascular Physiology
9. Cardiovascular Pathophysiology
10. Cardiovascular Pharmacology
11. Body Fluid Management
12. Principles of Patient Care
13. Electrocardiography (ECG)
14. Exercise Tolerance Test (ETT)

#### 3rd Year

1. Basic Immunology
2. Procedures for in Patients
3. Cardiovascular Emergencies
4. Principle of Radiation
5. Hemodynamic Evaluation
6. Mathematics in Cardiovascular Technology
7. Stress Cardiology
8. Cardiac Pathophysiology in Paediatric
9. Principles of Critical Care
10. Invasive Cardiac Methodologies
11. Ultrasound Techniques
12. Doppler Ultrasound Techniques
13. Vascular System and Diseases

#### 4th Year

1. Quality and Risk Management
2. Echocardiography in Cardiac Myopathies
3. Invasive Imaging
4. Echocardiography - I
5. Vascular Ultrasound - I
6. Cardiac Catheterization Laboratory - I
7. Cardiac Interventional Procedures - I
8. Biostatistics
9. Cardiac Care Unit Management
10. Paediatric Echocardiography
11. Echocardiography - II
12. Vascular Ultrasound - II
13. Cardiac Catheterization Laboratory-II
14. Cardiac Interventional Procedures-II

**NOTE: The scheme of studies can be changed as per requirement and advancement in the clinical field.**





**Clinical Training**

The study of cardiovascular Sciences centers on the working of heart, its diagnosis and treatment therefore the CVS technologists are placed at Ziauddin hospital for their clinical practicum, where they utilise their knowledge of cardiovascular principles and functions in the operation of CVS equipments, such as ECG, exercise stress tests and Cardiac Device Follow up, Ambulatory B.P. monitoring and ECG Event/Loop Monitoring. The in-house training enables the trainee to apprehend the operation of machineries used while performing any test. These trainings start after every semester examination and the cycle continues till the final year of the undergraduate programme.

**CLINICAL LABORATORY SCIENCES**

Clinical Laboratory Science Professionals provide laboratory services required for the

diagnosis and treatment of the disease. These Technologists or Scientists, by performing a number of tests, discover the diseases and lend a hand to the physicians to give quick treatment to the patients. Such Critical procedures require strong analytical skills and the ability to work under pressure. The Programme and courses offered at Clinical Laboratory Sciences put great emphasis on students acquiring these skills by a combination of didactic sessions, group discussion, supervised training, competency assessments and clinical practicum in order to make student adroit at performing tests, analyses and interpretations. Clinical Laboratory Scientists can set off their careers in medical and healthcare professions. Placements are also offered at scientific equipment companies, chemical and pharmaceutical companies. They can also contribute in the educational sector as a faculty member or as a researcher.

**Courses Taught****1st Year**

1. Functional English
2. Fundamental Chemistry
3. Islamiyat / Moral Ethics
4. Mathematics
5. Human Biology
6. Introduction to Health Education
7. Basic Health Sciences
8. Academic Reading and Writing
9. Human Behavior
10. Physics
11. Introduction to Statistics
12. General Pharmacology
13. Biochemistry
14. General Microbiology
15. Basic Laboratory Techniques

**2nd Year**

1. Technical and Professional Writing
2. Pak Studies
3. Introduction to Law
4. Computer Literacy
5. Professional Ethics and Behavior
6. Basic Hematology
7. Principles of Clinical Laboratory Instruments
8. Parasitology
9. Phlebotomy
10. Quality Assurance in Clinical Laboratory
11. Blood Banking
12. Hematology
13. Chemical Pathology
14. Clinical Microbiology

**Clinical Training**

The in-house training of CLS technologists encompasses observation and analysis of both manual and automated testing which involves immunoassays, Electrophoresis, Blood and urine culture, Blood Grouping and Cross matching, and manual and automated cell counting. The in-house training enables the trainee to master the operation of tools and equipment used while performing any test. These trainings start after every semester examination and the cycle continues till the final.

**DENTAL HYGIENE AND TECHNOLOGY**

Dental Hygiene and Technology is a multimodal course in the field of dental laboratory where dental hygiene is complemented with dental technology. It is the study of dental diseases, preventive therapy and patient counseling. The course is coupled with the technical sides of dentistry where technologist makes prosthesis, orthodontics and maxillofacial appliances. Dental technologists work in dental laboratories and create fabricated dental materials, using their artistic skills in fabricating the form and color of an individual's teeth. Besides dental laboratory, technologists are also welcome in academics to hold a faculty position.

**3rd Year**

1. Body Fluid Analysis
2. Introduction to Clinical Hematology and Laboratory Techniques
3. Introduction to Immunohematology
4. Techniques in Chemical Pathology
5. Basic Histotechnology
6. Basic Immunology
7. Clinical Virology
8. Advance Immunohematology
9. Molecular Biology
10. Basic Coagulation
11. Clinical Immunology & Serology
12. Advance Histotechnology
13. Mathematics for Clinical Laboratory
14. Clinical Mycology

**4th Year**

1. Clinical Laboratory Management
2. Clinical Laboratory Accreditation
3. Biostatistics
4. Quality Control in Clinical Laboratory (Advanced)
5. Hematology/Blood Banking/Chemical Pathology/Microbiology

**NOTE: The scheme of studies can be changed as per requirement and advancement in the clinical field.**





The College of Medical Technology started this programme in the year 2017 with a comprehensive course plan and in-house training of the technologists preparing them to meet the challenges of the developments in the field.

### Courses Taught

#### 1st Year

1. Functional English
2. Fundamental Chemistry
3. Islamiat / Moral Ethics
4. Mathematics
5. Human Biology
6. Introduction to Health Education
7. Basic Health Sciences
8. Academic Reading and Writing
9. Human Behavior
10. Physics
11. Introduction to Statistics
12. General Pharmacology
13. Biochemistry
14. General Microbiology
15. Basics of Dental Terminology

#### 2nd Year

1. Technical and Professional Writing
2. Pak Studies
3. Introduction to Law
4. Computer Literacy
5. Professional Ethics and Behavior
6. Tooth Morphology
7. Dental Anatomy and Histology
8. Dental Hygiene Pre-clinical Sciences
9. Concepts and Techniques of Removal Partial Denture
10. Dental Ethics and Practice Management
11. Oral Radiology
12. Preventive oral Concepts
13. Sterilization and Disinfection
14. Fundamentals of Dental Hygiene

### Clinical Training

The teaching and learning scheme at Ziauddin University provides its learner with in-house training where they can acquire the skills necessary for Dental technologists. Among these skills are community disease prevention, tooth morphology, dental materials, and oral pathology. During clinical sessions, students will have hands-on technical experience on how to perform root planting, apply fluoride therapy, and develop x-rays at Ziauddin hospital under the supervision of dental physician and senior technologists. These trainings start after every semester examination at the Dental Department of Ziauddin University Clifton and the cycle continues till the final year of the undergraduate programme.

#### 3rd Year

1. Oral Radiography and Laboratory
2. Adult Restorative Dentistry and Clinical Practice
3. Fundamentals, Principles and Allied Concepts in Surgery
4. Orthodontic Clinics for Dental Hygienists
5. Concepts and Techniques of Complete Denture
6. Dental Hygiene Clinical Sciences
7. Local Anaesthesia and Pain Control
8. Techniques of Removable Orthodontic Appliances
9. Fundamentals, Principles and Techniques in Oral Surgery
10. Concepts and Techniques of Fixed Partial Denture
11. Oral Medicine

#### 4th Year

1. Quality Assurance in Dentistry
2. Dental Health Management
3. Concepts and Techniques of Oral Maxillofacial Prosthesis
4. Oral Pathology
5. Techniques of Fixed Orthodontic Appliances
6. Biostatistics
7. Foundations of nutritional sciences
8. Geriatric Dentistry
9. Concepts and Techniques of Implants
10. Fundamentals, Principles and Allied Concepts in Implant

**NOTE: Scheme of studies can be changed as per requirement and advancement in the clinical field.**





## RADIOLOGICAL IMAGING

Radiological imaging is the study of techniques and procedure of medical images used for diagnosis of various diseases. Radiologic technologists are specialized in the use of medical imaging such as X-Rays, Magnetic Resonance Imaging (MRI), Computed tomography (CT) scans, ultra - sound, Sonography and fluoroscopy. They have an acute understanding of anatomy, positioning, radiation protection and radiographic exposure.

Radiologic technologists are responsible for producing quality diagnostic images. They act as an expert to the physician by providing them proper examination of the disease, interpreting the resulting medical images. The doors of radiological technologists are opened at various technical departments in hospitals followed by physicians, medical laboratories outpatient imaging centers.

Radiological imaging is a demanding profession therefore; the college of Medical Technology has designed a programme with intensive coursework along with the technical handling throughout the 04 year of studies.

### Courses Taught

#### 1st Year

1. Functional English
2. Fundamental Chemistry
3. Islamiyat / Moral Ethics
4. Mathematics
5. Human Biology
6. Introduction to Health Education
7. Basic Health Sciences
8. Academic Reading and Writing
9. Human Behavior
10. Physics
11. Introduction to Statistics
12. General Pharmacology
13. Biochemistry
14. General Microbiology
15. Radiation Protection

#### 2nd Year

1. Technical and Professional Writing
2. Pak Studies
3. Introduction to Law
4. Computer Literacy
5. Professional Ethics and Behavior
6. Patient Care in Radiological Sciences
7. Introduction to Radiation Physics and Instrumentation

#### Clinical Training

The programme offers training to the students at Ziauddin hospital under the guidance of supervisors and experienced technologists who coach students to perform X-rays, MRI, CT scans, mammography, fluoroscopy, ultrasound, Sonography and fluoroscopy. These trainings help students to become experts their relevant fields before entering into professional life. These trainings start after every semester examination and the cycle continues till the final year of the undergraduate programme

8. Radiobiology
9. Radiological Anatomy I
10. Radiological Anatomy II
11. Imaging Positions
12. Introduction to Medical Imaging

#### 3rd Year

1. Radiopharmacy
2. Radioanatomy
3. Orthopantomogram
4. Mammography Techniques
5. Quality Control of Image Equipment
6. Ultrasound Techniques
7. Doppler Ultrasound Techniques

#### 4th Year

1. Picture Archiving and Communication System
2. Contrast Media and Medications
3. Biostatistics
4. Quality Management System (ISO & JCI)
5. Major Radiological Imaging/ Ultrasonography

**NOTE: Scheme of studies can be changed as per requirement and advancement in the clinical field.**





## RADIATION THERAPY

Radiation Therapy a field of radiation oncology that administers the regular radiation treatment prescribed by a physician.

The scope of practices of radiation therapists include delivering radiation therapy to the patients of cancer and operating and examining linear accelerators that treat patients with radiation.

In BS MT Radiation therapy, students are taught the fundamentals of human anatomy, physiology, pathology, radiobiology, radiation safety and techniques, radiation oncology in addition to management electives to enable students to become competent and skilled radiation therapists.

### Courses Taught

#### 1st Year

1. Functional English
2. Fundamental Chemistry
3. Islamiat / Moral Ethics
4. Mathematics
5. Human Biology
6. Introduction to Health Education
7. Basic Health Sciences
8. Academic Reading and Writing
9. Human Behavior
10. Physics
11. Introduction to Statistics
12. General Pharmacology
13. Biochemistry
14. General Microbiology
15. Radiation Protection

#### 2nd Year

1. Technical and Professional Writing
2. Pak Studies
3. Introduction to Law
4. Computer Literacy
5. Professional Ethics and Behavior
6. Patient Care in Radiological Sciences
7. Introduction to Radiation Physics and Instrumentation
8. Radiobiology
9. Radiological Anatomy I

#### Clinical Training

The BS RT programme offered at Ziauddin University gives students practical skills by providing in-house training after every semester to build a strong foundation of the course. During their clinical practicum, students are taught to assist oncology patients by delivering chemotherapy to them. Moreover, the training also involves working on radiation equipments and producing a diagnosis. These trainings start after every semester examination and the cycle continues till the final year of the undergraduate programme.

10. Radiological Anatomy II
11. Imaging Positions
12. Introduction to Medical Imaging

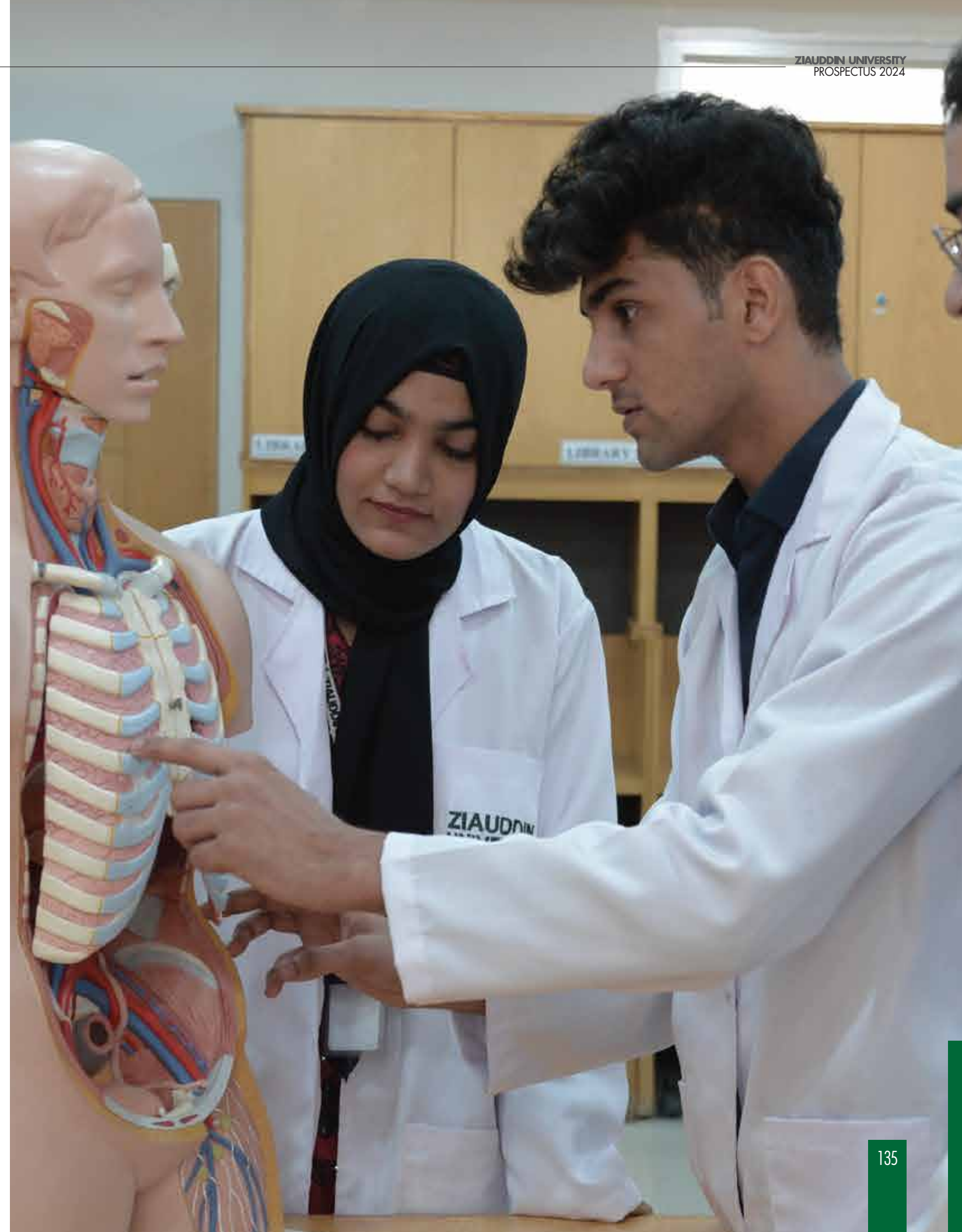
#### 3rd Year

1. Radiopharmacy
2. Clinical oncology (Basics)
3. Nursing Oncology
4. Techniques and Application of Radiation Therapy
5. Radiation Oncology Techniques
6. Clinical Oncology (Advanced)
7. Radiation Dosimetry
8. Palliative Care in Radiation Therapy

#### 4th Year

1. Quality Management in Radiation Therapy
2. Modern Radiation Therapy
3. Basic Radiation Therapy Modalities
4. Treatment Planning System (Basics)
5. Biostatistics
6. Quality Management System (ISO & JCI)
7. Medical Conditions in Radiation Therapy
8. Advanced Radiation Therapy Modalities
9. Treatment Planning System (Advanced)

**NOTE: Scheme of studies can be changed as per requirement and advancement in the clinical field.**





## CARDIAC PERFUSION

Cardiac perfusion is the study of extracorporeal medical procedures during open-heart surgeries and transplantation in order to support, regulate and temporally replace the patient's respiratory and circulatory system. The cardiac perfusionists are core members of the open-heart surgery team. Their role is to prepare and operate heart-lung machine and other complex machinery during cardiovascular surgeries in highly stressed situations. To perform these tasks, perfusionists are taught comprehensive courses to develop an in-depth knowledge of respiratory and circulatory systems. Cardiac perfusionists use their expertise during cardiovascular surgeries in assisting surgeons and physicians and can also work as a teacher and researcher in research institutes. Placements of perfusionists are at hospitals, and at times they are hired by individual surgeons. Moreover, perfusionists are appointed by industries that manufacture supplies and equipment related to perfusion.

Keeping in view the local and global needs, the College of Medical Technology initiated the B.S. Medical Technology in Cardiac Perfusion – a well-balanced comprehensive programme in which students are exposed to extensive learning and practice, clinical skills, academic activities and research studies. After the completion of the programme, students can utilize their skills in health-care as Cardiac Perfusionists.

### Courses Taught

#### 1st Year

1. Functional English
2. Fundamental Chemistry
3. Islamiat / Moral Ethics
4. Mathematics
5. Human Biology
6. Introduction to Health Education
7. Basic Health Sciences
8. Academic Reading and Writing
9. Human Behavior
10. Physics
11. Introduction to Statistics
12. General Pharmacology
13. Biochemistry
14. General Microbiology
15. Mathematics in Perfusion Technology

#### 2nd Year

1. Technical and Professional Writing
2. Pak Studies
3. Introduction to Law
4. Computer Literacy
5. Professional Ethics and Behavior
6. Cardiovascular Anatomy
7. Cardiovascular Physiology
8. Introduction to Cardiopulmonary Bypass Circuit-I
9. Cardiovascular Pathophysiology
10. Cardiovascular Pharmacology
11. Body Fluid Management
12. Perfusion Hematology and Blood Management
13. Introduction to Cardiopulmonary Bypass

#### Circuit-II

14. Clinical Applications of Perfusion Technology

#### 3rd Year

1. Basic Immunology
2. Procedures for in Patients
3. Cardiovascular Emergencies
4. Monitoring in Cardiopulmonary Bypass-I
5. Advances in Cardiopulmonary Bypass
6. Cardiac Pathophysiology in Paediatric
7. Devices in Perfusion Technology
8. Monitoring in Cardiopulmonary Bypass-II
9. Diagnostic Techniques in Perfusion Technology

#### 4th Year

1. Quality and Risk Management
2. Operation Theatre Organization and Management
3. Non-Cardiac Surgical Applications of Cardiopulmonary Bypass
4. Pre-Operative Paediatric Perfusion
5. Extracorporeal Membrane Oxygenation
6. Biostatistics
7. Cardiac Care Unit Management
8. Standard and Guidelines for Mechanical Circulatory Support
9. Intra Operative Paediatric Perfusion
10. Anaesthesia Management for Cardiac Surgery

**NOTE: Scheme of studies can be changed as per requirement and advancement in the clinical field.**

### Clinical Training

Ziauddin University offers cardiac perfusionists to practice their skills at Ziauddin Hospital under the supervision of Laboratory heads, physicians and instructors during their undergraduate studies. The degree requires completion of hands-on clinical training, during which candidates must perform a certain number and variety of clinical perfusion procedures. This experiential learning is critical to the preparation of perfusionists who must be able to respond to a wide variety of situations that may occur in the operating room. The in-house training enables the trainee to apprehend the operation of machinery used during the surgeries. This training starts after every semesters examination and the cycle continue till the final year of the undergraduate programme.



## NUCLEAR MEDICINE

Nuclear Medicine is the study of nuclear properties of stable nuclides that enables the technologist to diagnose, determine the complexity of a disease and to suggest treatments to a variety of diseases. The technologists primarily work on the isotopes present in human body.

Graduates of Nuclear Medicine are called Nuclear Medicine Technologists who study basic science subjects required for patient education and electives including radioisotopes and radiological imaging, and to work directly with patients during imaging procedures.

Nuclear Medicine Technologists work in hospital and laboratories in the diagnosis of various diseases such as cancers, heart diseases, gastrointestinal, endocrine, neurological disorders and other abnormalities within the body. Furthermore, they perform bone scanning, PET and Nuclear cardiac stress tests. They can also contribute in the field of teaching and research.

### Courses Taught

#### 1st Year

1. Functional English
2. Fundamental Chemistry
3. Islamiyat / Moral Ethics
4. Mathematics
5. Human Biology
6. Introduction to Health Education
7. Basic Health Sciences
8. Academic Reading and Writing
9. Human Behavior
10. Physics
11. Introduction to Statistics
12. General Pharmacology
13. Biochemistry
14. General Microbiology
15. Radiation Protection

#### 2nd Year

1. Technical and Professional Writing
2. Pak Studies
3. Introduction to Law
4. Computer Literacy
5. Professional Ethics and Behavior
6. Patient Care in Radiological Sciences
7. Basics of Nuclear Medicine
8. Introduction to Instrumentation
9. Radiobiology
10. Radiological Anatomy I
11. Radiological Anatomy II

### Clinical Training

The curriculum of B.S.NS includes supervised education which offers a sufficient and well-balanced variety of nuclear medicine procedures, examinations, and equipment. Various rotations include supervised clinical education such as general nuclear medicine imaging, cardiology imaging, SPECT/CT, PET/CT, radiation-sensitive cameras, and dosage meters, radiopharmacy and radiation safety. These trainings are provided at the Dr. Ziauddin hospital and aim to strengthen students' theoretical and practical understanding of Nuclear medicine sciences. This training starts after the semester examination and the cycle continues till the final year of the undergraduate programme.

12. Nuclear Medicine Patient Synergy
13. Image Processing

#### 3rd Year

1. Radiopharmacy
2. Basic Radionuclides Therapy
3. Advance Radionuclide Therapy - I
4. Introduction to Nuclear Cardiology
5. Standard Drug Intervention
6. Introduction to Nuclear Oncology
7. Advanced Instrumentation
8. Basic Nuclear Cardiology

#### 4th Year

1. Radionuclide Waste Management
2. Patient Release Method
3. Patient Release Method
4. Nuclear Oncology Techniques
5. Emerging Technologies
6. Advanced Nuclear Cardiology
7. Biostatistics
8. Quality management systems (ISO & JCI)
9. Positron Emission Tomography (PET) Techniques
10. Bone Mineral Densitometry
11. Nuclear Endocrinology Techniques

**NOTE: Scheme of studies can be changed as per requirement and advancement in the clinical field.**

## NEUROSCIENCES

Neuroscience is a multidisciplinary study of the brain system including the brain, spinal cord and nerve cells throughout the body. It examines the complex interaction of multiple neuronal systems that underlie the emergence and rich diversity of cognitive functions, the regulations, and expressions of all forms of human behavior.

Neuroscientists also work on operating EEG and EMG in clinics or hospitals to evaluate and monitor patients. Furthermore, they can work as a faculty member in the field of education.

In the BS MT Neurosciences programme, students are educated and trained in neurosciences techniques like EEG, EMG, evoked potentials, etc. During their bachelor's studies, students are exposed to analyzing and the diagnosis of nervous system diseases in human beings in addition to extensive courses and practices in neurosciences.

### Courses Taught

#### 1st Year

1. Functional English
2. Fundamental Chemistry
3. Islamiyat / Moral Ethics
4. Mathematics
5. Human Biology
6. Introduction to Health Education
7. Basic Health Sciences
8. Academic Reading and Writing
9. Human Behavior
10. Physics
11. Introduction to Statistics
12. General Pharmacology
13. Biochemistry
14. General Microbiology
15. Biosafety

#### 2nd Year

1. Technical and Professional Writing
2. Pak Studies
3. Introduction to Law
4. Computer Literacy
5. Professional Ethics and Behavior
6. Neuro-anatomy & Physiology of CNS
7. Basic Electronics of Neurophysiology
8. Neuroanatomy and physiology of PNS
9. Fundamentals of EEG Technology
10. Neuropathophysiology
11. Neurological Examination
12. Clinical applications of EEG

### Clinical Training

Ziauddin University facilitates its neurosciences technologists by providing in-house training in the areas of neuroscience intensive care, neuro medicine and neurosurgery, EEG and EMG, where students exercise their trainings. These trainings start after every semester examination and the cycle continues till the final year of the undergraduate programme.

13. Basic Neuropharmacology

#### 3rd Year

1. Fundamentals of EMG Technology
2. Clinical Applications of NCS and EMG
3. Upper extremity NCS technology
4. Lower extremity NCS technology
5. Lower extremity NCS technology
6. Basic neonatal and Paediatric EEG
7. Introduction to EPs (VEP)
8. Introduction to EPs (BEP)
9. Clinical Applications of EPs (VEP, BEP, SEP)
10. Introduction to EPs (SEP)
11. Advance NCS Technology

#### 4th Year

1. Research Methodology
2. Basic principles of IOM
3. Fundamentals of Sleep Studies
4. Introduction to sleep disorders
5. Long-term EEG monitoring
6. Biostatistics
7. Advance Sleep studies
8. Clinical Applications of IOM
9. Emerging techniques
10. Completion of Research Project

**NOTE: Scheme of studies can be changed as per requirement and advancement in the clinical field.**



## TEACHING AND LEARNING STRATEGIES

Ziauddin University, College of Medical Technology promotes a culturally inclusive, and constructive learning environment giving specific consideration to student's own psychological and sensory status and recognizing, nurturing and developing one's strength to foster the learning process and positive interaction among peers, groups and stimulates independence to meet the challenges of the real world. Subsequently, explicit and structured teaching is practiced and supported by audio and visual materials installed in each classroom. Contemporary practices such as blended learning, flipped classroom, and facilitation are provided meeting the course requirement of the programme. The brightest feature of the college of medical technology is that the Academic block and Clinical training sites are under the same roof, which reinforces learning by implementing teaching examples in real time cases. Finally, at the end of each semester, students are posted in Dr. Ziauddin Hospital to implement their knowledge and upgrade their skills.

## FACILITIES

Ziauddin University, College of Medical Technology offers ample facilities to its students. The central location of the College of Medical Technology in North Nazimabad makes it convenient, easy to approach and accessible for the students primarily. The College of Medical Technology is located in a state-of-the-art building that is modernly designed, with huge lobbies, lecture halls and laboratories. The classrooms of the College are spacious, well-furnished, and equipped with multimedia facilities which enhance the teaching-learning process in effective way. It is complemented with an air-conditioned environment that helps students to endure the harsh climatic conditions of the city. There is a seminar room available primarily to organize workshops and seminars that can accommodate more than 150 learners.

Training labs are termed Skills labs which are replicas of hospital/clinical labs. Skills

laboratories are well-equipped consisting of hi-tech instruments to provide hands-on training to students before dealing with patients. Ziauddin is following the trails of modernization and since the concept of a library has changed; it has evolved into a LEARNING RESOURCE CENTER which a comprehensive is learning area awarded for the concept of libraries and plastic museums. Therefore, Ziauddin has developed the latest Learning Resource Center which is a combination of a library with a wide range of books and plastic a museum. It comprises of 4D models along with computing facility that provides access to e-books, e-journals and academic articles. In addition to this, students can also benefit from the main library located at Ziauddin Hospital, North Nazimabad for utilizing extensive learning opportunities after university hours.

The College of Medical Technology is a skill-oriented programme and therefore, has made it mandatory for all the students to do practicums as a part of their coursework. To achieve this, the College of Medical Technology as a privilege, posts students on rotations within concerned departments of Dr. Ziauddin Hospitals during the semester and after successful completion of a semester. The practical labs are located within the hospital premises which train the students to have multiple clinical case scenarios amalgamated with theoretical teaching. The facility aims at developing the student's knowledge and skills along with a direct implementation of knowledge of actual patients.

To evoke a sense of health and fitness, a recreational area consisting of a gymnasium and indoor games is being built where these facilities can be availed by the students. Within the university premises two tuck shops are located, which cater to the nutritious side of the students, and provide the students with healthy food and snacks during university hours. This makes the college environment secure and under surveillance.

First aid treatment and general medication are also available for students in any unforeseen

circumstances. Moreover, students have access to make an appointment at the hospital for a doctor's consultation.

## ASSESSMENT POLICIES AND PROCEDURE

Enrolled candidates are assessed and examined for theory and skills with periodic examinations. Continuous assessment is practiced incorporating multiple summative and formative assessments to measure the extent to which students have achieved the desired outcome. It includes mid-terms, projects, portfolios, clinical practicum and competencies.

### WEIGHTAGE FOR THE FINAL EXAMINATION

- Continuous assessments 60%
- Final Examination 40%

### ATTENDANCE

80% Attendance in classes is mandatory

## ADMISSION POLICY

BS medical technology is a four year semester based programme. Admissions are announced once a year and students with minimum 50% marks in pre medical and medical technology group or higher secondary certificates may apply. Candidates with O/A level must take equivalence. All candidates

are selected on merit basis according to the following criteria:

- S.S.C marks
- H.S.C marks
- Ziauddin University Aptitude test
- Interview marks

Clinical rotations are done at Dr. Ziauddin Hospital North Nazimabad site, KDLB site & Clifton site.

## CAREER OPPORTUNITIES

Medical Laboratory scientists have a huge demand both nationally and internationally. A survey conducted, suggests that the demand of medical technologists is projected to grow 21% from 2014-2024 much faster than the average of all the occupations due to the greater need of diagnosis and of medical conditions through medical procedures.

Medical Technologist has the opportunity to join:

- Hospitals and clinical Laboratory positions
- National and multinational diagnostic companies
- Pharmaceutical firms
- Management positions
- Academic Positions
- Public Health Agencies
- NGOs

## FEE STRUCTURE

<b>Tuition Fee</b>	PKR 141,427/- (Semester)
<b>Admission Fee</b>	PKR 15,000/- (Once)
<b>Application Fee</b>	PKR 5,000/-
<b>Examination Fee</b>	PKR 11,000/- (Semester)
<b>Student Fund</b>	PKR 3,000/- (Yearly)
<b>Lab Coat</b>	PKR 5,000/- (Once)

## MS IN MEDICAL TECHNOLOGY

### Programme Introduction

Ziauddin College of Medical Technology is offering MS programme that provide distinct knowledge and exchangeable technical skills in diverse disciplines of Medical Technology. Along with imparting scientific knowledge and technical insight, this programme will also augment the critical thinking ability, problem solving, interpersonal skills and objective decision making among graduates which also opens new horizons for further learning.

### ELEGIBILITY CRITERIA

Medical Technology is a part of Allied Health Sciences which deals with the diagnosis, treatment, technical support and patient care. They will be able to contribute effectively in reaching solutions to the health problems. The MS graduates shall be providing their unique contributions in the form of technical excellence; research based critical analytical and evaluating skills, active leadership with mentoring graduates and peers at various academic

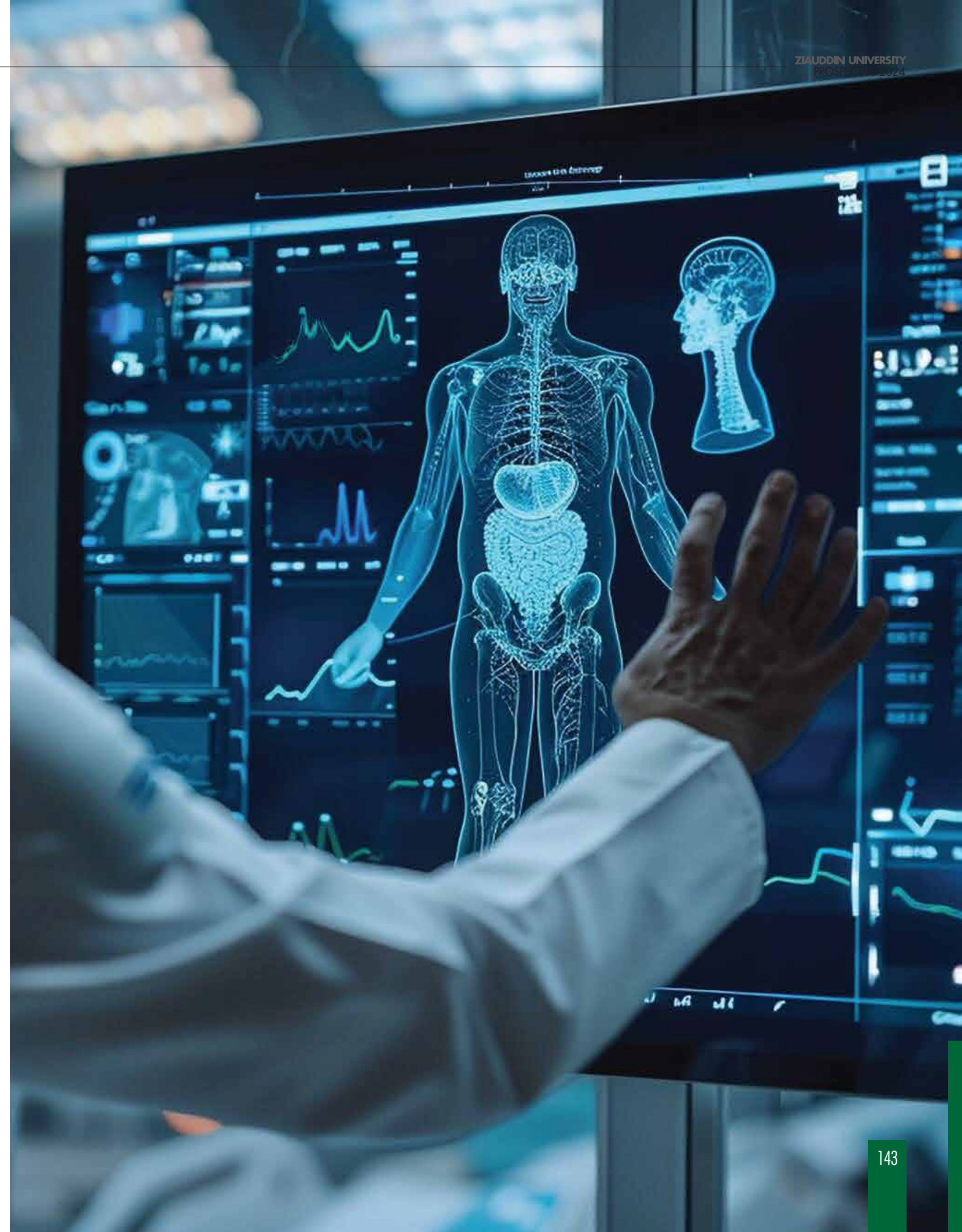
institutes, hospitals, medical centers, health agencies, pharmaceutical companies, research laboratories, forensic laboratories and all the health care entities. In addition, they will be able to present good critical thinking skills to produce accurate diagnosis, along with demonstration of managerial, administrative, quality assurance, and computer skills.

### ELEGIBILITY CRITERIA

- At least 16/17 years of education in the relevant discipline, Minimum CGPA 2.0/4.00 or 60% marks from an HEC-recognized institute (preferably the undergraduate degree should be HEC-attested or having HEC Equivalence certificate in case of foreign university education).
- Passed NTS GAT (General C)/ HAT or equivalent test with 50%, the University GAT (General) test with 50% marks or GRE subject by HEC authorized testing services.
- An interview with MPhil Admission committee.

### FEE STRUCTURE (2024-25)

MS in Medical Technology	Amount in PKR
Application Processing Fee (One Time)	5000/-
Admission Fee (One Time)	20,000/-
Tuition Fee (Semester wise)	180,000/-
Examination Fee (Semester wise)	12,500/-





## FACULTY MEMBERS

### PRINCIPAL

DR. AYESHA IQBAL  
MHPE (FELLOW) MBBS, MCPS

### ASSISTANT PROFESSORS

HUMERA RASHID  
M.PHIL. BIOTECHNOLOGY M.SC.  
CLINICAL MICROBIOLOGY BSC. LABORATORY  
MEDICINE BSC. BIOLOGICAL SCIENCES

MEHWISH ZEESHAN  
PH.D. BIOLOGICAL SCIENCES (SCHOLAR)  
M.PHIL. M.SC. B.SC. MEDICAL TECHNOLOGY

DR. RIZMA KHAN  
PH.D. BIOCHEMISTRY

DR. FARIA FATIMA  
PH.D. BIOTECHNOLOGY  
M.SC. BIOTECHNOLOGY

### LECTURERS

QAMAR UN-NISA  
MS HEALTHCARE MANAGEMENT  
M.SC. CLINICAL MICROBIOLOGY

MAHAPARA  
MS HEALTHCARE MANAGEMENT  
B.S. CARDIAC PERFUSION

ENGR. UMER HASSAN  
MS BIOMEDICAL ENGINEERING  
B.S. BIOMEDICAL ENGINEERING

DR. ISRA KHAUL  
M.PHIL. ANATOMY (FELLOW)  
MBBS

DR. MUHAMMAD SAAD ZAFAR  
BDS

DR. HAFIZ MUHAMMAD ABDUL AHAD  
BDS

### CLINICAL LABORATORY

DR. FAISAL IQBAL AFRIDI  
FCPS, PROFESSOR

DR. SABA RAZA  
FCPS, ASSISTANT PROFESSOR

DR. NOUREEN SHAKEEL  
FCPS, ASSISTANT PROFESSOR

MUHAMMAD SHOAB  
GROUP GENERAL MANAGER

DR. AISHA HABIB  
FCPS

### CARDIOVASCULAR SCIENCES

DR. JAWAID ANSARI  
CONSULTANT CARDIOLOGIST, MD

DR. MUHAMMAD SHAHZAD ALI  
RESIDENT CARDIOLOGY DEPARTMENT

DR. MUHAMMAD SHAHZAD  
MBBS

DR. NAJMA  
FCPS CARDIOLOGY

DR. BHAVESH SAGAR  
MBBS

DR. JAWAID ANSARI  
FCPS

ABDUL REHMAN  
B.S. MEDICAL TECHNOLOGY

DR. IMAMUDDIN KHAKI  
CARDIOVASCULAR THORACIC SURGEON

BISMA ALINA  
B.S. MEDICAL TECHNOLOGY  
MBA

### NEUROSCIENCES

DR. IMRAN QURESHI  
MBBS

MUSTAFA KHAN  
MSC

SAIF UR REHMAN  
B.S. MEDICAL TECHNOLOGY

NAZAAL PUNJANI  
B.S. MEDICAL TECHNOLOGY

MARIUM BINTE SALEEM  
B.S. MEDICAL TECHNOLOGY

SHABANA IQRAR  
B.S. MEDICAL TECHNOLOGY

NEHAN NADEEM  
B.S. MEDICAL TECHNOLOGY

### RADIATION THERAPY

DR. ASMA KHANMBBS

SHOAIB HANIF  
MD ONCOLOGY

ARSHAD MEHMOOD  
MSC

HRA NAZIM  
MSC

ZAINAB MUSTAFA  
MSC

SHOAIB SIDDIQUE  
MSC

### NUCLEAR MEDICINE

DR. SAJID SATTAR  
MD. ASSOCIATE PROFESSOR

DR. ASAD JALIL  
FCPS

AITEDAL MON  
B.S.C, TECHNOLOGIST

AYESHA ASIF  
B.S. MEDICAL TECHNOLOGY

### RADIOLOGICAL IMAGING

DR. KAMRAN HAMID  
FCPS, ASSOCIATE PROFESSOR

DR. ABDUR REHMAN  
FCPS

DR. MASSOD UR REHMAN KASHF  
MBBS, RESIDENT  
MOHAMMAD MAAZ ALI  
MBA

DR. AU MUHAMMAD  
MBBS, RESIDENT

DR. MEHAK BHUTTANI  
MBBS, RESIDENT


DR. SEHRISH  
MBBS, RESIDENT

DR. NAJIA NAZEER  
MBBS, RESIDENT

DR. ESHA AFZAL  
RESIDENT. LECTURER

DR. RUKHSANA  
MBBS, ASSISTANT PROFESSOR





**COLLEGE OF  
HUMAN  
NUTRITION  
AND  
DIETETICS**



### INTRODUCTION

The College of Human Nutrition and Dietetics at Ziauddin University, situated in the Faculty of Allied Health Sciences, aims to provide quality education in undergraduate and postgraduate programmes, transforming students into internationally competent professionals. Established in 2020 under the Faculty of Eastern Medicine & Natural Sciences, the department has grown and evolved to become a full-fledged college. Notably, the College of Human Nutrition and Dietetics at Ziauddin University is the only institute in Karachi offering admissions for MS & Ph.D. programmes in the discipline of Human Nutrition & Dietetics.

### VISION

To serve as a Centre of Excellence (Institute) for Education and Research for High-Quality Human Nutrition Care in Pakistan and Low-Income Countries.

### MISSION

To establish internationally comparable education programmes in Human Nutrition and Dietetics, supported by research for evidence-based solutions. Collaborate with industry for nutrition promoting products/services and engage stakeholders for projects promoting healthy lifestyles.

### PROGRAMME OFFERED

- BS in Human Nutrition & Dietetics
- MS in Human Nutrition & Dietetics
- PhD in Human Nutrition & Dietetics

### CAREER PROSPECTS

- Clinical Dietitians and Nutritionists
- Nutrition Educationists
- Public Health Nutritionists
- Human Nutrition and Dietetics Researcher and Scientist
- Nutrition experts in media

## BS IN HUMAN NUTRITION & DIETETICS

BS-HND is a four-year degree programme with courses requiring 136 credit hours. Within the spectrum of HEC suggested curriculum limits, the scheme of studies attempts to meet the standards suggested by the experts of the International Confederation of Dietetic Association (ICDA) and the Accreditation Council for Education in Nutrition and Dietetics (ACEND®) USA.

### ELIGIBILITY CRITERIA

Candidates having a minimum of 50% marks in Intermediate (Pre-Medical)/ Home Economics/ A-Level (Biology Mandatory) are eligible to apply.

### ADMISSION TEST AND INTERVIEW

The test comprises the following sections:

- 1) Subject Specific (Biology, Physics and Chemistry) 40
- 2) English 15
- 3) Math 15
- 4) IQ/Logical Reasoning 15
- 5) General Knowledge 15

The candidates have to appear in an interview conducted by the College of Human Nutrition & Dietetics after passing the admission test.

Seats available = 50

### Fee structure (2024-2025)

Semester 1		
	Tuition Fee	110,880
	Admission Fee	15,000
	Application Fee	5,000
	Examination Fee	3,400
	Enrolment Fee	2,600
	Laboratory Fee	3,000
	Documentation Fee	3,000
	Security Deposit	10,000
	Transport Fee	87,000
	<b>Total</b>	<b>239,880</b>

### ADMISSION TIMELINE

**Application acceptance:** July 1 to October 16, 2024

**Entrance Test:** October 19, 2024

**Interview:** October 24, 2024

**Class commencement:** January 01, 2025

S.No	Subjects	Credit Hours
<b>SEMESTER I</b>		
1	Fundamentals of Human Nutrition	3(2+1)
2	Essentials of Food Science and Technology	3(2+1)
3	Sociology	3(3+0)
4	Functional English	3(3+0)
5	Pakistan Studies	2(2+0)
6	Biochemistry-I	3(2+1)
<b>SEMESTER II</b>		
S.No	Subjects	Credit Hours
1	Advanced Nutrition	3(3+0)
2	Expository Writing	3(3+0)
3	Islamic Studies/Ethics	2(2+0)
4	Human Anatomy	3(2+1)
5	Psychology	3(3+0)
6	Biochemistry II	3(3+0)
<b>SEMESTER III</b>		
S.No	Subjects	Credit Hours
1	Nutrition Through the Life Cycle I	3(3+0)
2	Human Physiology	3(2+1)
3	Introduction to Computer	3(2+1)
4	Meal Planning and Management	3(2+1)



SEMESTER IV		
S.No	Subjects	Credit Hours
1	Nutrition Through the Life Cycle II	3(3+0)
2	Global Food Issues	3(3+0)
3	Mathematics	3(3+0)
4	Food Composition and Analysis	3(2+1)
5	Dietetics-I	3(2+1)
6	Nutrition Care Process –II	3(2+1)
SEMESTER V		
S.No	Subjects	Credit Hours
1	Public Health Nutrition	3(3+0)
2	Pharmacology and Nutraceuticals	3(3+0)
3	Biostatistics	3(3+0)
4	Food Service Management-I	3(2+1)
5	Dietetics-II	3(2+1)
6	Nutrition and Food Security in Pakistan	2(2+0)

SEMESTER VI		
S.No	Subjects	Credit Hours
1	Research Methods in Nutrition	3(2+1)
2	Community Nutrition	2(2+0)
3	Nutrition and Immunity	3(3+0)
4	Food Service Management-II	3(3+0)
5	Dietetics-III	3(2+1)
SEMESTER VIII		
S.No.	Subjects	Credit Hours
1	Internship A: Community	3(0+3)
2	Internship B: OPD	3(0+3)
3	Internship C: Hospital Wards	3(0+3)
4	Internship D: Food Service Management	3(0+3)
5	Capstone Project	3(0+3)
<b>Grand Total Credit Hours</b>		<b>136</b>

### LOCATION

Education City, Link Road, Gadap Town, Karachi

## MS IN HUMAN NUTRITION & DIETETICS

MS in Human Nutrition & Dietetics is specifically designed as a weekend programme to meet the needs of working professionals. The minimum duration for a master's programme is 1.5 years and the maximum is 4 years.

### ELIGIBILITY CRITERIA

Candidates with a BS in Human Nutrition & Dietetics/BS in Home Economics (Nutrition major) or any equivalent degree are eligible to apply for admission. Candidates from the relevant disciplines will have to study the preparatory/deficiency courses in one semester prescribed by the college to enhance their knowledge about the field.

### ADMISSION TEST & INTERVIEW

The candidate should pass the University admission test equivalent to GRE/HAT general with a passing score of 50% or GRE/HAT Gener-

al/Equivalent tests conducted by testing bodies' accredited by HEC, with a passing score of 50%.

The University's GAT test comprises the following sections:

- I. Verbal Reasoning (English)
- II. Quantitative Reasoning (Mathematics)
- III. Analytical Reasoning (Logic)

To complete the admissions process, all students who pass the Ziauddin University Entrance exam and are exempt will need to show up for an interview with the College of Human Nutrition & Dietetics.

### Course Work for Masters:

30 [(24 Credit Hours course work + 6 Credit Hours dissertation) or (30 credit hours course-work)].

	Course Work Only Option	Coursework + Thesis Option
Number of semesters	Three semesters (minimum)	Three semesters (minimum)
Programme Credit hours	30	30
No. of Courses	Core: 04	Core: 04
	Elective: 06	Elective: 04
Coursework Credit Hrs.	30	24
Thesis/Internship C Hrs.	0	6
Total CH	30	30
Credits allowed per semester	12 (max) in Spring/Fall 03 (max) in Summer (for deficiency/repeat course only)	12 (max) in Spring/ Fall 03 max) in Summer (for deficiency/repeat course only)



### FEE STRUCTURE

<b>Semester 1</b>	Tuition Fee	151,750
	Admission Fee	25,000
	Examination Fee	5,000
	Enrolment Fee	5,000
	Laboratory Fee	5,000
	Documentation Fee	5,000
	Security Deposit	15,000
	<b>Total</b>	<b>211,750</b>

### ADMISSION TIMELINE

**Application acceptance:** July 1 to October 16, 2024

**Entrance Test:** October 19, 2024

**Interview:** October 24, 2024

**Class commencement:** January 01, 2025

### LOCATION

North Nazimabad: Plot # E/40/1/1 – Wahid Colony, Block – B, Karachi.

## PHD IN HUMAN NUTRITION & DIETETICS

The PhD programme in Human Nutrition and Dietetics is designed as a weekend programme to meet the needs of working professionals. The minimum duration for PhD programme is 03 years and the maximum duration is 8 years. Students have to complete the coursework of 18 credit hours in semesters I and II, if they are from the same discipline. Following the completion of coursework, every PhD student shall be required to pass the comprehensive examination to be granted candidacy as a PhD researcher.

### The breakdown of credit hours

	Credit hours
<b>Core courses</b>	<b>12</b>
<b>Elective courses</b>	<b>6</b>
Total Coursework CH	<b>18</b>
<b>Research</b>	<b>30</b>
<b>Total</b>	<b>48</b>

### ELIGIBILITY CRITERIA & ADMISSION TEST

Candidates with an MS/MPhil or equivalent degree in nutrition or a related discipline are eligible to apply (candidates with a BS in Nutrition & Dietetics/ Home Economics with Nutrition major will be preferred).

i. Appearance in Ziauddin University Entrance Test is mandatory for all applicants, who wish to seek admission in PhD programme

ii. The test shall comprise of the following sections:

Section-I Nutrition 70%

Section-II English 15%

Section-III Analytical Reasoning 15%

iii. Candidates will be required to score at least 60% marks in each section to be eligible for consideration for provisional admission.

iv. If a candidate has already qualified for the International (subject) GRE/GAT/NTS, he/she will be exempted from the subject test component. The validity of International (subject) GRE is 5 years and NTS/GAT is for two years. The passing score of GRE minimum is 60% and that of NTS/GAT is 60%. However, the candidate has to appear in interview.

### INTERVIEW

To complete the admissions process, all students who pass the Ziauddin University Entrance Test must show up in person for an interview with the College of Human Nutrition & Dietetics.

Semester I	Semester II	Semester III- onwards
Core I	Core III	Comprehensive Examination and Research
Core II	Core IV	
Elective I	Elective 2	

### FEE STRUCTURE

<b>Semester 1</b>	Tuition Fee	151,750
	Admission Fee	25,000
	Application Fee	5,000
	Examination Fee	5,000
	Enrolment Fee	5,000
	Laboratory Fee	5,000
	Documentation Fee	5,000
	Security Deposit	15,000
	<b>Total</b>	<b>216,750</b>

**Application acceptance:** July 1 to October 16, 2024

**Entrance Test:** October 19, 2024

**Interview:** October 24, 2024

**Class commencement:** January 01, 2025

### LOCATION

North Nazimabad: Plot # E/40/1/1 – Wahid Colony, Block – B, Karachi.



## FACULTY MEMBERS

PROF. DR. KHURSHEED HASHMI  
(PROFESSOR); PHD (MICROBIOLOGY), MPhil,  
MSC & BSC IN MICROBIOLOGY

DR. MUSARRAT JAHAN  
(ASSISTANT PROFESSOR); PHD (BIOCHEMISTRY),  
MSC & BSC (H) IN BIOCHEMISTRY

DR. FAIZA SHEIKH  
(ASSISTANT PROFESSOR); PHD (FOOD SCIENCE  
& TECHNOLOGY), MSC & BSC IN FOOD  
SCIENCE & TECHNOLOGY

M/S MISBAH AIJAZ  
(LECTURER); MS (PUBLIC HEALTH), BS IN HOME  
ECONOMICS (NUTRITION MAJOR)

M/S WARDA QAMAR  
(LECTURER); BS (H) IN HOME ECONOMICS  
(FOOD & NUTRITION MAJOR)

M/S SUMMAIYA IQBAL  
(DEMONSTRATOR); BS IN HOME ECONOMICS  
(NUTRITION MAJOR)







# FACULTY OF LIBERAL ARTS & HUMAN SCIENCES





# FACULTY OF LIBERAL ARTS & HUMAN SCIENCES

## KEY INFORMATION

### DEAN

Dr. Shehla Najib Sidiki

### CONTACT INFORMATION

Website:

<https://lahs.zu.edu.pk>

Telephone: +92-21-3586-2937

Email: [info@zu.edu.pk](mailto:info@zu.edu.pk)

Locate Us:

Admin Office, 3rd Floor,  
Dental Building





## INTRODUCTION

The programmes offered at the Faculty of Liberal Arts and Human Sciences (FLAHS) offer students a broad and enriching educational approach that emphasises a well-rounded intellectual foundation across various disciplines. FLAHS has 3 colleges, namely; College of Education, College of Communication and Media Sciences, and College of Language, Literature and Culture. Liberal Arts education cultivates a free and open mind and integrates knowledge from fields such as humanities, social sciences, natural sciences, and the arts. The goal is not only to provide specialised knowledge but also to develop critical thinking, creativity, and effective communication skills. By exploring diverse perspectives and engaging with complex questions, students are equipped to navigate an ever-changing world, adapt to new challenges, and contribute thoughtfully to society. The degrees in all 3 colleges fosters a deep understanding of human experiences and equips individuals with the tools to thrive both personally and professionally.

## VISION

To develop empowered individuals that are able to deal with the complexities of life and society using critical thinking, communication skills and a problem-solving approach.

## MISSION

To provide students with a broad knowledge of the world to maximize their potential and engagement with human issues as citizens of a globalized and increasingly technological world.

## THE PUBLIC FORUM SERIES

The Public Forum, an initiative of the Faculty of Liberal Arts and Human Sciences, aims to provide a platform for meeting of minds and provide an opportunity to the youth, in particular, to engage with the civil society in a well-informed discussion on public issues. It is held

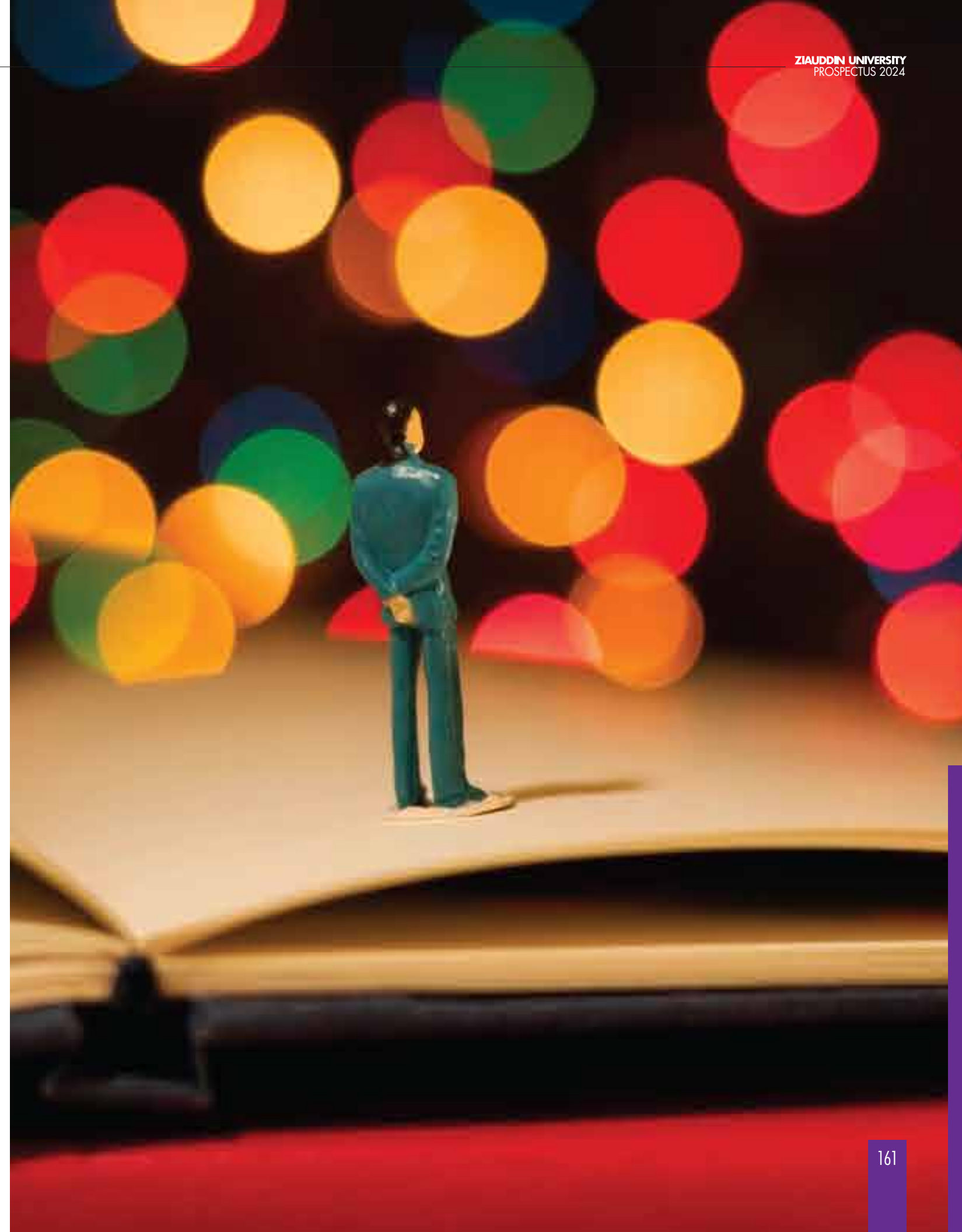
quarterly and is open to both students from all educational institutions and members of the public at large. It is offered free of charge to allow maximum participation of people from all walks of life.

## LEARNING AND TEACHING

Our learning and teaching philosophy is student-centered. The aim is to develop students as life-long learners. Students are provided an environment for self-growth and are engaged in tasks and activities that help them grow as critical thinkers and autonomous learners. Both in-class and out-of-class opportunities to discuss, debate and dialogue on concepts and shared experiences lead to the learning and utilization of these concepts in the real world. Internships and service learning are important components of students' learning experience in all colleges of the faculty.

## CAREER OPPORTUNITIES

Graduates of the various programmes in the Faculty of Liberal Arts and Human Sciences will develop a range of 21st Century employability skills, such as analysis and synthesis, working collaboratively in teams, critical thinking and problem-solving, and effective oral and written communication. Our programmes give an opportunity to follow diverse career pathways such as Communication specialist, Editor, Content Creator, Public Relations Specialist, Teacher/Educator, Marketing Specialist, Researcher, Copywriter, Corporate Trainer, Social Media Manager and many more.





# COLLEGE OF MEDIA SCIENCES

## KEY INFORMATION

### CONTACT INFORMATION

Website:  
<https://zcoms.zu.edu.pk/>  
Telephone: +92-21-3586-2937  
+92-321-366-5938  
Email: [info@zu.edu.pk](mailto:info@zu.edu.pk)  
Locate Us:  
Admin Office, 3rd Floor, Dental  
Building

Studying at Ziauddin College of Media Sciences has been an incredibly enriching experience. The college's cutting-edge facilities and industry-aligned curriculum have empowered me to develop both my creative and technical skills. The faculty are not only experts but also passionate mentors who have guided me every step of the way. Through hands-on projects and real-world exposure, I have gained a comprehensive understanding of both design and filmmaking, preparing me for a successful career in the media industry. The collaborative environment at Ziauddin University encourages creativity and critical thinking, pushing me to explore new ideas and refine my craft. Choosing Ziauddin College of Media Sciences has been pivotal in my academic and professional journey, and I am excited about the opportunities ahead.

#### SHEHBAZ HASSAN

Student, Bachelor of Studies in Communication & Media Sciences  
Ziauddin College of Media Sciences



## INTRODUCTION

Ziauddin College of Media Sciences (ZCOMS) is a gateway to excellence in Pakistan's booming media landscape. In a dynamic industry that evolves by the minute, ZCOMS stands as a beacon of innovation and proficiency, nurturing the next generation of media professionals. ZCOMS addresses the burgeoning demand for adept media professionals through a comprehensive blend of academic rigor and hands-on experience. We boast cutting-edge production facilities, a vibrant FM radio channel, and a partnered digital media agency, offering students an immersive journey from theory to practice. Here, education transcends the confines of the classroom, empowering students with real-world skills long before they embark on their careers.

At ZCOMS, diversity isn't just a buzzword—it's our foundation. We embrace students from all walks of life, fostering an inclusive environment where every voice is heard and valued. Our mission goes beyond academic prowess; we strive to cultivate global citizens who embrace cultural diversity and champion social equity. With the rich courses spanning liberal arts and technical disciplines, ZCOMS equips graduates with not only technical expertise but also a deep appreciation for the multifaceted world around them.

## UNLEASHING POTENTIAL, TRANSFORMING FUTURES

Our holistic approach to education extends far beyond the confines of traditional learning. By instilling a spirit of inquiry, creativity, and ethical responsibility, ZCOMS empowers students to realise their fullest potential—both professionally and personally. Our graduates emerge not just as job seekers but as industry leaders primed to shape the future of media with their innovation and integrity.

### VISION

Groom students to become media professionals of global calibre who are futuristic in vision, possessing interdisciplinary leadership qualities.

### MISSION

ZCOMS offers media education by providing state-of-the-art infrastructure to develop curiosity and highest intellectual and professional growth for the advancement of the media industry and development of a coherent communicative ethical society through research, exploration, and experimentation.

### PROGRAMMES OFFERED

ZCOMS offers the following two 4-year undergraduate programmes:

- Bachelor of Studies in Communication and Media Sciences (BS-CMS)
- Bachelor of Studies in Digital Media Marketing (BS-DMM)

## BS IN COMMUNICATION & MEDIA SCIENCES

### VISION

To provide quality education in Media Sciences for engagement in and growth of the media industry and to create interdisciplinary leaders.

### MISSION

BS-CMS incorporates a blend of theoretical and practical education in Media Sciences that develops intellectual potential through modern collaborative pedagogy enabling wise, forward-looking critical thinkers and leaders to grow professionally.

### INTRODUCTION

This programme covers a variety of liberal arts and technically oriented subjects covering theoretical, historical, analytical, and critical approaches to communication processes and the media. At the end of the four years programme, the graduates are equipped with necessary technical and professional orientation to qualify for jobs in businesses or institutions that require effective visual communicators as well as the background needed to pursue further education in related fields.

The BS-CMS programme offers the following specialisations as majors:

### COMMUNICATION DESIGN

This specialisation teaches students how to translate ideas into concepts and design with the help of visuals to attract attention, interest, and to sell an idea. It is a multidisciplinary field that combines marketing, advertising, and design; covers courses on video production, art, illustration, typography, image manipulation, and branding. The students are trained to create meaningful messages with compelling images for various mediums. The specialisation enhances the overall communicative and visual skills of the students.

### FILM & TV

Film, in its many forms, does not only entertain, but also informs and brings the world together. At ZCOMS, the nature of the Film & TV specialisation ensures that the student understands both the theoretical and the practical framework of the discipline. Students are taught by leading media professionals who

collaborate closely with them to develop their skills. Access to professional production facilities gives the students an opportunity to gain first-hand experience and prepare them for the professional world.

### JOURNALISM

The human appetite for information is insatiable and the demand for news will always be prevalent. With unique and thorough training in reporting, writing, editing, news, and skills of interviewing, students leave their mark in the evolving field of journalism. At ZCOMS, the Journalism programme teaches students the art of communicating clearly and directly with their audience and writing objectively without personal bias, which is the true essence of journalism. Over the past decade, the medium has changed greatly with the surge in web, blogging and social media platforms. These technologies serve as vital means of immediate and instantaneous source of news and information. The students specialising in journalism are trained to harness all the modern technologies that are shaping the news industry.

### CAREER OPPORTUNITIES

The graduates of BS-CMS can pursue a variety of career pathways leading to senior positions in the media industry. The organisations the graduates can find opportunities in are: advertising agencies, production houses, digital media agencies, FMCG companies, media buying houses, TV channels, and radio stations, to name a few. The skills and knowledge imparted help graduates in their career paths leading to important roles in the field such as script writers, art directors, copywriters, producers, editors, graphic designers, data analysts, content writers, digital content producers, news reporters, and PR professionals.

### DEGREE STRUCTURE

The BS-CMS degree is subdivided into the following course categories: General Education, Major (Foundation), Major (Specialization), Major (Elective) and Interdisciplinary. In addition, the degree contains two Internships and a final year Capstone Project.



## SCHEME OF STUDIES OF BS IN COMMUNICATION AND MEDIA SCIENCES – MAJOR IN COMMUNICATION DESIGN

### 47 Courses – 139 Credit Hours

All courses are 3 credit hours each, except Pakistan Studies and Islamic Studies which are 2 credit hours each.

#### SEMESTER 1

N <sub>o</sub>	CODE	COURSE	CATEGORY
01	ZUGE001 / ZUGE002	Islamic Studies / Moral Ethics	General Education
02	ZUGE004	Functional English	General Education
03	MSGE111	Design Fundamentals	General Education
04	MSMP111	Art, Design & Film History	Major (Foundation)
05	MSMP112	Drawing & Perspective	Major (Foundation)
06	MSMP113	Multimedia Foundation	Major (Foundation)

#### SEMESTER 2

N <sub>o</sub>	CODE	COURSE	CATEGORY
07	ZUGE003	Pakistan Studies	General Education
08	ZUGE006	Information & Communication Technologies	General Education
09	MSGE121	Sociology	General Education
10	MSMP121	Art of Music	Major (Foundation)
11	MSMP122	Digital Graphics	Major (Foundation)
12	MSMP123	Digital Photography	Major (Foundation)

#### SEMESTER 3

N <sub>o</sub>	CODE	COURSE	CATEGORY
13	ZUGE005	Expository Writing	General Education
14	MSGE231	Quantitative Reasoning 1	General Education
15	MSMP231	Concept & Content Development	Major (Foundation)
16	MSMP232	Camera & Lighting Techniques	Major (Foundation)
17	MSMP233	Digital Audio Video	Major (Foundation)
18	MSMP234	Digital Marketing Fundamentals	Major (Foundation)

#### SEMESTER 4

N <sub>o</sub>	CODE	COURSE	CATEGORY
19	MSGE241	Quantitative Reasoning 2	General Education
20	MSGE242	Environmental Studies	General Education
22	MSMP241	Editing & Grading	Major (Foundation)
21	MSMC241	Digital Photography Post	Major (Specialization)
23	MSMC242	Design Thinking	Major (Specialization)
24	MSID241	Drama & Theater	Interdisciplinary

#### SUMMER

N <sub>o</sub>	CODE	COURSE	CATEGORY
25	MSGE243	Internship (Civic)	General Education

#### SEMESTER 5

N <sub>o</sub>	CODE	COURSE	CATEGORY
26	MSMP351	Media Laws & Ethics	Major (Foundation)
27	MSMP352	Radio Programming & Production	Major (Foundation)
28	MSMC351	Art Direction	Major (Specialization)
29	MSMC352	Design Practice	Major (Specialization)
30	MSMC353	Integrated Marketing Communications	Major (Specialization)
31	MSID351	Media Writing	Interdisciplinary

#### SEMESTER 6

N <sub>o</sub>	CODE	COURSE	CATEGORY
32	MSMP361	Research Methods	Major (Foundation)
33	MSMC361	Branding Design	Major (Specialization)
34	MSMC362	Media Planning	Major (Specialization)
35	MSMC363	Social Media Content Production	Major (Specialization)
36	MSMC364	UX/UI Development	Major (Specialization)
37	MSID361	Media Psychology	Interdisciplinary

#### SUMMER

N <sub>o</sub>	CODE	COURSE	CATEGORY
38	MSFE361	Internship	Field Experience

#### SEMESTER 7

N <sub>o</sub>	CODE	COURSE	CATEGORY
39	ZUGE007	Entrepreneurship	General Education
40	MSMP471	Generative AI	Major (Foundation)
41	MSMC471	Packaging Design	Major (Specialization)
42	MSMC472	Visual Communication Challenges	Major (Specialization)
43	MSID471	Health & Wellness	Interdisciplinary
44	MSCC471	Thesis I - Communication Design	Capstone Project

#### SEMESTER 8

N <sub>o</sub>	CODE	COURSE	CATEGORY
45	-	Elective	Major (Elective)
46	-	Elective	Major (Elective)
47	MSCC481	Thesis II - Communication Design	Capstone Project



## SCHEME OF STUDIES OF BS IN COMMUNICATION AND MEDIA SCIENCES – MAJOR IN FILM & TV

### 47 Courses – 139 Credit Hours

All courses are 3 credit hours each, except Pakistan Studies and Islamic Studies which are 2 credit hours each.

#### SEMESTER 1

No	CODE	COURSE	CATEGORY
01	ZUGE001 / ZUGE002	Islamic Studies / Moral Ethics	General Education
02	ZUGE004	Functional English	General Education
03	MSGE111	Design Fundamentals	General Education
04	MSMP111	Art, Design & Film History	Major (Foundation)
05	MSMP112	Drawing & Perspective	Major (Foundation)
06	MSMP113	Multimedia Foundation	Major (Foundation)

#### SEMESTER 2

No	CODE	Course	CATEGORY
07	ZUGE003	Pakistan Studies	General Education
08	ZUGE006	Information & Communication Technologies	General Education
09	MSGE121	Sociology	General Education
10	MSMP121	Art of Music	Major (Foundation)
11	MSMP122	Digital Graphics	Major (Foundation)
12	MSMP123	Digital Photography	Major (Foundation)

#### SEMESTER 3

No	CODE	Course	CATEGORY
13	ZUGE005	Expository Writing	General Education
14	MSGE231	Quantitative Reasoning 1	General Education
15	MSMP231	Concept & Content Development	Major (Foundation)
16	MSMP232	Camera & Lighting Techniques	Major (Foundation)
17	MSMP233	Digital Audio Video	Major (Foundation)
18	MSMP234	Digital Marketing Fundamentals	Major (Foundation)

#### SEMESTER 4

No	CODE	COURSE	CATEGORY
19	MSGE241	Quantitative Reasoning 2	General Education
20	MSGE242	Environmental Studies	General Education
21	MSMP241	Editing & Grading	Major (Foundation)
22	MSMF241	Script Writing	Major (Specialization)
23	MSMF242	Film Design	Major (Specialization)
24	MSID241	Drama & Theatre	Interdisciplinary

#### SUMMER

No	CODE	Course	CATEGORY
25	MSGE243	Internship (Civic)	General Education

#### SEMESTER 5

No	CODE	Course	CATEGORY
26	MSMP351	Media Laws & Ethics	Major (Foundation)
27	MSMP352	Radio Programming & Production	Major (Foundation)
28	MSMF351	Art Direction	Major (Specialization)
29	MSMF352	Direction	Major (Specialization)
30	MSMF353	Life Drawing	Major (Specialization)
31	MSID351	Media Writing	Interdisciplinary

#### SEMESTER 6

No	CODE	Course	CATEGORY
32	MSMP361	Research Methods	Major (Foundation)
33	MSMF361	Audio Recording & Production	Major (Specialization)
34	MSMF362	Digital Compositing	Major (Specialization)
35	MSMF363	Production	Major (Specialization)
36	MSMF364	Storyboarding	Major (Specialization)
37	MSID361	Media Psychology	Interdisciplinary

#### SUMMER

No	CODE	Course	CATEGORY
38	MSFE361	Internship	Field Experience

#### SEMESTER 7

No	CODE	Course	CATEGORY
39	ZUGE007	Entrepreneurship	General Education
40	MSMP471	Generative AI	Major (Foundation)
41	MSMF471	Documentary Writing & Production	Major (Specialization)
42	MSMF472	Sound Design	Major (Specialization)
43	MSID471	Health & Wellness	Interdisciplinary
44	MSCF471	Thesis I - Film & TV	Capstone Project

#### SEMESTER 8

No	CODE	Course	CATEGORY
45	-	Elective	Major (Elective)
46	-	Elective	Major (Elective)
47	MSCF481	Thesis II - Film & TV	Capstone Project

## SCHEME OF STUDIES OF BS IN COMMUNICATION AND MEDIA SCIENCES – MAJOR IN JOURNALISM

47 Courses – 139 Credit Hours

All courses are 3 credit hours each, except Pakistan Studies and Islamic Studies which are 2 credit hours each.

### SEMESTER 1

N <sub>e</sub>	CODE	COURSE	CATEGORY
01	ZUGE001 / ZUGE002	Islamic Studies / Moral Ethics	General Education
02	ZUGE004	Functional English	General Education
03	MSGE111	Design Fundamentals	General Education
04	MSMP111	Art, Design & Film History	Major (Foundation)
05	MSMP112	Drawing & Perspective	Major (Foundation)
06	MSMP113	Multimedia Foundation	Major (Foundation)

### SEMESTER 2

N <sub>e</sub>	CODE	Course	CATEGORY
07	ZUGE003	Pakistan Studies	General Education
08	ZUGE006	Information & Communication Technologies	General Education
09	MSGE121	Sociology	General Education
10	MSMP121	Art of Music	Major (Foundation)
11	MSMP122	Digital Graphics	Major (Foundation)
12	MSMP123	Digital Photography	Major (Foundation)

### SEMESTER 3

N <sub>e</sub>	CODE	Course	CATEGORY
13	ZUGE005	Expository Writing	General Education
14	MSGE231	Quantitative Reasoning 1	General Education
15	MSMP231	Concept & Content Development	Major (Foundation)
16	MSMP232	Camera & Lighting Techniques	Major (Foundation)
17	MSMP233	Digital Audio Video	Major (Foundation)
18	MSMP234	Digital Marketing Fundamentals	Major (Foundation)

### SEMESTER 4

N <sub>e</sub>	CODE	Course	CATEGORY
19	MSGE241	Quantitative Reasoning 2	General Education
20	MSGE242	Environmental Studies	General Education
21	MSMP241	Editing & Grading	Major (Foundation)
22	MSMJ241	Media & Politics	Major (Specialisation)
23	MSMJ242	Journalism Principles	Major (Specialisation)
24	MSID241	Drama & Theatre	Interdisciplinary

### SUMMER

N <sub>e</sub>	CODE	Course	CATEGORY
25	MSGE243	Internship (Civic)	General Education

### SEMESTER 5

N <sub>e</sub>	CODE	Course	CATEGORY
26	MSMP351	Media Laws & Ethics	Major (Foundation)
27	MSMP352	Radio Programming & Production	Major (Foundation)
28	MSMJ351	Digital Journalism	Major (Specialization)
29	MSMJ352	News & TV Production	Major (Specialization)
30	MSMJ353	News Writing & Reporting	Major (Specialization)
31	MSID351	Media Writing	Interdisciplinary

### SEMESTER 6

N <sub>e</sub>	CODE	Course	CATEGORY
32	MSMP361	Research Methods	Major (Foundation)
33	MSMJ361	Feature Writing	Major (Specialization)
34	MSMJ362	Sub Editing	Major (Specialization)
35	MSMJ363	Social Media Content Production	Major (Specialization)
36	MSMJ364	Urdu News Writing	Major (Specialization)
37	MSID361	Media Psychology	Interdisciplinary

### SUMMER

N <sub>e</sub>	CODE	Course	CATEGORY
38	MSFE361	Internship	Field Experience

### SEMESTER 7

N <sub>e</sub>	CODE	Course	CATEGORY
39	ZUGE007	Entrepreneurship	General Education
40	MSMP471	Generative AI	Major (Foundation)
41	MSMF471	Documentary Writing & Production	Major (Specialisation)
42	MSMF472	Sound Design	Major (Specialisation)
43	MSID471	Health & Wellness	Interdisciplinary
44	MSCF471	Thesis I - Film & TV	Capstone Project

### SEMESTER 8

N <sub>e</sub>	CODE	Course	CATEGORY
45	-	Elective	Major (Elective)
46	-	Elective	Major (Elective)
47	MSCJ481	Thesis II - Journalism	Capstone Project



## BS IN DIGITAL MEDIA MARKETING

### VISION

Provide quality education in Digital Media for engagement in and growth of the field of Digital Marketing and create interdisciplinary leaders.

### MISSION

BS-DMM incorporates a blend of theoretical and practical education in Digital Media that develops intellectual potential through modern collaborative pedagogy enabling, forward-looking critical thinkers and leaders to grow professionally.

### INTRODUCTION

The growth of social media has not only changed the way businesses operate but also influenced the way products and services are marketed. The latest online tools, technologies and platforms enable businesses to reach their targeted customer more accurately than ever before and interact with them using rich multimedia content. Recognizing the need of the day, ZCOMS offers a 4-year undergraduate programme in "Digital Media Marketing" where students will be taught the most effective ways of integrating media content with digital marketing activities. The students will be able to understand the broad system governing marketing activities and will get insights in different relevant areas such as data management, web content development, media management for web and social media targeting and optimisation.

### SCHEME OF STUDIES OF BS IN DIGITAL MEDIA MARKETING

#### 47 Courses – 139 Credit Hours

All courses are 3 credit hours each, except Pakistan Studies and Islamic Studies which are 2 credit hours each.

#### SEMESTER 1

No	CODE	COURSE	CATEGORY
01	ZUGE001 / ZUGE002	Islamic Studies / Moral Ethics	General Education
02	ZUGE004	Functional English	General Education
03	MSGE111	Design Fundamentals	General Education
04	MSMP111	Art, Design & Film History	Major (Foundation)
05	MSMP112	Drawing & Perspective	Major (Foundation)
06	MSMP113	Multimedia Foundation	Major (Foundation)

### MINORS

Students can get a minor by taking four courses (12 credit hours) from a specialisation other than Digital Media Marketing.

### DUAL MAJOR

Students can opt for a dual major by taking 12 additional courses (36 credit hours) from a different specialisation.

### CAREER OPPORTUNITIES

The field of digital marketing provides an opportunity for many creative people. The graduates of BS-DMM can pursue a variety of career pathways. From digital media agencies to production houses, from FMCG companies to public relations, digital media graduates can make their mark in any industry. A variety of jobs are available to the candidates trained in the field including content writers, digital media content developers, bloggers, vloggers, digital marketing strategists, data analysts and many more.

### DEGREE STRUCTURE

The degree is sub-divided in the following course categories: General Education, Foundation, Major, and Minor/Elective.

#### SEMESTER 2

No	CODE	Course	CATEGORY
07	ZUGE003	Pakistan Studies	General Education
08	ZUGE006	Information & Communication Technologies	General Education
09	MSGE121	Sociology	General Education
10	MSMP121	Art of Music	Major (Foundation)
11	MSMP122	Digital Graphics	Major (Foundation)
12	MSMP123	Digital Photography	Major (Foundation)

#### SEMESTER 3

No	CODE	Course	CATEGORY
13	ZUGE005	Expository Writing	General Education
14	MSGE231	Quantitative Reasoning 1	General Education
15	MSMP231	Concept & Content Development	Major (Foundation)
16	MSMP232	Camera & Lighting Techniques	Major (Foundation)
17	MSMP233	Digital Audio Video	Major (Foundation)
18	MSMP234	Digital Marketing Fundamentals	Major (Foundation)

#### SEMESTER 4

No	CODE	Course	CATEGORY
19	MSGE241	Quantitative Reasoning 2	General Education
20	MSGE242	Environmental Studies	General Education
22	MSMP241	Editing & Grading	Major (Foundation)
21	MSMD241	Marketing Management	Major (Specialization)
23	MSMD242	Digital Media Foundation	Major (Specialization)
24	MSID241	Drama & Theater	Interdisciplinary

#### SUMMER

No	CODE	Course	CATEGORY
25	MSGE243	Internship (Civic)	General Education

#### SEMESTER 5

No	CODE	Course	CATEGORY
26	MSMP351	Media Laws & Ethics	Major (Foundation)
27	MSMP352	Radio Programming & Production	Major (Foundation)
28	MSMD351	E-Business Essentials	Major (Specialization)
29	MSMD352	Integrated Marketing Communications	Major (Specialization)
30	MSMD353	Web Development	Major (Specialization)
31	MSID351	Media Writing	Interdisciplinary

#### SEMESTER 6

No	CODE	Course	CATEGORY
32	MSMP361	Research Methods	Major (Foundation)
33	MSMD361	Database Principles	Major (Specialization)
34	MSMD362	Media Planning	Major (Specialization)
35	MSMD363	Social Media Content Production	Major (Specialization)
36	MSMD364	UX/UI Development	Major (Specialization)
37	MSID361	Media Psychology	Interdisciplinary

## SUMMER

No	CODE	Course	CATEGORY
38	MSFE361	Internship	Field Experience

## SEMESTER 7

No	CODE	Course	CATEGORY
39	ZUGE007	Entrepreneurship	General Education
40	MSMP471	Generative AI	Major (Foundation)
41	MSMD471	Content Management System	Major (Specialization)
42	MSMD472	Business Intelligence	Major (Specialization)
43	MSID471	Health & Wellness	Interdisciplinary
44	MSCD471	Thesis I - Digital Media Marketing	Capstone Project

## SEMESTER 8

No	CODE	Course	CATEGORY
45	-	Elective	Major (Elective)
46	-	Elective	Major (Elective)
47	MSCD481	Thesis II - Digital Media Marketing	Capstone Project

## ELIGIBILITY CRITERIA

- Minimum A-Levels 3 passes from a recognized institution with equivalency certificate issued by Inter Board Committee of Chairmen (ibcc.edu.pk), OR
- Intermediate pass or equivalent with equivalency certificate issued by Inter Board Committee of Chairmen (ibcc.edu.pk)
- Merit will be decided upon basic admission criteria. However, the final list will be based on evaluation of ZCOMS entrance test score and interview.

## FEE STRUCTURE

Admission fee	Rs. 10,000
Security deposit	Rs. 10,000
Activity fee	Rs. 10,000 (Per Year)
Course fee	Rs. 15,000/- per course & Rs.1000/- per exam
Thesis 1	Rs. 20,000/- Thesis 1 & Rs. 5000/- Thesis jury
Thesis 2	Rs. 20,000/- Thesis 2 & Rs. 5000/- Thesis jury

## PROGRAMME DURATION

BS-CMS and BS-DMM are four-year undergraduate programmes comprising of 139 credit hours and 47 courses. These courses can be completed with a minimum duration of 4 years and a maximum duration of 6 years.

## ACADEMIC CALENDAR

### Fall 2024

Commencement of Regular Classes  
Classes End  
Final Exams Begin  
Final Exams End

Monday, September 02, 2024  
Saturday, December 14, 2024  
Monday, December 16, 2024  
Saturday, December 21, 2024

### Spring 2025

Commencement of Regular Classes  
Classes End  
Final Exams Begin  
Final Exams End

Monday, February 03, 2025  
Saturday, May 25, 2025  
Monday, June 02, 2025  
Thursday, June 12, 2025

### Summer 2025

Commencement of Regular Classes  
Classes End  
Final Exams Begin  
Final Exams End

Monday, June 30, 2025  
Wednesday, August 20, 2025  
Thursday, August 21, 2025  
Saturday, August 23, 2025

## FACULTY MEMBERS

### Faizan S. Syed

Founder Director,  
College of Media Sciences  
CEO, East River

### Dr. Shehla Najib Sidiki

Dean, Faculty of Liberal Arts & Human  
Sciences

### Latif Abbasi

Associate Professor

### Ata Syed

Assistant Professor

### Ariba Shah

Senior Lecturer

### Visiting Faculty

#### Arsala Babar

Scriptwriting, Film Design, Film History

#### Naveed Siddiqui

Drawing & Design

#### Ali J. Vastani

Digital Photography, Camera & Lighting  
Techniques

#### Izhar Khan

Digital Marketing, Media Planning

#### Syed Misba Uddin Qadri

Quantitative Reasoning, Introduction to  
Information and Communication Tehnologies

## CONTACT INFORMATION

### Address

3<sup>rd</sup> Floor, Gate No 6, 4/B, Shahrah-e-Ghalib, Clifton, Karachi (75600)

### Phone

+92-21-35862937

### WhatsApp

0321-3665938

### Email

zcoms@zu.edu.pk



# COLLEGE OF LANGUAGES, LITERATURE & CULTURE

## KEY INFORMATION

**Academic Coordinator**  
Ms. Hina Khan

## CONTACT INFORMATION

Website:  
<https://cllc.zu.edu.pk/>  
Telephone:  
+92-21-35305790, +92-21-35148626  
Email:  
zeeshan.baig@zu.edu.pk  
Locate Us:  
Ground Floor, H.A Arcade, B.C-05,  
Block-1, Clifton, Karachi-75600

"Studying for a Bachelor's in English at CLLC was a transformative experience that exceeded all my expectations. The programme not only equipped me with a deep understanding of literature and language but also nurtured critical thinking and analytical skills that have proven invaluable in my career. The dedicated faculty members played a crucial role in my academic journey, providing guidance and fostering a supportive learning environment. The diverse range of courses allowed me to explore various genres and periods of literature, broadening my perspectives and enhancing my appreciation for the written word. I am proud to be an alumna of CLLC, ZU, where passion for literature meets academic excellence."

Fatima  
BS English



Welcome to the College of Languages, Literature & Culture at Ziauddin University! We are a prestigious institution dedicated to providing high-quality education in languages, literature, and culture. Our college offers a diverse range of programmes designed to enhance linguistic proficiency, critical thinking, and cultural understanding.

From mastering languages and exploring the depths of literature to understanding the intersection of various disciplines such as sociology, psychology, gender studies, history, anthropology, and education, our curriculum is designed to broaden your horizons and develop your intellectual capabilities.

At the College of Languages, Literature & Culture, we strive to create an enriching learning environment. Our experienced faculty members employ innovative teaching methods that promote interactive learning, critical analysis, and creative expression. We encourage students to engage in academic discussions, seminars, and workshops, fostering intellectual growth and collaborative learning.

We provide state-of-the-art facilities to support your educational journey. Our well-stocked libraries and multimedia resources offer you the tools and resources necessary to excel in your studies. The college also organizes various educational activities such as literary events, cultural festivals, and guest lectures to enhance your learning experience and expose you to diverse perspectives.

Upon graduating from the College of Languages, Literature & Culture, you will be equipped with valuable skills that open doors to rewarding career opportunities. You can pursue careers in fields such as education, translation and interpretation, journalism, research, social change and development, cultural organizations, and more. Our programmes prepare you to become effective communicators, critical thinkers, and agents of positive change in society.

## VISION

The College of Languages, Literature & Culture, housed within the Faculty of Liberal Arts and Human Sciences, aims to develop the next generation of citizens for an extremely fragmented yet interrelated world, with an appreciation and understanding of diversity in languages, literature and cultures within a broad humanistic context.

## MISSION

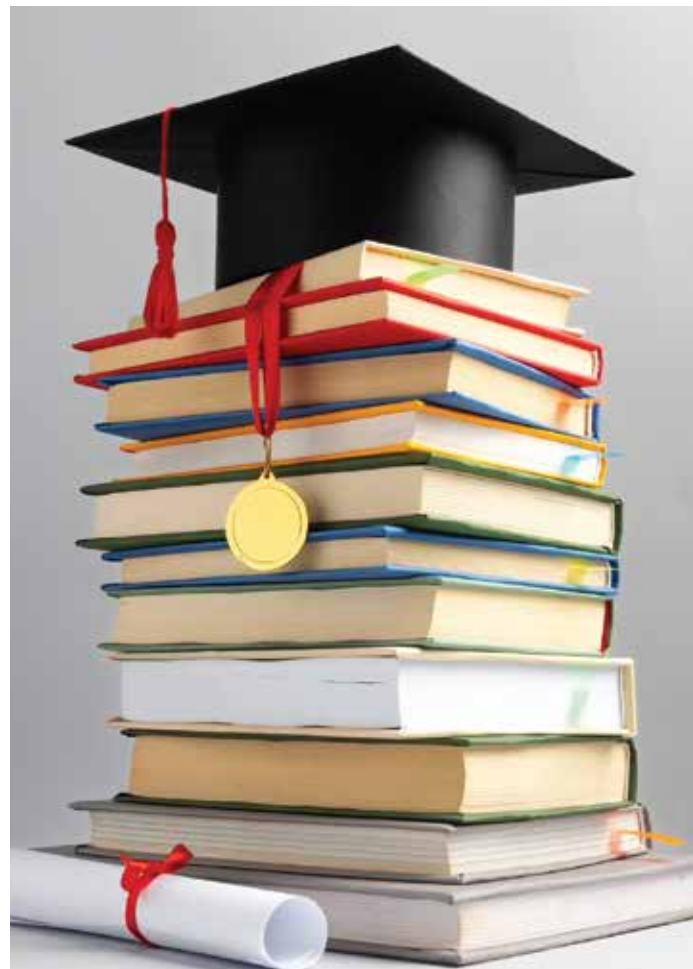
To engage in teaching, research and service in languages, literature and culture to develop graduates as critical thinkers with excellent language and communication skills, and an appreciation of diversity in cultures to promote tolerance and peace in a globalised world.

## PROGRAMMES OFFERED

CLLC offers the following programmes:

Two 4-year undergraduate programmes:

- Bachelor of Studies in English (BS English)
- Bachelor of Studies in Social Change and Development



# BS ENGLISH

## VISION

To provide quality education in language and literature studies to help students understand and appreciate cultural, linguistic and ethnic diversity.

## MISSION

Our mission is to offer a versatile and comprehensive BS English programme that cultivates a broad-based understanding of Linguistics and Literature and enables students to embrace and appreciate diversity alongside other 21st century learning skills.

## PROGRAMME OVERVIEW

The 4 year BS programme allows students the freedom to choose and study a wide range of subjects, both within their Major and Minor as well as General Education courses to follow their diverse interests. While selecting a major provides them with a strong foundation in one concentrated area of study, the option to choose a minor from related disciplines can help them widen both their knowledge base and skill sets to follow a range of career options in their desired field.

The BS programme aims to develop graduates with critical thinking and other 21st-century skills such as creativity, collaboration, critical thinking and communication as well as problem-solving skills rated highly by employers. This will provide them with the cutting-edge skill set required to fulfill the changing requirements of the workforce in this fast-changing technological world

## CAREER OPPORTUNITIES

The exit-level competencies of our BS English programme qualify our students to enter various domains in their professional lives. While knowledge, research and linguistic skills make academia, writing and journalism a few of the most lucrative areas, their leadership skills along with interdisciplinary expertise and in-depth historical and social awareness make them perfect candidates for achieving success in the CSS exams, in addition to careers in academia, and research and development work with NGOs and government institutions.

Moreover, having the opportunity to choose from a variety of minor subjects allows the students to expand their intellectual horizons in different dimensions of the contemporary globalized digital world, opening pathways to various industries like banking, and customer service.

## COURSE REQUIREMENTS AND STRUCTURE

The HEC-approved curriculum will be used for the BS English Programme with relevant changes and additional General and Elective Courses as approved by the Ziauddin University Academic Council.

- The Foundation courses are mandatory for all students.
- Depending upon the results of the entrance test, the students will need to study up to two non-credit courses in years 1 and 2 to improve their English language skills. It will be mandatory for students to pass these courses.



### BS-ENGLISH (LITERATURE) 48 COURSES - 142 CREDIT HOURS

SEMESTER 1				17
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
01	ISLAMIC STUDIES / MORAL ETHICS	ZUGE001 / ZUGE002	GE (ISLAMIC STUDIES)	2
02	FUNCTIONAL ENGLISH	ZUGE004	GE (FUNCTIONAL ENGLISH)	3
03	ICT IN DIGITAL LITERACY	ZUGE006	GE (ICT)	3
04	GENDER IN EVERYDAY LIFE	EGED111	GE (SOCIAL SCIENCES)	3
05	INTRODUCTION TO LITERATURE I	EMLT111	MAJOR	3
06	INTRODUCTION TO LINGUISTICS	EMLN111	MAJOR	3
SEMESTER 2				17
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
07	PAKISTAN STUDIES	ZUGE003	GE (IDEOLOGY PAKISTAN)	2
08	ACADEMIC READING & WRITING	ZUGE005	GE (EXPOSITORY WRITING)	3
09	WORLD HISTORY	EGED121	GE (ARTS & HUMANITIES)	3
10	ENVIRONMENTAL STUDIES	EGED122	GE (NATURAL SCIENCE)	3
11	INTRODUCTION TO LITERATURE II	EMLT121	MAJOR	3
12	LEARNING AND THE LEARNER	EMLN121	MAJOR	3
SEMESTER 3				18
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
13	QUANTITATIVE REASONING I	EGED231	GE (QUANTITATIVE REASONING)	3
14	LANGUAGE, CULTURE AND SOCIETY	EITD231	INTERDISCIPLINARY / ALLIED	3
15	INTRODUCTION TO DEVELOPMENT & SOCIAL CHANGE	EITD232	INTERDISCIPLINARY / ALLIED	3
16	HISTORY OF ENGLISH LITERATURE I	EMLT231	MAJOR	3
17	CONTENT DEVELOPMENT	EMLN231	MAJOR	3
18	PHONETICS & PHONOLOGY	EMLN232	MAJOR	3
SEMESTER 4				15
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
19	QUANTITATIVE REASONING II	EGED241	GE (QUANTITATIVE REASONING)	3
20	CONCEPTS AND CONTEMPORARY DEBATES IN HUMANITIES AND SOCIAL SCIENCES	EITD241	INTERDISCIPLINARY / ALLIED	3
21	INTRODUCTION TO PSYCHOLOGY	EITD242	INTERDISCIPLINARY / ALLIED	3
22	HISTORY OF ENGLISH LITERATURE II	EMLT241	MAJOR	3
23	Pakistani English	EMLN241	MAJOR	3

SUMMER				3
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
24	INTERNSHIP (Community Engagement)	EGED242	GE (CIVICS)	3
SEMESTER 5				18
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
25	ENTREPRENEURSHIP	EGED351	GE (ENTREPRENEURSHIP)	3
26	WORLD LITERATURE IN TRANSLATION	EMLT351	MAJOR	3
27	POETRY I	EMLT352	MAJOR	3
28	FICTION I	EMLT353	MAJOR	3
29	17TH AND 18TH CENTURY PROSE	EMLT354	MAJOR	3
30	16TH-20TH CENTURY DRAMA	EMLT355	MAJOR	3
SEMESTER 6				18
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
31	POETRY II	EMLT361	MAJOR	3
32	CRITICAL APPROACHES TO LITERATURE	EMLT362	MAJOR	3
33	DYSTOPIAN LITERATURE	EMLT363	MAJOR	3
34	FICTION II	EMLT364	MAJOR	3
35	LITERARY MOVEMENTS	EMLT365	MAJOR	3
36	PAKISTANI ANGLOPHONE LITERATURE	EMLT366	MAJOR	3
SUMMER				3
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
37	INTERNSHIP	EFEX361	FIELD EXPERIENCE	3

SEMESTER 7				18
Nº	COURSE	CODE	CURRENT FALL	CHRS
38	LITERARY THEORY AND CRITICISM I	EMLT471	MAJOR	3
39	INTRODUCTION TO 19TH AND 20TH CENTURY POETRY	EMLT472	MAJOR	3
40	19TH CENTURY AMERICAN LITERATURE	EMLT473	MAJOR	3
41	RESEARCH METHODOLOGY FOR LITERATURE	EMLT474	MAJOR	3
42	SHAKESPEARE THE PLAY'S THE THING	EMLT475	MAJOR	3
43	LITERATURE AND SOCIETY	EMLT476	MAJOR	3
SEMESTER 8				15
Nº	COURSE	CODE	CURRENT FALL	CHRS
44	LITERARY THEORY AND CRITICISM II	EMLT481	MAJOR	3
45	20TH CENTURY AMERICAN LITERATURE	EMLT482	MAJOR	3
46	POSTCOLONIAL LITERARY STUDIES	EMLT483	MAJOR	3
47	FEMINIST LITERATURE	EMLT484	MAJOR	3
48	DISSERTATION	ECLT485	CAPSTONE PROJECT	3





## BS SOCIAL CHANGE AND DEVELOPMENT

### VISION

To nurture an inter-disciplinary and comprehensive understanding of the complex problems of development and social change.

### MISSION

BS Social Change & Development cultivates problem and evidence-based learning approach which directs students to practically engage with the issues within our society. This programme invites students to become agents of social change and in turn strengthen their community and society by resolving global/local issues.

### PROGRAMME OVERVIEW

The 4 year BS Social Change & Development (SCD) programme provides students with a wide range of career prospects both locally and internationally that contribute to social change at varied levels. The SCD programme intends to nurture an interdisciplinary and comprehensive understanding of the complex problems of development and social change. The SCD programme equips its students with a thorough theoretical understanding together with hands-on and practical training. The 4-year BS Social Change & Development programme integrates social sciences disciplines such as anthropology; economics; political science and sociology along with contemporary thematic studies such as Gender and development; community engagement for sustainability and change; and conflict and alternative dispute resolution. The ZU Social Change & Development programme represents an innovative and a dynamic approach

to some of the problems faced by our society at local levels including rural and urban settings within cities and provinces at national levels and also at regional and international levels.

### CAREER OPPORTUNITIES

- Civil Services
- SME – associates
- CSR associates at banks/ Multinational firms
- Legal team associates
- Citizen journalism
- Content developers/Documentary Developers
- Social Media Influencers
- Education and Development sector
- Researchers at NGOS & INGOS
- Monitoring & Evaluation
- Teaching and lectureship
- Mediation counselor
- Social entrepreneurs

### COURSE REQUIREMENTS AND STRUCTURE

The HEC approved curriculum will be used for the BS Social Change and Development programme with relevant changes and additional General and Elective Courses as approved by the Ziauddin University Academic Council.

#### Please note:

The Foundation courses are mandatory for all students.

Depending upon the results of the entrance test, the students will need to study up to two non-credit courses in years 1 and 2 to improve their English language skills. It will be mandatory for students to pass these courses.

### Study Scheme of BS Social Change & Development

**BS-SOCIAL CHANGE AND DEVELOPMENT**     **46 COURSES - 136 CREDIT HOURS**  
**FALL 2024 CLLC DEGREES**

SEMESTER 1				17
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
01	ISLAMIC STUDIES / MORAL ETHICS	ZUGE001 ZUGE002	GE (ISLAMIC STUDIES)	2
02	FUNCTIONAL ENGLISH	ZUGE004	GE (FUNCTIONAL ENGLISH)	3
03	ICT IN DIGITAL LITERACY	ZUGE006	GE (ICT)	3
04	LITERATURE AND SOCIETY	SCGE111	GE (ARTS & HUMANITIES)	3
05	PERSPECTIVES ON IDENTITY IN THE CONTEMPORARY WORLD	SCMJ111	MAJOR	3
06	INTRODUCTION TO SOCIOLOGY	SCMJ112	MAJOR	3
SEMESTER 2				17
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
07	PAKISTAN STUDIES	ZUGE121	GE (IDEOLOGY PAKISTAN)	2
08	EXPOSITORY WRITING	ZUGE122	GE (EXPOSITORY WRITING)	3
09	INTRODUCTION TO SOCIAL PSYCHOLOGY	SCGE121	GE (SOCIAL SCIENCES)	3
10	QUANTITATIVE REASONING I	SCGE122	GE (QUANTITATIVE REASONING)	3
11	INDIVIDUAL WELLBEING AND DEVELOPMENT	SCMJ121	MAJOR	3
12	GENDER AND SOCIAL CHANGE	SCMJ122	MAJOR	3
SEMESTER 3				18
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
13	QUANTITATIVE REASONING II	SCGE231	GE (QUANTITATIVE REASONING)	3
14	ENVIRONMENTAL STUDIES	SCGE232	GE (NATURAL SCIENCE)	3
15	CONTENT DEVELOPMENT	SCMJ231	MAJOR	3
16	DEVELOPMENT OF SOCIOLOGICAL THOUGHT	SCMJ232	MAJOR	3
17	INTRODUCTION TO SOCIAL CHANGE & DEVELOPMENT	SCMJ233	MAJOR	3
18	SOCIAL ANTHROPOLOGY: CULTURAL REPRESENTATIONS, BELIEFS AND PRACTICES	SCMJ234	MAJOR	3

SEMESTER 4				15
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
19	CLASSICAL SOCIOLOGICAL THEORY	SCMJ241	MAJOR	3
20	SOCIAL PHILOSOPHY & CRITICAL THINKING	SCMJ242	MAJOR	3
21	POPULATION STUDIES	SCMJ243	MAJOR	3
22	ECONOMICS AND DEVELOPMENT	SCMJ244	MAJOR	3
23	SUSTAINABLE DEVELOPMENT- FROM MDGS TO SDGS: MAJOR LEARNING AND IMPLICATIONS	SCMJ245	MAJOR	3
SUMMER				3
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
24	INTERNSHIP (PROJECT BASED LEARNING ON POVERTY ISSUES)	SCGE241	GE (CIVICS)	3
SEMESTER 5				18
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
25	ENTREPRENEURSHIP	SCGE351	GE (ENTREPRENEURSHIP)	3
26	NGO MANAGEMENT	SCID351	INTERDISCIPLINARY / ALLIED	3
27	VISUAL STORYTELLING	SCID352	INTERDISCIPLINARY / ALLIED	3
28	METHODS OF SOCIAL SCIENCES RESEARCH	SCMJ351	MAJOR	3
29	SOCIAL CHANGE AND DEVELOPMENT IN PAKISTAN	SCMJ352	MAJOR	3
30	SOCIOLOGY OF HUMAN RIGHTS	SCMJ353	MAJOR	3
SEMESTER 6				15
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
31	INTRODUCTION TO PEACE & CONFLICT STUDIES	SCID361	INTERDISCIPLINARY / ALLIED	3
32	RESULTS BASED PROJECT MANAGEMENT	SCID362	INTERDISCIPLINARY / ALLIED	3
33	DIVERSITY, SOCIAL JUSTICE, EQUITY AND DEVELOPMENT	SCMJ361	MAJOR	3
34	RURAL & URBAN DEVELOPMENT: ISSUES AND PERSPECTIVES	SCMJ362	MAJOR	3
35	RESEARCH THESIS AND REPORT	SCMJ363	MAJOR	3

SEMESTER 7				12
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
37	PHILOSOPHY OF DEVELOPMENT & PSYCHOLOGY OF POVERTY	SCMJ471	MAJOR	3
38	POVERTY / DEVELOPMENT ADVOCACY THROUGH PERFORMING ARTS	SCMJ472	MAJOR	3
39	POVERTY & WOMEN EMPOWERMENT	SCMJ473	MAJOR	3
40	SOCIAL ENTERPRISE INCUBATION (1)	SCCP474	CAPSTONE PROJECT	3
SEMESTER 8				18
N <sub>e</sub>	COURSE	CODE	CURRENT FALL	CHRS
41	(PROJECT BASED LEARNING ON HEALTH / EDUCATION ISSUES)	SCMJ481	MAJOR	3
42	PHILOSOPHY & PSYCHOLOGY OF HUMAN NATURE AND WELL BEING	SCMJ482	MAJOR	3
43	HEALTH/EDUCATION ISSUES ACROSS CULTURES AND IDEOLOGIES	SCMJ483	MAJOR	3
44	STUDY OF SOCIAL ENTERPRISES IN HEALTH CARE / EDUCATION	SCMJ484	MAJOR	3
45	OPERATIONS AND PROCESSES	SCMJ485	MAJOR	3
46	SOCIAL ENTERPRISE INCUBATION (2)	SCCP486	CAPSTONE PROJECT	3

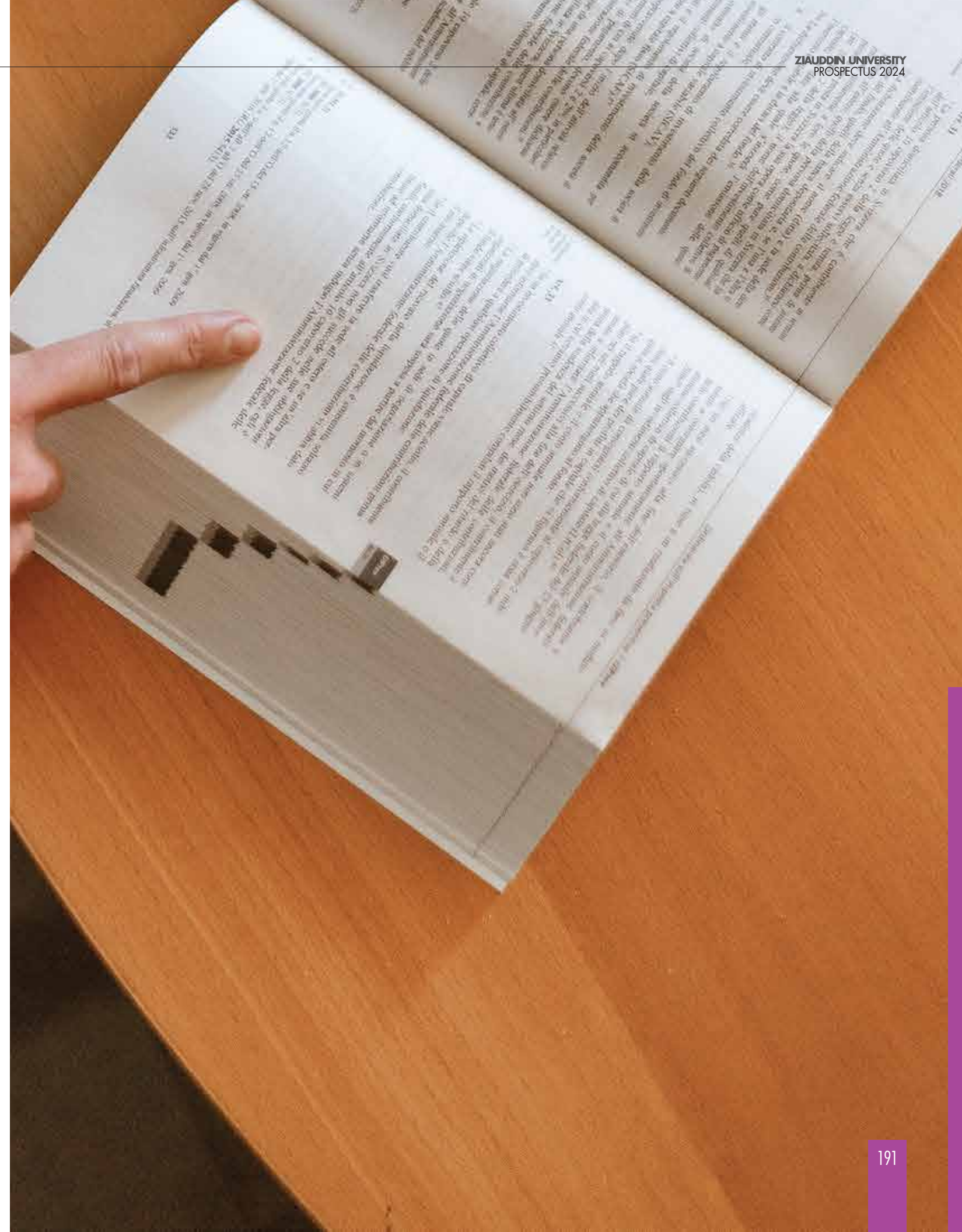


**BS-ENGLISH (LINGUISTICS)**      **48 COURSES - 142 CREDIT HOURS**  
**FALL 2024 CLLC DEGREES**

SEMESTER 1				17
N <sub>o</sub>	COURSE	CODE	CURRENT FALL	CHRS
01	ISLAMIC STUDIES / MORAL ETHICS	ZUGE001 / ZUGE002	GE (ISLAMIC STUDIES)	2
02	FUNCTIONAL ENGLISH	ZUGE004	GE (FUNCTIONAL ENGLISH)	3
03	ICT IN DIGITAL LITERACY	ZUGE006	GE (ICT)	3
04	GENDER IN EVERYDAY LIFE	EGED111	GE (SOCIAL SCIENCES)	3
05	INTRODUCTION TO LITERATURE I	EMLT111	MAJOR	3
06	INTRODUCTION TO LINGUISTICS	EMLN111	MAJOR	3
SEMESTER 2				17
N <sub>o</sub>	COURSE	CODE	CURRENT FALL	CHRS
07	PAKISTAN STUDIES	ZUGE003	GE (IDEOLOGY PAKISTAN)	3
08	EXPOSITORY WRITING	ZUGE005	GE (EXPOSITORY WRITING)	2
09	WORLD HISTORY	EGED121	GE (ARTS & HUMANITIES)	3
10	ENVIRONMENTAL STUDIES	EGED122	GE (NATURAL SCIENCE)	3
11	INTRODUCTION TO LITERATURE II	EMLT121	MAJOR	3
12	LEARNING AND THE LEARNER	EMLN121	MAJOR	3
SEMESTER 3				18
N <sub>o</sub>	COURSE	CODE	CURRENT FALL	CHRS
13	QUANTITATIVE REASONING I	EGED232	GE (QUANTITATIVE REASONING)	3
14	LANGUAGE, CULTURE AND SOCIETY	EITD231	INTERDISCIPLINARY / ALLIED	3
15	INTRODUCTION TO DEVELOPMENT & SOCIAL CHANGE	EITD232	INTERDISCIPLINARY / ALLIED	3
16	HISTORY OF ENGLISH LITERATURE I	EMLT231	MAJOR	3
17	CONTENT DEVELOPMENT	EMLN231	MAJOR	3
18	PHONETICS & PHONOLOGY	EMLN232	MAJOR	3
SEMESTER 4				15
N <sub>o</sub>	COURSE	CODE	CURRENT FALL	CHRS
19	QUANTITATIVE REASONING II	EGED241	GE (QUANTITATIVE REASONING)	3
20	CONCEPTS AND CONTEMPORARY DEBATES IN HUMANITIES AND SOCIAL SCIENCES	EITD241	INTERDISCIPLINARY / ALLIED	3

SUMMER				3
N <sub>o</sub>	COURSE	CODE	CURRENT FALL	CHRS
24	INTERNSHIP (Community Engagement)	EGED242	GE (CIVICS)	3
SEMESTER 5				18
N <sub>o</sub>	COURSE	CODE	CURRENT FALL	CHRS
25	ENTREPRENEURSHIP	EGED351	GE (ENTREPRENEURSHIP)	3
26	LANGUAGE IN EDUCATION	EMLN351	MAJOR	3
27	MORPHOLOGY	EMLN352	MAJOR	3
28	LANGUAGE AND POWER	EMLN353	MAJOR	3
29	DISCOURSE ANALYSIS & STYLISTICS	EMLN354	MAJOR	3
30	SEMANTICS AND PRAGMATICS	EMLN355	MAJOR	3
SEMESTER 6				18
N <sub>o</sub>	COURSE	CODE	CURRENT FALL	CHRS
31	MEDIA DISCOURSE ANALYSIS	EMLN361	MAJOR	3
32	TRANSLATION STUDIES	EMLN362	MAJOR	3
33	COGNITION, METACOGNITION AND READING	EMLN363	MAJOR	3
34	MULTILINGUALISM AND TRANSLANGUAGING	EMLN364	MAJOR	3
35	LANGUAGE AND GENDER	EMLN365	MAJOR	3
36	TESOL	EMLN366	MAJOR	3
SUMMER				3
N <sub>o</sub>	COURSE	CODE	CURRENT FALL	CHRS
37	INTERNSHIP	EFEX361	FIELD EXPERIENCE	3

SEMESTER 7				18
No	COURSE	CODE	CURRENT FALL	CHRS
38	WORLD ENGLISHES	EMLN471	MAJOR	3
39	SYNTAX	EMLN472	MAJOR	3
40	SECOND LANGUAGE ACQUISITION	EMLN473	MAJOR	3
41	RESEARCH METHODS IN APPLIED LINGUISTICS	EMLN474	MAJOR	3
42	CONTEMPORARY ISSUES AND RESEARCH IN ELT	EMLN475	MAJOR	3
43	GENRE ANALYSIS	EMLN476	MAJOR	3
SEMESTER 8				15
No	COURSE	CODE	CURRENT FALL	CHRS
44	LANGUAGE TESTING AND ASSESSMENT	EMLN481	MAJOR	3
45	PSYCHOLINGUISTICS	EMLN482	MAJOR	3
46	SOCIOLINGUISTICS	EMLN483	MAJOR	3
47	COMPUTATIONAL LINGUISTICS AND CORPUS LINGUISTICS	EMLN484	MAJOR	3
48	DISSERTATION	ECLN485	CAPSTONE PROJECT	3





## ELIGIBILITY CRITERIA

### BS English:

Intermediate/A Levels (or equivalent) with a minimum of 45% (or equivalent) marks in the last exam.

### BS in Social Change & Development:

Minimum A-Levels 3 passes/ 45% marks in Intermediate or equivalent from a recognized institution.

### Nature / Duration

• BS Programmes are 4-year undergraduate programmes.

## ACADEMIC CALENDAR FLAHS

### Summer 2024

Commencement of Regular Classes  
Classes End  
Final Exams Begin  
Final Exams End  
Announcement of Results

Mon, Jul 01, 2024  
Sat, Aug 24, 2024  
Mon, Aug 26, 2024  
Wed, Aug 28, 2024  
Tue, Aug 31, 2024

### Fall 2024

Orientation Fall 2024  
Commencement of Regular Classes  
Mid-term Exam Begins  
Mid-term Exam End  
Classes End  
Final Exams Begin  
Final Exams End  
Announcement of Results

Mon, Sep 02, 2024  
Mon, Sep 02, 2024  
Mon, Oct 21, 2024  
Sat, Oct 26, 2024  
Sat, Dec 14, 2024  
Mon, Dec 16, 2024  
Sat, Dec 21, 2024  
Fri, Jan 03, 2024

## CONTACT INFORMATION

Address  
Ground Floor, BC-05, H.A Arcade, Block-1, Clifton, Karachi.

Phone  
021-35305790

Email  
zeeshan.baig@zu.edu.pk

## FACULTY MEMBERS

### HINA KHAN

ACADEMIC COORDINATOR/ SENIOR LECTURER  
M.S IN LINGUISTICS (IN PROGRESS)  
M.A ELT MBA HR & FINANCE

### MUHAMMAD YASEEN

LECTURER  
MA ENGLISH LITERATURE  
M.PHIL ENGLISH LITERATURE AND LINGUISTICS (IN PROGRESS)  
120 HRS TEFL

### SYED SAJID NAQVI

LECTURER  
MA ENGLISH LANGUAGE TEACHING  
120 HRS TEFL  
IDP IELTS WRITING ASSESSMENT CERTIFIED  
IDP IELTS SPEAKING ASSESSMENT CERTIFIED

### MR. ZAHID YASEEN

LECTURER  
MA ENGLISH LITERATURE

### MS. FASIHA IRFAN

LECTURER  
MA ENGLISH LITERATURE  
M.PHIL ENGLISH LITERATURE (IN PROGRESS)

### SYED KASHIF RAZA

LECTURER  
M.SC. PAK STUDIES, MA URDU, MA SOCIOLOGY, B.ED.

### BAKHTAWER DAUDPOTA

LECTURER  
MS ENGLISH LINGUISTICS

### MAHNOOR TUFAIL

LECTURER  
M.PHIL ENGLISH LINGUISTICS  
CELTA CERTIFIED- UNIVERSITY OF CAMBRIDGE , U.K

### MOOMAL CHANDIO

LECTURER  
MS APPLIED LINGUISTICS  
MA ENGLISH LITERATURE

### DR. SYED MUZAFFAR HUSSAIN

ASSISTANT PROFESSOR  
M.ED  
PH.D. ISLAMIC STUDIES  
PUBLICATIONS : 3 BOOKS

### WAJID ALI WAJIDI

ASSISTANT PROFESSOR  
M.PHIL ISLAMIC STUDIES  
P.HD. ISLAMIC STUDIES (IN PROGRESS)

### SAIMA YOUSUF

LECTURER  
MA INTERNATIONAL RELATIONS  
M.PHIL. EUROPEAN STUDIES (IN PROGRESS)

### SABA TANVEER

LECTURER  
MS LINGUISTICS (IN PROCESS), MA ENGLISH LITERATURE AND LINGUISTICS, MA ENGLISH LANGUAGE TEACHING, B.ED. EDUCATIONAL PSYCHOLOGY



# COLLEGE OF EDUCATION

## KEY INFORMATION

### PRINCIPAL

Ms. Rana Hussain

### CONTACT INFORMATION

Website:

<https://coe.zu.edu.pk>

Telephone:

(9221)36830303

Email:

[info@zu.edu.pk](mailto:info@zu.edu.pk)

Locate Us:

D-65, Block-H, North Nazimabad,  
Karachi

Every successful person has people standing by them who never waver in their support. These people can take the form of parents, teachers, acquaintances, or even friends. They emerge to encourage and assist those who are destined for achievement. In my case, these supporting figures are found within the institutions I have been affiliated with. Ziauddin College of Education has granted me numerous opportunities to acquire theoretical knowledge and practical experience in the field of education. Reflecting on my decision to enrol at Ziauddin University for teacher education, I can now see that it was a wise choice. This college has completely changed my life, equipping me not only with subject-related knowledge but also with essential life skills such as leadership. The inspiration and motivation instilled in me by my teachers will remain with me forever. It is my aspiration to pass on this inspiration to the global community.

Alina Lakhani  
B.ED. (HONS) - 4 YEARS



The College of Education is part of the Faculty of Liberal Arts and Human Sciences (FLAHS). The Principal in consultation with the Dean (FLAHS) makes all independent decisions pertaining to the academics, budget, staffing, and other administrative matters. The College of Education has a Board of Studies, chaired by the Principal and comprising both internal and external members. All COE programmes, after approval by the Board of Studies, are presented to the Academic Council of Ziauddin University for endorsement.

### VISION

To harness and maximize human potential and capabilities in the field of education that can contribute to the development and betterment of society and the nation as a whole.

### MISSION

The mission of the Ziauddin College of Education is two-fold:

- a) To excel in enhancing the scholarship of teaching and learning, thereby setting a national standard of academic excellence in education.
- b) To provide leadership in service and outreach initiatives by actively engaging schools to foster communities of practice for teachers and bolster school development programmes.

### PROGRAMMES/COURSES

College of Education offers the following two 4-year undergraduate programmes:

- Bachelor in (Education) Degree Programme
- Associate Degree in Education.
- BS Education and Psychology Programme 4 Year

## BACHELOR IN EDUCATION DEGREE PROGRAMME

### VISION

To harness and maximize the human potential and capabilities by achieving recognition for the outstanding academic performance in teacher education, educational research, and professional and educational development services.

### MISSION

The Ziauddin College of Education is committed to providing educational solutions for academic challenges by improving teaching and learning and providing leadership in service and outreach, through engaging schools to organize communities of practice for teachers and strengthen school development programmes.

### PROGRAMME OVERVIEW

The programme will prepare you to be a scholar or college lecturer post-MS. Education. Whereas B.Ed. (Hons) will prepare you for taking action and education as a catalyst for change. B.Ed. is practical learning that prepares graduates as practitioners in different walks of education teaching leading designing curriculum writing textbooks and building capacities of children as well as adults.

### FUNCTIONAL ENGLISH - I

After completing this course, Student Teachers will:

- have improved their listening and reading skills in English
- be able to communicate in written and oral English with peers and teachers
- rely less on their first languages and increase their use of English in formal and informal situations
- have a deeper understanding of correct English structures in descriptive, narrative, and instructional texts.

### METHODS OF TEACHING

This course is an introduction to teaching methods used in primary schools. Because you have been a primary school student, you will recognize some of these methods. However, you know them from a student's perspective rather than from a teacher's perspective. Teaching methods are often divided into two broad

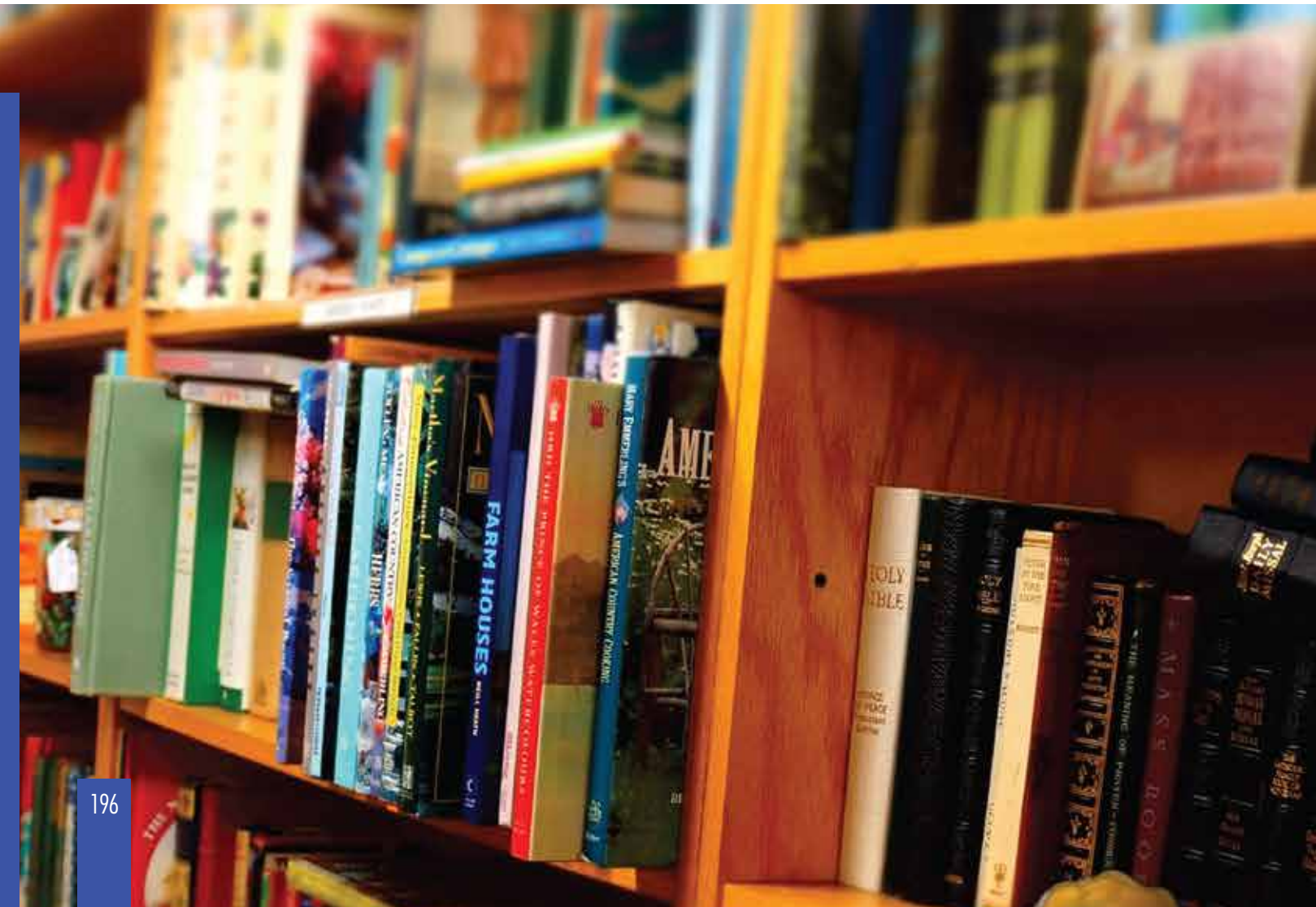
categories: teacher-centered methods (also called direct instruction) and learner-centered methods (also called indirect instruction or inquiry-based learning). An effective teacher knows several methods, some teacher-directed and others learner-directed. From among these methods, a teacher selects the one method or combination of methods most likely to achieve a particular lesson's objectives with a particular group of students.

### SCIENCE - I

This course will refresh and strengthen Student Teachers' subject-matter knowledge. It lays a foundation for the pedagogical content knowledge also required to effectively teach general science in primary school. The course covers core concepts in physical science, life science, and earth science. Also covered are the teaching strategies and instructional approaches that best support the development of conceptual understanding of science.

### CHILD DEVELOPMENT

The primary focus of this course is learning about children in order to become an effective teacher. It provides Student Teachers with an overview of child development and growth as a holistic process. The latest research and thinking about the conditions that affect children's learning and development will be addressed across developmental domains and stages of development. Development of language and cognition as well as the emotional, social, and physical characteristics of children will be explored. Student Teachers will form their own child development theories. Implications of child development theory for schools, teachers, and society will be considered. Student Teachers will be provided with real experiences to study and observe children at different levels of development. They will have an opportunity to enhance their understanding of how people learn, individual differences and learning styles, and how theories of learning and development relate to classroom learning and teaching. The course will enable Student Teachers to create learning environments that suit the needs of an individual child as well as children in general.





## CLASSROOM MANAGEMENT

One of the foremost reasons cited for teacher burnout is the challenge of classroom management. This comes as little surprise as classrooms are crowded, busy places in which students of diverse backgrounds and learning styles must be organized, directed, and actively involved in learning. Many events need to occur simultaneously, and the course of these events is often unpredictable. Teachers must react often and immediately to evolving problems and needs. Teaching in such settings requires a highly developed ability to manage people, space, time, and activity. In this course, prospective teachers will be encouraged to explore their own beliefs about teaching and learning to arrive at a philosophy of classroom management that places learning as an ultimate goal. Prospective teachers will be given the chance to explore curricular concerns of what to teach and how to teach it and to view lesson planning as the consequence of these decisions. They will also study research and best practices on differentiation of instruction, classroom structures, routines, procedures, and community building.

## COMPUTER LITERACY

This course will prepare teachers to understand, use, and apply technologies (computers, digital cameras, mobile phones) in effective, efficient, and ethical ways. Advanced technologies are more pervasive today than they have ever been, and their uses are expanding continually. Information and Communications Technology (ICT) is significantly enhancing and altering human activity and enabling us to live, work, and think in ways that most of us never thought possible. Prospective teachers will actively explore the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. They will also learn to develop skills like collaboration, higher-order thinking, problem-solving, and self-direction through the effective use of technology tools and resources, thus enabling them to be lifelong learners in the twenty-first century.

## ENGLISH - II

This is the second English course for Student Teachers in ADE/B.Ed. (Hons) programmes. It aims to develop skills for effective communica-

tion and presentation using clear and appropriate English. The course comprises five units that focus on developing effective communication strategies, making oral presentations, understanding intonation patterns and their role in determining the meaning of a message or text, and how to present information in speech and writing. The first five weeks are devoted to developing the Student Teachers' language confidence and interpersonal skills. This is followed by task-based projects that incorporate all four language skills in order to develop the Student Teachers' proficiency in the English language.

## MATHEMATICS I: GENERAL MATHEMATICS

This course is designed to prepare Student Teachers for teaching mathematics in elementary grades. It provides opportunities for Student Teachers to strengthen their mathematical knowledge and skills and to gain confidence in their understanding of mathematics. An important outcome of this course is for Student Teachers to be able to teach mathematics successfully in the primary, elementary, and middle grades. Research-based knowledge about good maths instruction provides a solid base of information for educators to use as they identify mathematics skills that Student Teachers need to develop, as well as teaching strategies and instructional approaches that best support the development of these skills. The course design is based on what research tells us about good maths instruction.

## MATHEMATICS II: GENERAL MATHEMATICS

This course will equip Student Teachers with the knowledge and skills to teach maths in elementary grades. They will become familiar with the mathematics content in Pakistan's National Curriculum and expected student learning outcomes. Student Teachers will learn to use a variety of instructional methods that promote active learning of maths, including making and using teaching and learning materials. They will plan mathematics lessons and activities, and engage in practice teaching of maths.

## PAKISTAN STUDIES

By the end of this course, Student Teachers will be able to:

- create awareness among children about Pakistan as an enlightened nation by comparing it with the rationale and endeavors for Pakistan's creation
- educate children about the key concepts in disciplines comprising Pakistan Studies, including history, geography, economics, and political science
- assist children in identifying various perspectives on current, persistent, and controversial issues in Pakistan; identify their own position on these issues, and be able to support them
- instill in Student Teachers a sense of patriotism, tolerance, active citizenship, and respect for cultural diversity and religious harmony
- design and implement a project to promote active and responsible citizenship and help children and young people do the same.

## ART, CRAFTS, AND CALLIGRAPHY

The Art, Crafts, and Calligraphy course will help prepare Student Teachers to teach these subjects in the elementary grades. It provides Student Teachers with an opportunity to develop their knowledge and understanding of art, crafts, and calligraphy (with a focus on Pakistani artists, calligraphers, and craftsmen and women) and to practice making their own works using a variety of techniques. Given that this is a teacher education course, Student Teachers also examine the role of art in child development; the importance of art, craft, and calligraphy in the curriculum; and the links between art, crafts, and calligraphy and other subjects such as science, math, and social studies. Student Teachers will have learned about lesson planning, classroom assessment, and classroom management in other courses; in this course, they will focus on these three skills as they apply to teaching and learning art, crafts, and calligraphy in the elementary grades.

## INFORMATION AND COMMUNICATION TECHNOLOGIES IN EDUCATION

The focus of this course is to provide you with the knowledge and skills regarding how ICTs can be used to engage students in the learning process, improve understanding of content as well as instructional and assessment practices, and enhance communication and collaboration in the classroom. By 'student', we mean here children in primary or lower secondary grades. To attain this end, Student Teachers will design and create instructional units in

which technology plays a central role and implement these units with students. The course also examines other non-computer technologies and looks at current technology trends.

## SCIENCE - II

This course will strengthen prospective Student Teachers' subject-matter knowledge. It provides further opportunities to deepen the pedagogical science content knowledge required to effectively teach general science in elementary school. The course covers core concepts in physical science, life science, and earth science. It also covers teaching strategies and instructional approaches that best support the development of a conceptual understanding of science. In contrast to Science I, which dealt with simpler concepts, Science II establishes connections between core concepts, such as matter and energy, and entire systems, such as Earth's systems or systems within the human body.

## TEACHING LITERACY

The purpose of this course is to help Student Teachers understand the theory and practice of teaching early reading and writing. Reading and writing are seen as related, integrated meaning-making processes that are reciprocal with the oral language processes of listening and speaking. Like oral language, reading and writing develop over time through a child's active interaction with print and the environment and with support and facilitation by the teacher. Adopting effective strategies that foster success and a love of reading is key to supporting all children as they become readers and writers.

## CLASSROOM ASSESSMENT

Classroom assessment, a set of educational practices taught in this course, enables a teacher to make instructional decisions with and for students based on information obtained from frequent evaluations of learning. There are many definitions of classroom assessment. Here is one: Tests have a role in the evaluation of learning in school. However, there are notable differences between a test and an assessment. Any given test is a one-time event. Classroom assessment is a continuous process. Some tests, called external tests, are created by people who do not know the students who will take the test. In contrast,



assessments are planned and conducted by teachers with their own students. Tests are part of the assessment process, but they are only one of many assessment tools. Assessment is a broad concept. A teacher conducting an assessment collects information about learning from several perspectives and uses more than one assessment tool.

### SCHOOL, COMMUNITY, AND TEACHER

The purpose of this course is to provide Student Teachers with a strong foundation for understanding the relationship between and among teachers, the school, and the families and community that support the school. Basic conceptualizations of educational institutions and the role of the teacher in relating to these institutions will be considered. Student Teachers will also explore how cultural, social, and historical forces have shaped their understanding of the relationship teachers have with schools, communities, and families in Pakistan. The course will explore the social context of schooling and examine how the work of teachers is nested within schools and communities. It will provide orientation to the process of socialization in schools and how social factors affect education.

### TEACHING ENGLISH

This three-credit course has been designed to enable Student Teachers to teach English using an interactive, communicative approach to children aged 6 to 13. It will be taught over 16 weeks with three face-to-face sessions per week, making a total of 48 sessions. The course aims to be comprehensive in its coverage and depth so that, upon its completion, Student Teachers will have gained both a theoretical understanding of the basic principles of second-language acquisition and the practical knowledge of how to apply these principles effectively in the language classroom. The course focuses on ways to teach young learners the four language skills—listening, reading, speaking, and writing—to enable them to reach a basic level of communicative competence in both spoken and written English. In addition to learning how to teach and integrate the four skills in an interactive, learner-centered manner, Student Teachers will gain an understanding of how grammar lessons and vocabulary acquisition can be incorporated

into a communicative teaching approach.

### TEACHING SOCIAL STUDIES

This course will help you, as a Student Teacher, to reflect on the purpose of teaching social studies and to shape your approach to teaching the subject. It will prepare you to teach the knowledge, skills, values, and attitudes essential for democratic citizenship. As a social studies teacher, you will have the opportunity to encourage informed and responsible civic action. Social studies teachers have an added responsibility to help children understand their world. Moreover, your task becomes more challenging given the dynamic nature of society and the subject matter, the nature and needs of learners, and the wide variety of learning contexts in Pakistan.

### CURRICULUM DEVELOPMENT

Curriculum development is intended to orient Student Teachers to the principles, processes, and procedures of curriculum design and development. Student Teachers will be informed about the objectives, selection of content, its scope and outcomes, teaching strategies, and design of instructional materials. This course will also include various factors that affect the process of curriculum development and implementation. Student Teachers will learn about traditional and progressive notions of curriculum monitoring, assessment, and evaluation as well as how these notions influence curriculum improvement efforts. This course gives Student Teachers the opportunity to develop an in-depth understanding of the central idea of the curriculum. Furthermore, it will enable Student Teachers to plan and develop curricula to meet the needs of their students.

### EDUCATIONAL PSYCHOLOGY

This course is an introduction to educational psychology that covers the basic concepts, theories, and principles of human development, learning, motivation, individual differences, intelligence, and assessment. Additionally, it relates how these concepts are applied to classroom teaching. In an educational setting, it is essential for teachers to know about human development and how students learn. Students learn according to their own pace and ability, so concepts about individual differences and different types of learners are also covered.

### FOUNDATIONS OF EDUCATION

The purpose of this course is to help Student Teachers recognize the worth of the foundations of education, and examine their role and significance in the whole process of education in Pakistan. Student Teachers will develop a comprehensive understanding of the terms foundations and education in light of the various ideological, philosophical, psychological, sociological, and historical perspectives that have influenced education. Foundations are essentially basic ways of thinking about schooling and the formal processes of education. The course will inform them about the influence of social forces, such as politics, social structure, culture, history, and economics, on the selection of content, the methods of teaching, and the aims of education. Student Teachers will examine the classical and contemporary philosophical perspectives on education, the significance of societal culture and its social structure in education, and how education in return strengthens both, as well as the significance of psychology in the teaching-learning process.

### COMPARATIVE EDUCATION

The Comparative Education course is divided into five units. The course provides an overview of methods, major concepts, and current trends in the field. Notions of comparative education will be introduced in Unit 1, focusing on purposes, methods, and approaches. Further, the scope of comparative education will be discussed, together with the determinants of a national education system, in Unit 2. The remaining units cover topics such as a comparative view of education in Pakistan and comparative education in selected developing as well as developed countries. The course will enable Student Teachers to identify the strengths and limitations of various education systems through international comparative research.

### CONTEMPORARY ISSUES AND TRENDS IN EDUCATION

The Contemporary Issues and Trends in Education course will assist Student Teachers in appreciating the strengths, challenges, innovations, and reforms in education at both national and international levels. They will be empowered not only to adopt viable strate-

gies and approaches in their professional practice but also to implement prescribed educational policies and programmes. There are many issues in education; some are general and are found across the globe, while others are specific to Pakistan. Contemporary issues such as health, housing, gender disparity, poverty, pressure groups, family, and community values affect education at local, national, and international levels. Education also plays a role in addressing these issues. This course focuses on the following issues and trends: globalization; the Millennium Development Goals (MDGs), Education for All (EFA), and national goals; diversity; the role of peace education at the micro- and macrolevels; the role of schools in today's society; and the changing roles of teachers.

### INTRODUCTION TO GUIDANCE AND COUNSELLING

This course has been designed to introduce the concept, scope, and theories that govern the process of guidance and counseling in education. It will enable Student Teachers to identify areas of guidance and counseling at the elementary level. Through the knowledge and skills acquired from this course, they will be well-equipped to explore the talents and potential of their students, while preparing them for life in the 21st century. The course will include both theoretical knowledges of guidance and counseling and the development of Student Teachers' counseling skills. It will strengthen their ability to exercise active listening skills, reflect on students' problems, and help them choose potential solutions to their problems. The course will also enable Student Teachers to design school-wide guidance and counseling programmes.

### MATHEMATICS - III (TEACHING MATHEMATICS PEDAGOGY OPTION)

Mathematics is the mother of all subjects. It appears in all walks of life; even a mason has to calculate the area of the building when claiming his wages. But teachers' existing beliefs about and perceptions of teaching mathematics in our context are not promising. We are more focused on the transmission of knowledge by engaging students in memorizing mathematical rules and formulae, rather than on engaging them in constructing mathematical knowledge and under-

standing mathematical concepts. Mathematics learning can inculcate problem-solving, logical thinking, and reasoning skills in students only when they are taught in such a way that they learn conceptually instead of by drill and practice. In previous semesters, we have focused on mathematics content, but this course intends to extend Student Teachers' understanding of pedagogy as well as build their understanding of the nature of mathematics, teacher beliefs and perceptions, and mathematics teaching and learning. This will enable Student Teachers to develop students' problem-solving, logical thinking, and reasoning skills. This course will help in creating awareness of the history of mathematics as well as its scope and significance.

### RESEARCH METHODS IN EDUCATION

The course Research Methods in Education is designed to orient Student Teachers to the concept and methods of education research. In particular, the course focuses on action research, and it aims to equip Student Teachers with the necessary skills to plan and conduct action research in an educational setting. Action research is a form of research that can be used to improve professional practices in the classroom. It can help in both personal development and institutional improvement. This course will also help Student Teachers to write research proposals and research reports and to create presentations to discuss their work.

### SCIENCE - III (TEACHING SCIENCE PEDAGOGY OPTION)

Science education needs reform in the philosophical, instructional, and pedagogical dimensions of current practice. Particularly, instructional settings and strategies used by teachers can create an environment that fosters a constructive and active view of the learning process. Learning does not occur by passive absorption of scientific facts; rather, it involves learners in constructing their own meaning and assimilating new information to develop new understandings. In Science III, the overall thrust of the course is on the development of scientific knowledge, skills, and attitudes in Student Teachers in the areas of life science, physical science, and Earth and space science. Therefore, this course empha-

sizes developing inquiry, problem-solving, and decision-making abilities in Student Teachers so they may maintain a sense of wonder and curiosity about the world around them.

### TEACHING ENGLISH - II (TEACHING ENGLISH PEDAGOGY OPTION)

This three-credit hour course has been designed to develop pedagogical skills in Student Teachers for teaching and assessing the English language to students in elementary grades. The course spans 16 weeks. The basic aim of the course is to enable Student Teachers to master the pedagogies related to teaching and assessment in the English language. Student Teachers will also be able to integrate the practical activities meant for the development of the four skills with the pedagogies. They will also gain practical experience in the teaching of grammatical as well as lexical aspects of the English language. Student-centered and communicative approaches will be followed. The course will include a research-based project related to teaching learning problems in English as a Second Language (ESL) classrooms and their potential solutions. At the end of the course, Student Teachers will have a good understanding of practical classroom problems in the teaching of English and their solutions. This course aims to enable Student Teachers to put their knowledge of different English language teaching approaches learned in the previous course into practice most suitably according to their own specific needs.

### TEACHING SOCIAL STUDIES - II (TEACHING SOCIAL STUDIES PEDAGOGY OPTION)

Social studies is concerned with human beings and their relation to society, and a social studies curriculum should address the totality of human experience over time and space. It is connected with the past, is linked to the present, and looks ahead to the future. This is a combination of history, geography, sociology, basic science, economics, anthropology, archaeology, and psychology. However, this course will mainly focus on the teaching of history and geography. The purpose of this course will be to integrate the elements and concepts of history and geography, such as change, continuity, and chronology.

### RESEARCH PROJECT

The Research Projects in Education course is a practical course in which Student Teachers will be involved in the action research process. The course will enable them to plan, act, observe, and reflect during action research. As the action research process entails an ongoing analysis of data, Student Teachers will be engaged in the same process for their individual projects and will receive guidance from their supervisors. Student Teachers will disseminate their findings in the form of reports.

### SCHOOL MANAGEMENT

School today is experiencing a paradigm shift in conceptions and operations related to school management. Systems thinking has become the major paradigm for school improvement efforts. Traditional analytical thinking focuses on isolating smaller and smaller parts of a system for study. Systems thinking, on the other hand, focuses on interactions between the different components of a system and aims to consider the system as a whole rather than as separate components within a whole. Thus, in a school system, each part or individual is a necessary component for the system's optimal function. The main goal of this course is to develop the capacity of Student Teachers to understand school as a system and to view school management through a systems approach. This will enable them to identify and examine their role in the school system and its significance in improving the learning outcomes of students. The course will also help Student Teachers to unearth, examine, and consider alternatives to the norms that shape status quo teaching if they are to become innovative and thoughtful professionals.

### TEST DEVELOPMENT AND EVALUATION

The Test Development and Evaluation course will focus on knowledge, understanding, and skills in the development of valid, reliable, and adequate tests and evaluation procedures as a means to improve learning. Major topics covered include theories of test development, characteristics of a good test, steps in test construction, alternative assessment strategies, and evaluation and accountability based on value addition. Assessment methods include written tests, assignments, presentations, observation, peer assessment and self-assessment, and portfolios. At the end of the course,

Student Teachers will be able to plan, organize, develop, administer, and score tests, report student performance, and utilize results to improve student learning.

### EARLY CHILDHOOD CARE AND EDUCATION

Educational research suggests that early experiences of a child has a profound effect on attainment at later stages in life. Therefore, it is important to invest in children's education to provide positive and enabling experiences right from an early age. Quality early childhood programmes not only help in brain development but also contribute to the physical, emotional and social development of a child.

### THE DEVELOPMENTAL PRACTICUM

Every practicum experience is guided by three participants: (1) the Student Teacher, (2) the Cooperating Teacher, and (3) the College/University Supervisor. What happens in the classroom and how it is interpreted will depend on the views of each member of the triad. It is important to negotiate common expectations for roles and responsibilities. If expectations are clear and understood by each member, the experience is more likely to be satisfactory for all. Student Teachers should take ownership of their own learning and at the same time receive consistent feedback and daily mentoring from their Cooperating Teachers at the school. While the Cooperating Teachers' role is primarily mentoring, they are also required to provide the Student Teachers with formative and summative feedback.

### PRACTICUM I & II

Student Teachers will be able to:

- reflect on and learn from connecting theory and their teaching practice
- collaborate with peers, Cooperating Teachers, other school staff, and the College/University Supervisor, establishing professional relationships
- invite, accept, and utilize formative feedback from the Cooperating Teaching, peers, and the College/University Supervisor in a non-defensive manner
- produce plans for teaching and learning that reflect the use of appropriate instructional methods and strategies to meet the needs of all students within the context of the practicum classroom



- utilize appropriate instruments or techniques for informally and formally assessing children's learning and children's learning needs
- recognize cognitive and affective needs of children, and establish learning Environments and use activities appropriate to meeting those needs.

### LONG PRACTICUM

This course is a practical teaching, reflecting and re-thinking course on the role of the teacher, teaching practice based on reflective practices. The students teach this course along with the fieldwork of the research project most of the work that student teachers carry out feedback into the research project

### TEACHING OF ISLAMIYAT

This course aims to enable candidates to:

1. Understand the nature and characteristics of Islamic Studies.
2. Design and use modern means and techniques in the implementation of the lessons in Islamic Studies.
3. Create effective assessment tools in Islamic education.
4. Acquire moral values and positive trends for the teaching profession. Observe and evaluate teaching practice in Islamic Studies

### STUDY SCHEME

SEMESTER 1 17				
	Course	CODE	CATEGORY FALL 2024	CREDIT
01	ISLAMIC STUDIES/ MORAL ETHICS	ZUGE-001/ ZUGE002	GE (ISLAMIC STUDIES)	2
02	NATURAL SCIENCES -THE SCIENCE OF GLOBAL CHALLENGES	EDGE-111	GE (NATURAL SCIENCE)	3
03	FUNCTIONAL ENGLISH	ZUGE-004	GE (FUNCTIONAL ENGLISH)	3
04	QUANTITATIVE REASONING I	EDGE-112	GE (QUANTITATIVE REASONING)	3
05	CHILD DEVELOPMENT	EDMP-111	MAJOR (CORE)	3
06	GENERAL METHODS OF TEACHING	EDMP-112	MAJOR (CORE)	3

### ASSOCIATE DEGREE

Students have the option to exit the programme with an associate degree after completing 2 years (4 semesters).

### CAREER PROSPECTS

B.Ed. although teaching school children is the main focus but the interdisciplinary approach of the programme prepares graduates to see education holistically and prepare them to serve in any leadership role in education.

The graduates can avail following Career Opportunities

- Subject teachers /Professional Development Teachers
- Textbook Developers
- Test Items Designers
- Researchers

They can get jobs in many other related fields too like, publishing houses, education consultancies, career consultancies, study abroad agencies, newspapers, education department, and educational websites.

### DEGREE STRUCTURE

The degree is subdivided into the following course categories: General Education, Foundation, Major, and Minor/Elective.

SEMESTER 2 17				
	Course	CODE	CATEGORY FALL 2024	CREDIT
07	QUANTITATIVE REASONING II	EDGE-121	GE (QUANTITATIVE REASONING)	3
08	EXPOSITORY WRITING -ACDEMIC READING AND WRITING	ZUGE-005	GE (EXPOSITORY WRITING)	3
09	CONTENT AND PEDAGOGY MATHEMATICS	EDMP-121	MAJOR (CORE)	3
10	CLASSROOM MANAGEMENT	EDMP-122	MAJOR (CORE)	3
11	Ideology and Constitution of Pakistan	ZUGE-003	GE (IDEOLOGY PAKISTAN)	2
12	METHODS OF TEACHING ISLAMIYAT	EDMP-123	MAJOR (CORE)	3
SEMESTER 3 20				
	Course	CODE	CATEGORY FALL 2024	CREDIT
13	Application of information and communication Technology (ICT)	ZUGE-006	GE (ICT)	3
14	TEACHING LITERACY SKILLS	EDMP-231	MAJOR (CORE)	3
15	ART, CRAFTS AND CALLIGRAPHY	EDGE- 231	GE (ARTS & HUMANITIES)	2
16	TEACHING OF URDU	EDMP-232	INTERDISCIPLINARY / ALLIED	3
17	TEACHING OF SCIENCE	EDMP-233	INTERDISCIPLINARY / ALLIED	3
18	FOUNDATION OF EDUCATION	EDMP-234	MAJOR (CORE)	3
19	CURRICULUM DEVELOPMENT	EDMP-235	MAJOR (CORE)	3
SEMESTER 4 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
20	School teacher and Community Civics and Community Engagement	EDGE-241	GE (CIVICS)	3
21	CLASSROOM ASSESSMENT	EDMP-241	MAJOR (CORE)	3
22	SCIENCE OF SOCIETY - SOCIAL SCIENCES	EDGE-242	GE (SOCIAL SCIENCE)	3
01	TEACHING OF ENGLISH	EDMP-242	MAJOR (CORE)	3
02	TEACHING OF SOCIAL STUDIES	EDMP-243	MAJOR (CORE)	3
03	EDUCATIONAL PSYCHOLOGY	EDMP-244	MAJOR (CORE)	3
04	TEACHING PRACTICE	EDIT-241	INTERDISCIPLINARY / ALLIED	3
SEMESTER 5 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
05	TEACHING OF MATHEMATICS	EDMP-351	MAJOR (CORE)	3
06	CONTEMPORARY ISSUES AND TRENDS IN EDUCATION	EDMP-352	MAJOR (CORE)	3
07	CONTENT COURSE -I (ENGLISH/ S.ST )	EDCE-351	(SPECIALIZATION)	3
08	CONTENT COURSE-I (MATHEMATICS)	EDCE-352	(SPECIALIZATION)	3
09	CONTENT COURSE-I (SCIENCE)	EDCE-353	(SPECIALIZATION)	3
10	INTRODUCTION TO GUIDANCE AND COUNSELING	EDMP-353	MAJOR (CORE)	3

SEMESTER 6 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
11	COMPARATIVE EDUCATION	EDMP-361	MAJOR	3
12	TEACHING OF MATHEMATICS II	EDIT-361	INTERDISCIPLINARY / ALLIED	3
13	CONTENT COURSE -II (ENGLISH/ S.ST )	EDCE-361	(SPECIALIZATION)	3
14	CONTENT COURSE-II (MATHEMATICS)	EDCE-362	(SPECIALIZATION)	3
15	CONTENT COOURSE-II (SCIENCE)	EDCE-363	(SPECIALIZATION)	3
16	TEACHING PRACTICE	EDIT-362	PRACTICUM/INTERNSHIP	3
SEMESTER 7 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
17	RESEARCH METHODS IN EDUCATION	EDMP-471	MAJOR (CORE)	3
18	Critical Thinking & Reflective Practices	EDMP-472	MAJOR	3
19	CONTENT COURSE-III (ENGLISH/ S.ST)	EDCE-471	(SPECIALIZATION)	3
20	CONTENT COURSE-III (MATHEMATICS)	EDCE-472	(SPECIALIZATION)	3
21	ENTREPRENEURSHIP	ZUGE-006	GE (ENTREPRENEURSHIP)	3
22	TEACHING PRACTICE	EDIT-471	INTERDISCIPLINARY / ALLIED	3
SEMESTER 8 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
23	Test Development and Evaluation	EDMP-481	MAJOR (CORE)	3

EDMP	EDUCATION MAJOR PEDAGOGY
EDIT	EDUCATION INTERDISCIPLINARY TEACHING
EDCE	EDUCATION CONTENT ELECTIVE
EDRP	EDUCATION RESEARCH PROJECT
ZUGE	GENERAL EDUCATION

## BS EDUCATION AND PSYCHOLOGY PROGRAMME 4 YEARS

### VISION

To produce skilled professionals with exceptional understanding of human behavior in education by applying psychological principles which will help them address challenges and elevate teaching practices.

### MISSION

Education and Psychology programme aims to equip students with the knowledge, skills, and theoretical foundations needed to understand learning processes and address educational challenges. We foster critical thinking, problem-solving skills, and a scientific mindset, empowering students to contribute significantly to the field of Education and Psychology.

### PROGRAMME OVERVIEW

The primary aim of the Education and Psychology programme at Ziauddin University is to facilitate the development of concepts, principles, and modern methods, and the important theoretical foundations necessary to understand the process of learning with a view to identify and analyze educational problems and suggest relevant solutions. To accomplish this, the programme has two main aims:

To prepare professionals who are competent in the science that studies human behavior in educational situations during the learning

process. This includes the study of the psychological requirements of the educational process, understanding the mechanisms of the learning process, motivations of behavior, mental processes, educational guidance, individual differences in schools and schooling, understanding and appreciating individual and cultural diversity, etc.

To prepare professionals in charge of education to be able to apply the educational and psychological principles in practical ways in educational and classroom situations to resolve educational problems using research and evaluation processes, thus achieving an effective learning environment.

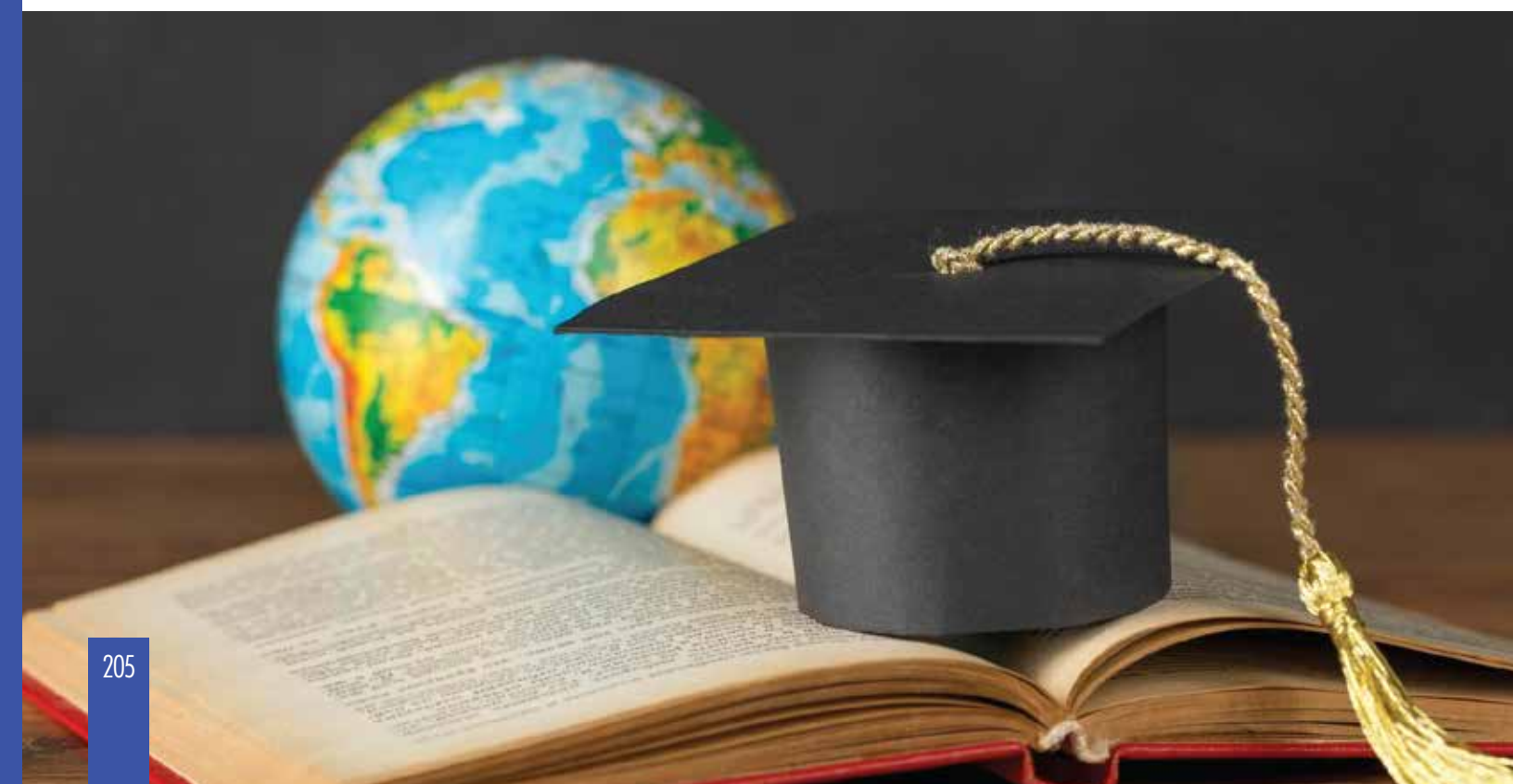
### POST PROGRAMME PROSPECTS

- Education Psychologist
- School Counsellor for Schools & Colleges
- Curriculum Developer (identifying students' learning needs and designing courses/curricula accordingly)
- Policy Advisor

### PROGRAMME STRUCTURE

The HEC revised curriculum of Psychology 2013 and the Undergraduate Policy of 2020 (under discussion) has guided the programme structure. The configuration of courses and credits is shared below.

BS Education and Psychology is a 4-year degree programme that consists of 132 credit hours.





**Elective Courses (2 from each discipline Total4)**

**Suggested Electives**

**Psychology**

S#	Courses	Credits	Courses	Credits
	Introduction to Rehabilitation Health Psychology	3	Sustainable Development Goals Early Childhood Care and Education	3
	Positive Psychology	3	Education Leadership and Management	3
	Crisis Intervention /Disaster & Trauma Management	3	Role of Media in Education and Society	3
	Theories of Guidance and Counseling	3	Introduction to Education Policy and Planning	3
	Organizational Behavior	3	Environmental Studies	3

**ELIGIBILITY CRITERIA**

For admission in the BS Education Psychology programme, the candidate must have completed O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Math's, Islamiat & Pakistan Studies) and A-levels (minimum 3 Subjects)/ 12th Grade/ Intermediate with minimum second division or equivalent from a recognized institution.

**PRE-REQUISITES**

- Education-based electives, can be taken after the students have attained 39 credits from the Education Major courses.
- Psychology-based electives, can be taken after the students have attained 39 credits from the Psychology Major courses.

**Semester-wise Breakup**

DS= Discipline Specific  
Comp= Compulsory  
Maj= Major  
Gen= General

**STUDY SCHEME**

SEMESTER 1 20				
	Course	CODE	CATEGORY FALL 2024	CREDIT
1.	Introduction to Psychology (F)	IPSY-112	MAJOR (CORE)	3
2.	Introduction to Social Psychology (F)	ISPY-113	MAJOR (CORE)	3
3.	History and Schools of Psychology (F)	ZUGE 006	MAJOR (CORE)	3
4.	Human Development & Psychology (F)	HDPY-127	MAJOR (CORE)	3
5.	Introduction to Human Biology (Gen Ed)	ZUGE-002	MAJOR (CORE)	3
6.	FUNCTIONAL ENGLISH	ZUGE-004	GE (FUNCTIONAL ENGLISH)	3
7.	Ideology and Constitution of Pakistan	ZUGE-003	GE (IDEOLOGY PAKISTAN)	2

SEMESTER 2 20				
	Course	CODE	CATEGORY FALL 2024	CREDIT
8.	FOUNDATION OF EDUCATION	EDMP-234	MAJOR (CORE)	3
9.	CONTENT COURSE -I (ENGLISH/ S.ST )	EDCE-351	(SPECIALIZATION)	3
10.	GENERAL METHODS OF TEACHING	EDMP-112	MAJOR (CORE)	3
11.	EXPOSITORY WRITING -ACDEMIC READING AND WRITING	ZUGE-005	GE (EXPOSITORY WRITING)	3
12.	CHILD DEVELOPMENT	EDMP-111	MAJOR (CORE)	3
13.	Application of information and communication Technology (ICT)	ZUGE-006	GE (ICT)	3
14.	ISLAMIC STUDIES/ MORAL ETHICS	ZUGE-001/ ZUGE002	GE (ISLAMIC STUDIES)	2
SEMESTER 3 17				
	Course	CODE	CATEGORY FALL 2024	CREDIT
15.	Elements of Clinical Psychology (F)	ECPY-213	MAJOR (CORE)	3
16.	Personality Theories (F)	PYTH-215	MAJOR (CORE)	3
17.	Psychology of Cognition and Perception (F)	PYCP-216	MAJOR (CORE)	3
18.	Positive Psychology Elective -1	POPY-226	MAJOR (CORE)	3
19.	ENTREPRENEURSHIP	ZUGE-006	GE (ENTREPRENEURSHIP)	3
20.	Intro to Statistics- Quantitative Reasoning	ZUGE-011	GE (QUANTITATIVE REASONING)	3
SEMESTER 4 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
21.	TEACHING PRACTICE	EDIT-241	INTERDISCIPLINARY / ALLIED	3
22.	CURRICULUM DEVELOPMENT	EDMP-235	MAJOR (CORE)	3
1.	INTRODUCTION TO GUIDANCE AND COUNSELING	EDMP-353	MAJOR (CORE)	3
2.	CONTENT COOURSE-II (SCIENCE / ENGLISH)	EDCE-363	(SPECIALIZATION)	3
3.	CRITICAL THINKING & REFLECTIVE PRACTICES	EDMP-472	MAJOR	3
4.	CONTENT COURSE-II (MATHEMATICS)	EDCE-362	(SPECIALIZATION)	3
SEMESTER 5 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
5.	Research Methods in Psychology (M)	RMPY-311	MAJOR (CORE)	3
6.	Fundamentals of Neuropsychology (M)	FNPY-312	MAJOR (CORE)	3
7.	Mental Health & Psychopathology (F)	MHPY-313	MAJOR (CORE)	3
8.	Psychological Test & Measurement I (F)	PTMT-314	MAJOR (CORE)	3
9.	ART, CRAFTS AND CALLIGRAPHY	EDGE- 231	GE (ARTS & HUMANITIES)	3
10.	Organizational Psychology Elective -II	ORPY-323	(SPECIALIZATION)	3

SEMESTER 6 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
11.	RESEARCH METHODS IN EDUCATION	EDMP-471	MAJOR (CORE)	3
12.	NATURAL SCIENCES -THE SCIENCE OF GLOBAL CHALLENGES	EDGE-111	GE (NATURAL SCIENCE)	3
13.	CLASSROOM MANAGEMENT	EDMP-122	MAJOR (CORE)	3
14.	COMPARATIVE EDUCATION	EDMP-361	MAJOR	3
15.	TEACHING PRACTICE	EDIT-471	INTERDISCIPLINARY / ALLIED	3
16.	SCIENCE OF SOCIETY - SOCIAL SCIENCES	EDGE-242	GE (SOCIAL SCIENCE)	3
SEMESTER 7 15				
	Course	CODE	CATEGORY FALL 2024	CREDIT
17.	Psychological Test & Measurement II (M)	PTMT-322	MAJOR (CORE)	3
18.	Professional Practices & Ethics in Psychology	PPEP-411	MAJOR (CORE)	3
19.	Qualitative & Quantitative Research (M)	QAQR-416	GE (QUANTITATIVE REASONING)	3
20.	Supervised Clinical Practice (Adv. practicum)	SPCP-414	MAJOR (CORE)	3
21.	Child assessment and Psychometrics	CAPY-411	MAJOR (CORE)	3
SEMESTER 8 18				
	Course	CODE	CATEGORY FALL 2024	CREDIT
22.	SCHOOL MANAGEMENT	EDMP-482	MAJOR (CORE)	3

### PROGRAMME DURATION

A four-year undergraduate programme comprising of 132 credit hours and 45 courses. These courses can be completed with a minimum duration of 4 years and a maximum duration of 6 years.

### ELIGIBILITY CRITERIA

- Based on 45 % pass marks in the entry requirement certificate/degree.
- Entry Test in English and Logical Reasoning with 60 %
- A scenario-based interview with 40%.
- Pass marks in the Ziauddin Admission test are 60%.

### ACADEMIC CALENDAR FLAHS

#### Summer 2024

Commencement of Regular Classes  
Classes End  
Final Exams Begin  
Final Exams End  
Announcement of Results

Mon, Jul 01, 2024  
Sat, Aug 24, 2024  
Mon, Aug 26, 2024  
Wed, Aug 28, 2024  
Tue, Aug 31, 2024

#### Fall 2024

Orientation Fall 2024  
Commencement of Regular Classes  
Mid-term Exam Begins  
Mid-term Exam End  
Classes End  
Final Exams Begin  
Final Exams End  
Announcement of Results

Fri, Aug 30, 2024  
Mon, Sep 02, 2024  
Mon, Oct 21, 2024  
Sat, Oct 27, 2024  
Sat, Dec 14, 2024  
Mon, Dec 16, 2024  
Sat, Dec 21, 2024  
Fri, Jan 03, 2024

**Note:** All dates are subject to change. Students will be informed of the changes well in advance.

### CONTACT INFORMATION

#### Address

D-65, Block H, North Nazimabad Town, Karachi.

#### Phone

021- 36630303

## FACULTY MEMBERS

#### RANA HUSSAIN

PRINCIPAL-COLLEGE OF EDUCATION  
DIRECTOR ZES- DIRECTOR ACADEMIC ZUEB

#### DR. MUHAMMAD YOUSUF SHARJEEL

PROFESSOR  
DIRECTOR -POSTGRADUATE STUDIES

#### NOOR-E-SAHAR

SR. LECTURER / ICT SPECIALIST  
ACADEMIC COORDINATOR-UNDERGRADUATE STUDIES

#### DR. NUZHAT NAZ

ASSISTANT PROFESSOR



# FACULTY OF VETERINARY AND ANIMAL SCIENCES





# FACULTY OF VETERINARY AND ANIMAL SCIENCES

## KEY INFORMATION

### DEAN

Prof. Dr. Zafar Iqbal Qureshi

### CONTACT INFORMATION

Website:

<https://zu.edu.pk/faculty-of-veterinary-and-animal-sciences/>

Telephone:

021-35862937-9 EXT: 2701

Email:

[info@zu.edu.pk](mailto:info@zu.edu.pk)

Locate Us:

Education City, Link Road, Karachi.

When I first applied to the Veterinary programme at Ziauddin University, I was filled with excitement. The chance to study in a new country, experience different cultures, and be provided with new opportunities was something I had been looking forward to.

In meeting my expectations, Ziauddin did not disappoint. Since coming here, I have been doing my level best to uphold the standards of this university. The opportunities that I have been provided have not only impacted my academic growth but my personal growth as well.

Although it has not been easy. The culture shock of going to a new country is quite jarring, and it took some time to adapt to it. However, I have reached out to various sources, including the staff members who have aided me in such endeavors. For this, I am truly grateful. I have often found myself impressed by how much care Ziauddin takes in nurturing their students and allowing them to reach their full potential.

Moreover, I was truly impressed by the equipment the university has provided us with. Along with the fact that Ziauddin has their own farm, it allows us to get hands-on experience in animal health care and treatment, which has been invaluable for me.

I am aware that there will be many challenges in the future, nevertheless, I am certain that with all that Ziauddin University has instilled in me, I will be more than capable of achieving my future goals. Anyone with the right amount of dedication and effort will surely find themselves achieving new heights at Ziauddin University.

FATHIMATH MAISAAN ALI  
DVM STUDENT (BATCH-I)



**INTRODUCTION**

Land erosion, Water logging, Water shortage, and inherited division of land holdings have led to a drastic increase in the number of small agriculture/livestock farmers. The main reliance of these farmers for their livelihood has therefore been shifted to rearing livestock. Livestock is an important subsector of agriculture contributing about 61.89 percent to agriculture value and 14.04 percent to GDP. Additionally, 30-35 million of the rural population is engaged in livestock raising. The world is growing more complex, and knowledge of science, animals, animal production, and animal health is expanding rapidly. Consequently, people expect more and more from the veterinary profession. The veterinary profession must become capable of delivering higher and higher levels of services to all the classes of animals important to people and achieve an even higher level of competence in all veterinary activities.

Realizing the food needs, food safety, and food security for the human population in the future and to address the issue of climate change, the world animal health organization has emphasized on improvement of veterinary education standards in all veterinary teaching institutions of the world for the betterment of animals and public health. Therefore, livestock is vital for food security, rural development, and poverty alleviation in Pakistan. The steep rise in commodity prices has further enhanced the importance of this sector.

Ziauddin University Faculty of Veterinary and Animal Sciences is the first Pakistan Veterinary Medical Council-accredited institution in Karachi. Established with a purpose-built, state-of-the-art infrastructure, the faculty has excellent laboratories, spacious lecture/seminar halls equipped with multimedia, a library, and much more. The campus is spread over 75 acres of the picturesque landscape of Education City Link Road, only a 15 to 30-minute drive from the city. The campus is surrounded by dairy, cattle, sheep, goat, and poultry farms. It has close

linkages with these farmers, provincial livestock departments as well as other veterinary institutions of the country for creating industry awareness and providing farm management exposure to the students. A mini zoo, a goat farm, buffaloes, and several large animals are also other attractions of the faculty.

The teaching faculty is highly qualified, and most of them have foreign postgraduate qualifications and years of practical experience.

**VISION**

Improve animal and human health through excellence in veterinary education and clinical services with an ultimate goal to address food safety, food security, public health, and climate change impact on animals.

**MISSION**

The Faculty of Veterinary and Animal Sciences (ZUFVAS) is dedicated to the well-being of animals and humans through excellence in education, research, veterinary practices, and services to the community with integrity, quality, creativity, innovation, and commitment.

**DOCTOR OF VETERINARY MEDICINE (DVM)  
05-YEAR DEGREE PROGRAMME****INTRODUCTION**

Doctor of Veterinary Medicine is a five-year, semester-based degree programme.

**LEARNING AND TEACHING STRATEGIES:**

Both national and international qualified teaching faculty promote better understanding through Presentation/Assignment/Seminar/Practical performance

**TUTORIALS:**

Fully Equipped labs  
Farm Management  
Clinical Practices (Supervised/Independent)  
Clinical Training and Farm Management

Students of Ziauddin Faculty of Veterinary and Animal Sciences have the advantage to be a part of an organization with the setup for poultry birds, wildlife, small and large animals, and pet care clinic. Clinical training provides a better chance of learning and practicing the skills in the field, hence, preparing future veterinarians to play an important role in improving healthcare quality in society. Students of 3rd, 4th & 5th professionals will complete their clinical training at the link road campus of Dr. Ziauddin University. In addition, Ziauddin Faculty of Veterinary and Animal Sciences has close collaborations with other major Veterinary Sciences institutions like the Sindh Institute of animal health and local dairy, meat, poultry, fisheries, and wildlife farms in the Karachi area.





## LIVESTOCK ASSISTANT DIPLOMA (LAD) 02-YEAR DIPLOMA COURSE

### INTRODUCTION

The primary goal of a Livestock Assistant is to provide organized technical and skilled services of modern animal husbandry studies and techniques that help in improving the productivity of domestic livestock. In addition, these services ensure a sustainable livelihood and provide a route toward poverty alleviation, particularly in rural areas. Livestock Assistant Diploma at Ziauddin University is a 2-year programme that would professionally train students for assisting Doctor of Veterinary Medicine (DVM) graduates at veterinary hospitals, dispensaries, livestock farms, and fields. Moreover, it would ensure to provide of technical skills

for advising farmers on livestock management and hygiene practices, also efficiently handling major/minor livestock-related cases.

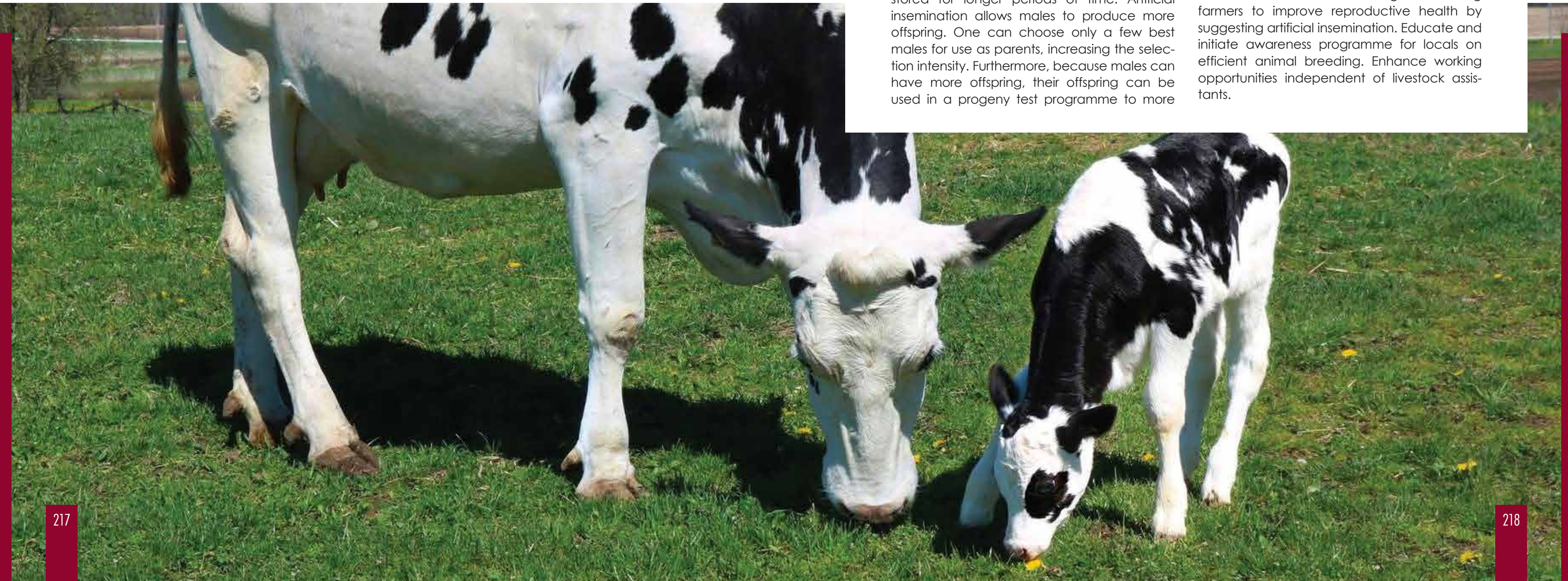
Further, the aim of the diploma includes teaching technical skills that would enable students with the services of analyzing signs of diseases and providing required treatment to sick or infected animals. To assist progressive farmers in improving the reproductive health of their animals. Helps in seasonal vaccinations against major animal diseases. Moreover, collection and analysis of blood, milk and fecal samples for proper laboratory diagnosis and improvement of animal health.

## ARTIFICIAL INSEMINATION (A.I) 06- MONTH COURSE

### INTRODUCTION

The primary aim of the Artificial Insemination Technique (AIT) is to provide biotechnological skilled services of modern animal husbandry studies and techniques that help in improving the productivity of livestock. Furthermore, this technique ensures to provide a route towards poverty alleviation, particularly in rural areas. AIT at Ziauddin University is a 6-month programme that would professionally train candidates in technical skills for advising farmers on a correct breeding plan. Semen can be easily transported; allowing multiple females in different geographical locations to be inseminated simultaneously, and semen can be stored for longer periods of time. Artificial insemination allows males to produce more offspring. One can choose only a few best males for use as parents, increasing the selection intensity. Furthermore, because males can have more offspring, their offspring can be used in a progeny test programme to more

accurately evaluate the genetic value of the male. Finally, individual farmers can use artificial insemination to increase the genetic pool with which his or their animals can be mated, potentially decreasing the effects of inbreeding. Male animals often grow to be larger than females and can consume relatively larger amounts of feed. Infected, male animals are often more strong, powerful, and potentially ill-mannered and thus require special housing and handling equipment. The benefits of more intense selection must be balanced against the negative effects of decreased variation. Further, the objectives of the diploma include imparting technical skills that would enable students with the skills of assisting and advising farmers to improve reproductive health by suggesting artificial insemination. Educate and initiate awareness programme for locals on efficient animal breeding. Enhance working opportunities independent of livestock assistants.





## CAREER PROSPECTS OF PROGRAMME

- Teaching in Higher Education Institutions.
- Research organizations in veterinary and public health.
- Private Practices (Pets/animal health clinics)
- Private Business (Dairy farm, Poultry Farm, goat/Sheep farm, and fish farm)
- Government/Private Jobs
- Livestock/poultry disease diagnostic laboratories
- Consultancy

## ELIGIBILITY CRITERIA

### Doctor of Veterinary Medicine (DVM)

- 50% marks in Higher Secondary Certificate Examination in Pre-Medical group Examination held by a recognized Board of Intermediate Education in Pakistan or A Level and other equivalent to HSC (Pre-medical) for Doctor of Veterinary Programme.
- Applications from overseas candidates are also invited.
- Students awaiting results of Board of Intermediate / A-level Examinations are also eligible to apply.

**Note:** It is the responsibility of the applicant to apply according to instructions given with the application form.

- Applications are invited for, Link Road.
- (The final allocation based on the location will be at the discretion of Ziauddin University depending upon the number of applications.)

### Documents to Be Submitted

- Attested copy of SSC / 'O' Level (IBCC Equivalence) Certificate
- Attested copy of HSC / 'A' Level (IBCC Equivalence) Certificate
- Attested copy of SSC / 'O' Level Mark Sheet
- Attested copy of HSC / 'A' Level Mark Sheet
- Attested copy of NIC or 'B' Form of Applicant
- Attested copy of NIC of 2 references
- Attested copy of NIC of Parents / Guardian
- HSC II Admit Card in case of result not announced
- Applicant's one (1) passport size photograph

### Student Selection

Final selection of students is decided based on their performance in the following:

- Secondary School Certificate
- Higher Secondary Certificate
- Ziauddin University Test
- Interview

### Aptitude Test

• The university conducts an Aptitude Test for all eligible candidates. The test consists of Multiple-Choice questions of various types. The test comprises four to five sections designed to assess each applicant's performance in the areas of

- Biology
- Chemistry
- Physics
- General Knowledge
- English

• The level of questions in sections of Biology, Physics, and Chemistry corresponds to that expected at the end of Intermediate Examination or equivalent qualifications.

### Interview

• Applicants are interviewed to assess their suitability to complete their respective courses and pursue a career in veterinary sciences.

### Notification of Admission

University will inform successful applicants and a deadline will be given for the confirmation of admission. Offers not accepted by the given deadline will be canceled

### Livestock Assistant Diploma (LAD)

- Secondary Certificate Examination held by a recognized Board of Intermediate Education in Pakistan or A Level and other equivalent to HSC for LAD Programme.
- Applications are invited for Link Road Campus.

### Artificial Insemination (A.I)

- Doctor of Veterinary Medicine (DVM) Graduates.
- Livestock Assistant Diploma (LAD) Certificate holder.
- Nominees from Dairy Sector (Minimum qualification HSC/Intermediate in (Pre-medical group).

## FEE STRUCTURES

### Doctor of Veterinary Medicine (DVM)

Registration Fee	5,000
Admission Fee	25,000
Examination Fee	6,000
Semester Tuition Fee	175,000
Security deposit (one-time refundable)	25,000
Student Fund	5,000
<b>Total</b>	<b>241,000</b>

### Livestock Assistant Diploma (LAD)

Admission Fee	25,000
Security Deposit (one-time refundable)	10,000
Registration Fee	5,000
Student Fund	4,000
Semester Tuition Fee	50,000
Examination Fee	1,000
<b>Total Amount</b>	<b>95,000</b>

### Artificial Insemination (A.I)

Admission Fee	25,000
Security Deposit (one-time refundable)	5,000
Registration Fee	2,500
Student Fund	2,000
Semester Tuition Fee	50,000
Examination Fee	500
<b>Total Amount</b>	<b>85,000</b>

## ACADEMIC CALENDAR 2025-26 (TENTATIVE)

Dates/Days	Events
August 1 <sup>st</sup> , 2024 (Thursday)	Admission Commencement
<b>Spring 2025</b>	<b>20 weeks</b>
February 10 <sup>th</sup> , 2025 (Monday)	Orientation Day (Batch-III)
February 11 <sup>th</sup> , 2025 (Tuesday)	Commencement of Regular classes for 1 <sup>st</sup> , 3 <sup>rd</sup> , & 5 <sup>th</sup> Semesters of DVM; 1 <sup>st</sup> & 3 <sup>rd</sup> Semesters of LAD
April 10 <sup>th</sup> , 2025 (Thursday)	Last day before the mid-term exam
April 11 <sup>th</sup> , 2025 (Friday) to April 18 <sup>th</sup> , 2025 (Friday)	Mid-term Exam Week
April 21 <sup>st</sup> , 2025 (Monday)	Classes Resume
June 10 <sup>th</sup> , 2025 (Tuesday)	Last day of the Spring 2025 Semester
June 11 <sup>th</sup> , 2025 (Wednesday) to June 17 <sup>th</sup> , 2025 (Tuesday)	Final-term Exam Preparation Week
June 18 <sup>th</sup> , 2025 (Wednesday) to July 1 <sup>st</sup> , 2025 (Tuesday)	Final-term Examination
July 2 <sup>nd</sup> , 2025 (Wednesday)	Semester Break and Announcement of Result
<b>Fall 2025</b>	<b>20 weeks</b>
July 7 <sup>th</sup> , 2025 (Monday)	Commencement of regular classes for 2 <sup>nd</sup> , 4 <sup>th</sup> , & 6 <sup>th</sup> Semesters of DVM; 2 <sup>nd</sup> & 4 <sup>th</sup> Semesters of LAD
September 5 <sup>th</sup> , 2025 (Friday)	Last day before the mid-term exam
September 8 <sup>th</sup> , 2025 (Monday) to September 16 <sup>th</sup> , 2025 (Tuesday)	Mid-term Exam Week
September 17 <sup>th</sup> , 2025 (Wednesday)	Classes Resume
November 14 <sup>th</sup> , 2025 (Friday)	Last day of the Fall Semester 2025
November 17 <sup>th</sup> , 2025 (Monday) to November 21 <sup>st</sup> , 2025 (Friday)	Final-term Exam Preparation Week
November 24 <sup>th</sup> , 2025 (Monday) to December 5 <sup>th</sup> , 2025 (Friday)	Final-term Examination
December 8 <sup>th</sup> , 2025 (Monday)	Semester Break and Announcement of Result
<b>Winter 2025-26</b>	<b>08 weeks</b>
December 15 <sup>th</sup> , 2025 (Monday)	Commencement of classes
January 2 <sup>nd</sup> , 2026 (Friday)	Last day before the mid-term exam
January 5 <sup>th</sup> , 2026 (Monday) to January 9 <sup>th</sup> , 2026 (Friday)	Mid-term Exam Week
January 12 <sup>th</sup> , 2026 (Monday)	Classes Resume
January 30 <sup>th</sup> , 2026 (Friday)	Last day of the Winter Semester 2025-26
February 2 <sup>nd</sup> , 2026 (Monday) to February 6 <sup>th</sup> , 2026 (Friday)	Final-term Examination
February 9 <sup>th</sup> , 2026 (Monday)	Semester Break and Announcement of Result





## FACULTY MEMBERS

**PROF. DR. ZAFAR IQBAL QURESHI**

DEAN  
FACULTY OF VETERINARY AND ANIMAL  
SCIENCES & DEPARTMENT OF  
THERIOGENOLOGY

**PROF. DR. NOOR MUHAMMAD SOOMRO**

PROFESSOR  
DEPARTMENT OF VETERINARY PATHOLOGY

**DR. AKBAR ALI**

ASSOCIATE PROFESSOR  
DEPARTMENT OF VETERINARY MICROBIOL-  
OGY

**DR. SHAUKAT ALI BHATTI**

ASSOCIATE PROFESSOR  
DEPARTMENT OF ANIMAL NUTRITION

**DR. MARIA AMIR SOLANGI (STUDY LEAVE)**

ASSISTANT PROFESSOR  
DEPARTMENT OF VETERINARY PHYSIOLO-  
GY AND BIOCHEMISTRY

**DR. ZAIN-UL-AABDIN**

ASSISTANT PROFESSOR  
DEPARTMENT OF PREVENTIVE VETERINARY  
MEDICINE AND PUBLIC HEALTH

**DR. BENAZIR SAHITO**

ASSISTANT PROFESSOR  
DEPARTMENT OF VETERINARY  
PHARMACOLOGY

**DR. MUHAMMAD WASIM USMANI**

ASSISTANT PROFESSOR  
DEPARTMENT OF VETERINARY PATHOLOGY

**DR. JAVID ARIF**

ASSISTANT PROFESSOR  
DEPARTMENT OF VETERINARY MICROBIOL-  
OGY

**DR. MUHAMMAD ALI MEMON**

ASSISTANT PROFESSOR  
DEPARTMENT OF VETERINARY PARASITOL-  
OGY

**DR. AMINA HABIB**

ASSISTANT PROFESSOR  
DEPARTMENT OF VETERINARY MICROBIOL-  
OGY

**DR. UBAID QURESHI**

LECTURER  
DEPARTMENT OF LIVESTOCK MANAGE-  
MENT

**DR. HAFIZ AHMAD HAMEED**

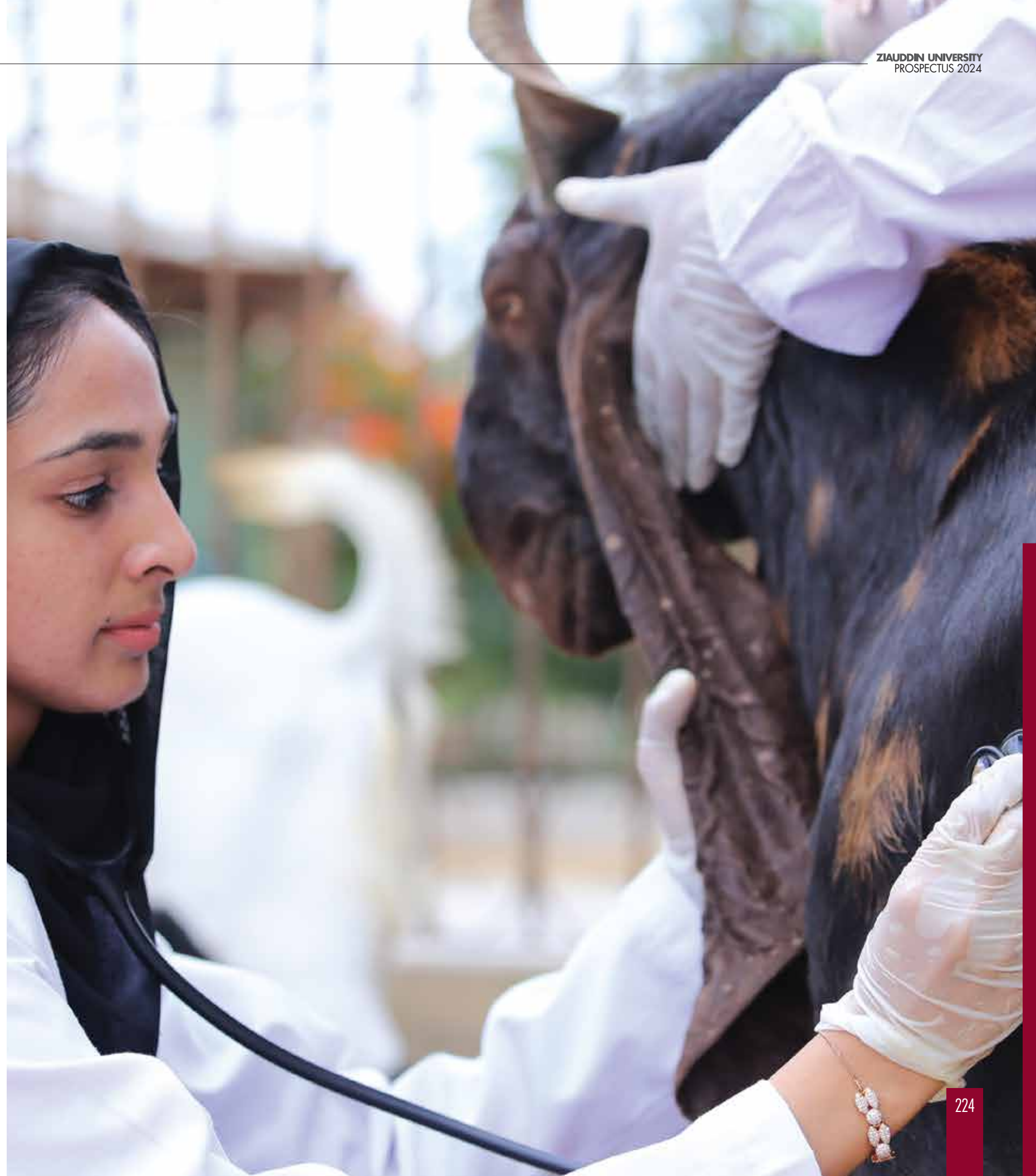
LECTURER  
DEPARTMENT OF VETERINARY ANATOMY  
AND HISTOLOGY

**DR. IMRAN KHAN BALOCH**

LECTURER  
DEPARTMENT OF LIVESTOCK EXTENSION

**DR. MUHAMMAD AAMIR SHEHZAD**

LECTURER  
DEPARTMENT OF ANIMAL BREEDING AND  
GENETICS





# FACULTY OF PHARMACY & PHARMACEUTICAL SCIENCES





# FACULTY OF PHARMACY & PHARMACEUTICAL SCIENCES

## KEY INFORMATION

### DEAN

Prof. Dr. Rahela Ikram

### CONTACT INFORMATION

#### Website:

<https://zfp.zu.edu.pk/>

#### Telephone:

+92-21-35862937-9 Ext: 2631, 3503

#### Email:

[zcp@zu.edu.pk](mailto:zcp@zu.edu.pk)

#### Locate Us:

Education City, Link Road,  
Gadap Town, Karachi.

"As a Pharm. D student at the Faculty of Pharmacy & Pharmaceutical Sciences, Ziauddin University, my educational journey has been nothing short of exceptional. The programme's comprehensive curriculum, delivered by renowned faculty members, has equipped me with a deep understanding of pharmaceutical sciences and clinical pharmacy. The state-of-the-art facilities and hands-on practical experience provided at Ziauddin University have been instrumental in honing my skills and preparing me for the dynamic field of pharmacy. The university's commitment to fostering a collaborative and supportive learning environment has not only enhanced my academic growth but also allowed me to build valuable connections with fellow students and professionals. I am confident that the solid foundation I have gained here will serve as a stepping stone for a successful and fulfilling career in pharmacy. Ziauddin University has truly been a beacon of excellence in pharmaceutical education, and I am proud to be a part of this esteemed institution".

Naveen Pasha  
PHARM.D



## VISION

To be a global leader in pharmacy and pharmaceutical education, research and practice with the ultimate goal of providing excellent, innovative patient care and drug development.

## MISSION

The mission is to achieve excellence in pharmacy education, research and practice through dissemination of knowledge and skills by qualified and experienced faculty. With an aim to prepare professionals who can fulfill the growing healthcare needs of the society and provide standard pharmaceutical care.

## INTRODUCTION

Pharmacy, along with medicine and nursing forms the backbone of our healthcare system. We cannot afford to be left behind other nations in providing quality drugs to our masses and professional manpower to our health care institutions. We have to cater to the needs of this system by producing well qualified, professionally trained and highly competent pharmacists to perform the specialised tasks in their specific areas of activity, such as drug

design, synthesis, manufacturing, quality assurance, marketing and supply system, procurement, storage, distribution and use of drugs in industry, hospital setting or in community practice. In all advanced health care systems the support of a clinical pharmacist, who is a drug therapy consultant and drug information specialist, is considered vital. Realising the importance of Pharmacy education, Ziauddin University started its 5-year Doctor of Pharmacy (Pharm.D) programme in January 2005. The Pharmacy institution of Ziauddin University is following the curriculum approved by Higher Education Commission (HEC) & Pharmacy Council of Pakistan (PCP) based on the semester examination system. This is an accredited and recognised programme of Pharmacy Council of Pakistan.

The programme provides students with core knowledge, skills, abilities, attitudes and values that are necessary to the provision of Pharmaceutical care. The professional courses in the Pharm.D curriculum consists of didactic material, laboratory courses, and practical experience in patient care environment.





# COLLEGE OF PHARMACY





## INTRODUCTION

The College of Pharmacy at Ziauddin University offers a group of pharmacy-related disciplines and manages a comprehensive professional system to develop professionals through undergraduate (Doctor of Pharmacy) and postgraduate (Master & Doctor of Philosophy) education. It consists of five academic departments i.e. Pharmacology, Pharmaceutics, Pharmaceutical Chemistry, Pharmacognosy, and Pharmacy Practice.

All of our degree programs are accredited by the Higher Education Commission (HEC) and Pharmacy Council of Pakistan (PCP). Additionally, College is also the member of International Pharmaceutical Federation (FIP). The highly qualified faculty, up-to-date curriculum, well-equipped labs, excellent academic environment, vibrant research culture, ethical practices, and collaboration with the health industry make us the seat of

contemporary and advanced learning in the field of Pharmacy.

## PROGRAMMES

### Undergraduate Programmes

- Doctor of Pharmacy (PHARM.D.)

### Postgraduate Programme

- Doctor of Philosophy (Ph.D.)
- Master of Philosophy (M.Phil)

### Diploma Programme

- Pharmacy Technician Course (B Category)

## DEPARTMENTS

- Department of Pharmaceutics
- Department of Pharmacognosy
- Department of Pharmaceutical Chemistry
- Department of Pharmacology
- Department of Pharmacy Practice

# DOCTOR OF PHARMACY (PHARM.D) PROGRAMME

The Pharm.D programme at Faculty of Pharmacy & Pharmaceutical Sciences, Ziauddin University aims to produce pharmacists who have the abilities and skills which are necessary to achieve outcomes related to:

- Providing Pharmaceutical care to patients.
- Developing and managing medication distribution and control systems.
- Monitoring drug response in patients and adjusting dosage regimens to produce the safest, most beneficial results in therapy
- Managing the pharmacy
- Promoting public health
- Providing drug information and education
- Providing technical aid to Pharmaceutical industry and solving problems pertinent to the manufacturing of medicines
- Reviewing products evaluated for formulary consideration
- Evaluating policies, procedure, protocols and clinical pathways to ensure safe use of medications
- Analysing quality assurance activities to ensure that improvements are implemented to produce positive patient outcomes

## ELIGIBILITY CRITERIA

The candidate should have passed the Intermediate Science (HSC) Examination (Medical/Biology Group) securing at least 60 % marks in aggregate from the Board of Higher Secondary Education in Pakistan or any other examination of a Foreign University which in scope and standard is found equivalent to the HSSC Examination (Medical Group), Pakistan.

## ADMISSION POLICY

The programme is open to all individuals who meet the selection criteria. All candidates are selected on merit according to the following criteria:

- Examination/interview Weightage
- HSSC: 50%
  - Entry Test: 30%
  - Interview: 20%

Note: It is the responsibility of the applicant to submit the application according to instructions given with the application form.

## FEE STRUCTURE

### 1st Semester

Admission Fee (Non Refundable)	Rs. 60,000/-
Tuition Fee (per semester)	Rs. 200,400/-
Semester Examination Fee	Rs. 7,000/-
Other Charges	
Security Deposit (Refundable)	Rs. 25,000/-
Medical Examination Fee	Rs. 3,500/-
Student Activity Fee	Rs. 2,000/-
Documentation Fee	Rs. 4,000/-
CD of Study Guide Book	Rs. 400/-
Registration Fee (Pharmacy Council)	Rs. 1,000/-
Total Other Charges	Rs. 35,900/-
1st Semester Fee	Rs. 303,300

### 2nd Semester

Tuition Fee (per semester)	Rs. 200,400/-
Semester Examination Fee	Rs. 7,000/-
Student Activity	Rs. 1,000/-
2nd Semester Fee	Rs. 208,400

### Note:

The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.

Advance fees to be paid semester-wise. All dues need to be cleared within two weeks of commencement of the academic year. 2% surcharge per month will be levied on outstanding fees after the due date.

## FINANCIAL ASSISTANCE

Financial Assistance is provided to the needy and meritorious students with a good GPA, conduct and not having undergone any resit examination. It is awarded from 2nd Professional onwards.





## SCHEME OF STUDY

### Scheme of Courses for Pharm. D. (Five-Year Course)

#### 1<sup>st</sup> Professional Pharm. D

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Course No.	Subject (Theory Courses)	Cr. Hr.	Course No.	Subject (Theory Courses)	Cr. Hr.
ZUGE 004	English-A (Functional English)	03	ZUGE 005	English-B (Communication & Writing skills)	03
PHMC 111	Pharmaceutics-IA (Physical Pharmacy) Th.	03	PHMC 121	Pharmaceutics-IB (Physical Pharmacy) Th.	03
PHMH 111	Pharmaceutical Chemistry-IA (Organic) Th.	03	PHMH 121	Pharmaceutical Chemistry-IB (Organic) Th.	03
PHMH 113	Pharmaceutical Chemistry-IIA (Biochemistry) Th.	03	PHMH-123	Pharmaceutical Chemistry-IB (Biochemistry) Th.	03
PHML 111	Physiology-A Th.	03	PHML 121	Physiology-B Th.	03
PHML 113	Anatomy & Histology Th.	03			
Course No.	Subject (Lab Courses)	Cr. Hr.	Course No.	Subject (Lab Courses)	Cr. Hr.
PHMC 112	Pharmaceutics-IA (Physical Pharmacy) Lab.	01	PHMC 122	Pharmaceutics-IB (Physical Pharmacy) Lab.	01
PHMH 112	Pharmaceutical Chemistry-IA (Organic) Lab.	01	PHMH 122	Pharmaceutical Chemistry-IB (Organic) Lab.	01
PHMH-114	Pharmaceutical Chemistry-IIA (Biochemistry) Lab.	01	PHMC 122	Pharmaceutical Chemistry-IB (Biochemistry) Lab.	01
PHML 112	Physiology-A Lab.	01	PHML 122	Physiology-B Lab.	01
PHML 114	Anatomy & Histology Lab.	01			
<b>Total Cr. Hr. 23</b>			<b>Total Cr. Hr. 19</b>		

#### 2<sup>nd</sup> Professional Pharm. D

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Course No.	Subject (Theory Courses)	Cr. Hr.	Course No.	Subject (Theory Courses)	Cr. Hr.
ZUGE 001	Islamic Studies	03	ZUGE 003	Pakistan Studies	02
PHMC 211	Pharmaceutics-IIA (Dosage Forms Science)Th.	03	PHMC 221	Pharmaceutics-IB (Dosage Forms Science)Th.	03
PHMC 213	Pharmaceutics-IIIA (Pharmaceutical Microbiology & Immunology) Th.	03	PHMC 223	Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Th.	03
PHML 211	Pharmacology and Therapeutics-IA Th.	03	PHML 221	Pharmacology and Therapeutics-IB Th.	03
PHMG 211	Pharmacognosy-IA (Basic) Th.	03	PHMG 221	Pharmacognosy-IB (Basic) Th.	03
PHMP-211	Pharmacy Practice-IA (Pharmaceutical Mathematics)	03	PHMP 221	Pharmacy Practice-IB (Bio-statistics)	03
Course No.	Subject (Lab Courses)	Cr. Hr.	Course No.	Subject (Lab Courses)	Cr. Hr.
PHMC 212	Pharmaceutics-IIA (Dosage Forms Science) Lab.	01	PHMC 222	Pharmaceutics-IB (Dosage Forms Science) Lab.	01
PHMC 214	Pharmaceutics-IIIA (Pharmaceutical Microbiology & Immunology) Lab.	01	PHMC 224	Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) Lab.	01
PHML 212	Pharmacology and Therapeutics-IA Lab.	01	PHML 222	Pharmacology and Therapeutics-IB Lab.	01
PHMG 212	Pharmacognosy-IA (Basic) Lab.	01	PHMG 222	Pharmacognosy-IB (Basic) Lab.	01
<b>Total Cr. Hr. 22</b>			<b>Total Cr. Hr. 21</b>		

#### 3<sup>rd</sup> Professional Pharm. D

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Course No.	Subject (Theory Courses)	Cr. Hr.	Course No.	Subject (Theory Courses)	Cr. Hr.
PHMP-311	Pharmacy Practice-IIA (Dispensing Pharmacy) Th.	03	PHMP-321	Pharmacy Practice-IB (Community Social & Administrative Pharmacy)Th.	03
PHMH-311	Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Th.	03	PHMH-321	Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) Th.	03
PHML 311	Pharmacology and Therapeutics-IIA Th.	03	PHML 321	Pharmacology and Therapeutics-IIB Th.	03
PHMG 311	Pharmacognosy-IIA (Advanced) Th.	03	PHMG 321	Pharmacognosy-IIB (Advanced) Th.	03
PHML 313	Pathology Th.	03	PHMP-322	Pharmacy Practice-III (Computer and its Applications in Pharmacy) Th.	03
Course No.	Subject (Lab Courses)	Cr. Hr.	Course No.	Subject (Lab Courses)	Cr. Hr.
PHMP-312	Pharmacy Practice-IIA (Dispensing Pharmacy) Lab.	01	PHMP-324	Introduction to Clinical Pharmacy Th.	03
PHMH-312	Pharmaceutical Chemistry-IIIA (Pharmaceutical Analysis) Lab.	01	PHMH-322	Pharmaceutical Chemistry-IIIB (Pharmaceutical Analysis) Lab.	01
PHML 312	Pharmacology and Therapeutics-IIA Lab.	01	PHML 322	Pharmacology and Therapeutics-IIB Lab.	01
PHMG 312	Pharmacognosy-IIA (Advanced) Lab.	01	PHMG 322	Pharmacognosy-IIB (Advanced) Lab.	01
PHML 314	Pathology Lab.	01	PHMP-323	Pharmacy Practice-III (Computer and its Applications in Pharmacy) Lab.	01
<b>Total Cr. Hr. 20</b>			<b>Total Cr. Hr. 22</b>		

#### 4<sup>th</sup> Professional Pharm. D

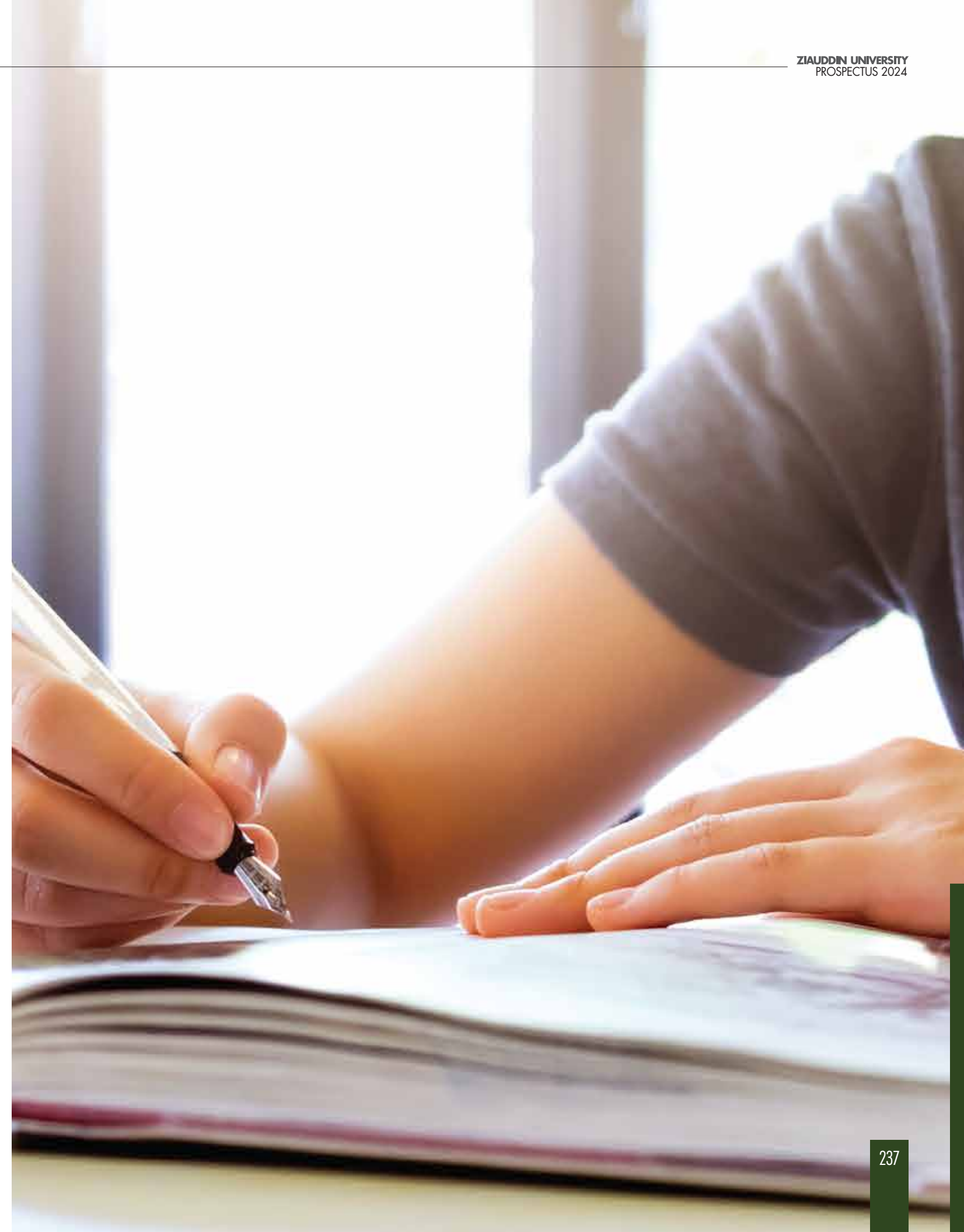
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Course No.	Subject (Theory Courses)	Cr. Hr.	Course No.	Subject (Theory Courses)	Cr. Hr.
PHMP 411	Pharmacy Practice-IVA (Hospital Pharmacy) Th.	03	PHMP 421	Pharmacy Practice-IVB (Hospital Pharmacy) Th.	03
PHMP 412	Pharmacy Practice-VA (Clinical Pharmacy-I) Th.	03	PHMP 422	Pharmacy Practice-VB (Clinical Pharmacy-I) Th.	03
PHMC 411	Pharmaceutics-IVA (Industrial Pharmacy) Th.	03	PHMC 421	Pharmaceutics-IVB (Industrial Pharmacy) Th.	03
PHMC 413	Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics) Th.	03	PHMC 423	Pharmaceutics-VB (Biopharmaceutics & Pharmacokinetics) Th.	03
PHMC 415	Pharmaceutics-VIA (Pharmaceutical Quality Management) Th.	03	PHMC 425	Pharmaceutics-VIB (Pharmaceutical Quality Management) Th.	03
PHMG 411	Pharmacognosy-III (Clinical) Th.	02	Course No.	Subject (Lab Courses)	Cr. Hr.
Course No.	Subject (Lab Courses)	Cr. Hr.	PHMP 423	Pharmacy Practice-VB (Clinical Pharmacy-I) Lab.	01
PHMP 413	Pharmacy Practice-VA (Clinical Pharmacy-I) Lab.	01	PHMC 422	Pharmaceutics-IVB (Industrial Pharmacy) Lab.	01
PHMC 412	Pharmaceutics-IVA (Industrial Pharmacy) Lab.	01	PHMC 424	Pharmaceutics-VB (Biopharmaceutics & Pharmacokinetics) Lab.	01
PHMC 414	Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics) Lab.	01	PHMC 426	Pharmaceutics-VIB (Pharmaceutical Quality Management) Lab.	01
PHMC 416	Pharmaceutics-VIA (Pharmaceutical Quality Management) Lab.	01	<b>Total Cr. Hr. 19</b>		
<b>Total Cr. Hr. 21</b>					

### 5<sup>th</sup> Professional Pharm. D

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Course No.	Subject	Cr. Hr.	Course No.	Subject	Cr. Hr.
PHMC 511	Pharmaceutics-VIIA (Pharmaceutical Technology)Th.	03	PHMC 521	Pharmaceutics-VIIB (Pharmaceutical Technology)Th.	03
PHMP-511	Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II) Th.	03	PHMP-521	Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Th.	03
PHMP-512	Pharmacy Practice-VIIA (Forensic Pharmacy) Th.	03	PHMP-522	Pharmacy Practice-VIIB (Forensic Pharmacy) Th.	03
PHMP-513	Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) Th.	03	PHMP-523	Pharmacy Practice-VIIIB (Pharmaceutical Management & Marketing) Th.	03
PHMH-511	Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th.	03	PHMH-521	Pharmaceutical Chemistry-IVB (Medicinal Chemistry) Th.	03
<b>Course No.</b>	<b>Subject (Lab Courses)</b>	<b>Cr. Hr.</b>	PHMP-524	Pharmacy Practice-IX (Pharmaceutical Sales & Entrepreneurship) Th.	02
PHMC 512	Pharmaceutics-VIIA (Pharmaceutical Technology)Lab.	01	<b>Course No.</b>	<b>Subject (Lab Courses)</b>	<b>Cr. Hr.</b>
PHMP-514	Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II) Lab.	01	PHMC 522	Pharmaceutics-VIIB (Pharmaceutical Technology)Lab.	01
PHMH-512	Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Lab.	01	PHMP-525	Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II) Lab.	01
<b>Total Cr. Hr. 18</b>			PHMH-522	Pharmaceutical Chemistry-IVB (Medicinal Chemistry) Lab.	01
			<b>Total Cr. Hr. 20</b>		

### Pharm.D Five-Year Credit Hours Summary

Pharm. D	1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	Total
Professional	Cr. Hr.	Cr. Hr.	Cr. Hr.
1 <sup>st</sup>	23	19	42
2 <sup>nd</sup>	22	21	43
3 <sup>rd</sup>	20	22	42
4 <sup>th</sup>	21	19	40
5 <sup>th</sup>	18	20	38
<b>Total Credit Hours</b>	<b>104</b>	<b>101</b>	<b>205</b>





## LEARNING AND TEACHING STRATEGIES

The following learning methods/strategies are used to promote better understanding;

- PBL (Problem Based Learning)
- Lectures
- Practical
- Assignments
- Presentations/Seminars
- Field visits  
(Clinical Training/Pharmaceutical Industries)

## STUDENT ASSESSMENT METHODS

- Written and practical examinations.
- Student log books or written reports
- Viva Voce
- Group or individual presentations
- Short answer written papers
- MCQs

## REGULAR SEMESTER EXAMINATION

It consists of the following;

- **Internal Continuous Assessment Tests:**
- **Theory**

Each course per semester carries 60 marks, which is marked as following:

- Midterm Exams 20 marks conducted by Department of Examination Ziauddin University
- Quizzes/Class Tests 20 marks
- Assignments/Presentations 20 marks
- **Lab**
- Midterm Viva Exams 20 marks
- Quiz 10 marks
- Lab Performance 10 marks
- Lab manual 10 marks

### Final Semester Examination:

It is conducted by the Examination Department of Ziauddin University and held at the end of each semester. It carries 40 marks for each theory course and 50 marks for each lab course.

## WINTER SEMESTER

A student who has either failed or has been stopped from taking the examination due to a shortage of attendance (less than 80%) or to improve his/her grade is allowed to register for the winter semester.

Winter semester will be offered as an optional semester of eight weeks duration. Students will be offered courses to remove deficiencies or pass the courses, and they may register for up to 9 credit hours. The course in the winter semester will be offered with a minimum course registration of three students. In case of a smaller number of students, they will be admitted in the next year's winter semester.

### Repeating Courses/Improvement of CGPA

If a student receives an "F" grade, he/she will be required to repeat the particular course in the winter semester. However, the F grade obtained earlier will be mentioned on the transcript. Undergraduate students may be allowed to repeat the course in which he/she has obtained grade C or below. Under such circumstances, both the grades will be displayed on the transcript. However, only the improved grade shall be used in the calculation of the CGPA.

In the case of CGPA improvement, the grade would be recorded with 'imp' on the transcript.

## GRADE & GRADE POINT

Grade	Grade Point	% Equivalence	Remarks
A	4.00	85 and above	
A-	3.66	80–84	
B+	3.33	75–79	
B	3.00	71–74	
B-	2.66	68–70	
C+	2.33	64–67	
C	2.00	61–63	
C-	1.66	58–60	
D+	1.30	54–57	
D	1.00	50–53	
F	0.00	Below 50	
I (Incomplete)	0.0	-	Did not complete as mentioned 15.5/-15.68 *
W (Withdrawl)	0.0	-	Withdrawal from the course is allowed till the 6th week of semester. At the 6th week, students will be awarded <b>F</b> Grade
X (Exempted)	0.0	-	In case migration from other institution or studied courses in exchange programme **

## ELIGIBILITY FOR SEMESTER EXAMINATION

A cumulative attendance report of seventeen weeks (one semester) is displayed at the end of the semester. A student has to secure 80% attendance in each course (Theory & Lab.)

Attendance will be marked on CMS and eligibility will be generated accordingly from CMS.

## PROMOTION POLICY

Students shall be promoted to next higher class after passing at least 60% courses of the current year and 100% courses of the previous year(s).

## REQUIREMENT FOR THE AWARD OF PHARM.D

- A student must have passed all prescribed courses of Pharm.D Programme as per HEC & PCP criteria.

## GOLD MEDAL

At the time of the convocation, a Gold Medal, "Sir Ziauddin Gold Medal" is awarded by Ziauddin University to a student achieving highest CGPR but not less than 3.4 CGPR in Pharm.D.

The candidate will not qualify for Gold Medal even if he/she has achieved the highest CGPR, if he/she has appeared in the winter semester or grade improvement exams.

## CLINICAL TRAINING

Students of Faculty of Pharmacy & Pharmaceutical Sciences, Ziauddin University are lucky to be a part of an institute with the large set-up of hospitals & clinical practice. To make best use of this opportunity, we have given much emphasis on the clinical side of the profession which is the very soul of Pharm.D programme. This is a requirement of the curriculum as approved by Pharma-

cy Council of Pakistan. This training also provides a better chance of learning and practicing the skills in these fields. No Pharmacy institution in the country has such an ideal situation for the training as Ziauddin University has. This training enables these future Pharmacists to play a vital role in the improvement of quality of healthcare in our society. This will bring a unique difference between its graduates and graduates of other Pharmacy institutions of the country. It will not be out of place to mention that Pharm.D is a patient oriented programme rather than product oriented four-year B.Pharm degree of the past. Students of 4th & 5th professionals complete this training in Pharmaceutical service centres of Ziauddin Hospitals (In-patient pharmacy, emergency room pharmacy, ambulatory dispensing area, bulk store, out-patient pharmacy, satellite pharmacy) and different wards like Medical ICU, Cardiac care unit, Neonatal care unit, cardiac ward, Neuro./Psychiatry ward, Gastroenterology ward, Gynaecology ward, Paediatric ward, Dialysis centre. This training is conducted at all three sites of Dr. Ziauddin Hospital i.e. North Nazimabad, Clifton & Kemari (KDLB).

The main objectives of clinical training are:

- To develop students' communication skills for effective interaction with patients and with practitioners of other health professions
- To help students develop a patient awareness in the practice of Pharmacy
- To enable students to integrate the knowledge acquired in course work prior to clinical exposure, and to apply it to the solution of real problems, and to help students become more aware of the general methods of diagnosis and patient care specifically related to drug therapy.

### COMMUNITY PHARMACY TRAINING AT ZIAUDDIN

Community pharmacy training programmes focused on advancing skills in direct patient care, patient care service development and practice management. This is the unique training programme offered by Ziauddin Faculty of Pharmacy & Pharmaceutical Sciences, not

available anywhere else in Pakistan. Following are the main objectives of our community training:

- To produce professionally competent pharmacists.
- To serve the community as a drug specialist.
- To enable the students to have sound knowledge and practical exposure to;
  - i. Community Pharmacy and its organisation.
  - ii. Epidemiology and its control.
- To educate and counsel the patient.
- To control drug abuse and misuse.
- To control drug inventory.
- To develop a better understanding of principles of health promotion and patient care programmes such as immunisation in community.

### PHARMACY RESIDENCY PROGRAMME

In order to expand graduates' professional skills and to develop a patient oriented attitude, one year Pharmacy Practice Residency programme has been started in the clinical and hospital pharmacy. This is a one year training programme for the graduate of Ziauddin Faculty of Pharmacy & Pharmaceutical Sciences. The programme aims to provide professional experience in different fields of pharmacy practice such as inpatient pharmacy, outpatient pharmacy, oncology pharmacy, nutrition pharmacy etc.

At the end of this programme, certificates are awarded to graduates who successfully complete the programme. During the residency period a reasonable stipend is also given to the trainees. This is the only institution of Pakistan which offers such specialised training programme based on Pharmaceutical care system.

### INDEPENDENT CLINICAL PHARMACY ROUNDS

The objective of this programme is to ensure rational use of medicines in Dr. Ziauddin Hospital. It allows the clinical pharmacy faculty to specialise in clinical pharmacy practice and developing clinical skills such as patient profile review, drug information, patient medication history and discharge patient counselling.

### EXTRACURRICULAR ACTIVITIES

Students of Pharmacy always remain at the forefront in organizing activities of academic & non academic nature. These activities include

- Annual Pakistan Tour
- Inter and intra departmental sports Competitions
- Inter and Intra departmental debate competitions.
- Donation Drives
- Annual picnic
- Annual Dinner
- Recruitment drives

Under the patronage of Student Advisor various clubs/societies have been formulated to facilitate student's activities in many aspects, which are as under;

- Community Welfare Society
- Leisure Club
- Literary Society
- Scientific Club
- Sports Club
- Alumni Club

### INDUSTRIAL VISITS

Industrial tours to different pharmaceutical industries are arranged frequently to make the students aware of the students with basic practices of manufacturing, quality control and quality assurance of medicines. These tours enable the students to relate their theoretical knowledge with different unit

operations involved in dosage forms manufacturing and different QC and QA techniques to maximise the product quality.

### CAREER OPPORTUNITIES

Pharmacy offers a challenging, satisfying and rewarding career to the individual whose interest lies in health services, business, scientific research, university teaching and hospital practice. Pharmacists advise their patients, and other health practitioners in the selection of, dosages, drug-drug interactions, and side effects of medications, as well as monitor the health and progress of patients to ensure that they are using their medications safely and effectively.

Areas where services of pharmacists are required include;

- Hospital Pharmacy/Clinical Pharmacy
- Pharmaceutical Industry
- Community Pharmacy
- Academia
- Pharmaceutical Marketing
- Drug control administration
- Research & Development
- Armed Forces
- Regulatory Authorities

Many opportunities for pharmacists with Pharm.D degree are available in U.S.A, Canada, Australia & Middle East.



## MPHIL AND PHD PROGRAMME

This programme is designed to prepare students for teaching and research careers in academia, the pharmaceutical industry, hospitals and research institutes. Students are expected to select an area of specialisation from one of the pharmaceutical science disciplines including Pharmacology, Pharmaceutical Chemistry, Pharmaceutics, Pharmacognosy and Pharmacy Practice.

The M.Phil and Ph.D programme consists of course work, presentations, research and publications. The objective of the programme is to provide a thorough understanding of the subject. In addition, students can choose from a variety of elective courses that allow them to gain knowledge and skills which may be used for a career of independent research and teaching in pharmacy for academic institutions, industrial laboratories, hospital or government research and administrative agencies.

The University places emphasis on excellence in research, making every effort to ensure that students are able to commit as much time as possible to their research projects, which allows them to earn the M.Phil or Ph.D degree in a timely fashion.

### DISCIPLINES OFFERED

#### M.Phil

- Pharmacology
- Pharmaceutics
- Pharmaceutical Chemistry
- Pharmacognosy
- Pharmacy Practice

#### Ph.D

- Pharmacology
- Pharmaceutics
- Pharmaceutical Chemistry
- Pharmacognosy
- Pharmacy Practice

### ADMISSION POLICY

The admission for post graduate degree programmes (MPhil and Ph.D) is announced once an academic year. Strong adherence to governing HEC rules is observed at the time of admission. All candidates are selected on merit following evaluation of academic record, GAT and interview.

### ELIGIBILITY CRITERIA

#### For MPhil Programme

Pharm. D / B.Pharm (4 years) degree from any HEC recognised university. Candidates must have passed NTS GAT exam or Entry Test of ZU with 50% marks.

#### For Ph.D Programme

MPhil/M.S/Equivalent Degree in relevant field of Pharmacy from any HEC recognised university with minimum CGPA 3.0 (out of 4.0 in semester system) or First Division (in annual system) and must meet all admission criteria of HEC, candidates must passed GAT Subjective (NTS or Ziauddin university based with minimum cumulative score of 60% or 70% respectively).

### FEE STRUCTURE

#### M.Phil

Admission Fees:	Rs. 32,000/-
Tuition Fees (per semester):	Rs. 120,000/-
Semester Exam (per semester):	Rs. 6,000/-
Thesis Defense:	Rs. 50,000/-

#### Ph.D

Admission Fees:	Rs. 32,000/-
Tuition Fees (per semester):	Rs. 120,000/-
Semester Exam (per semester):	Rs. 6,000/-
Thesis Evaluation Fee: USD 300 / Evaluator / Attempt	
Thesis Defense:	Rs. 100,000/-

Note: Any additional taxes imposed by the government will be the liability of the students/parents/guardian.

The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.

Advance fees to be paid semester-wise. All dues need to be cleared within two weeks of commencement of the academic year. 2% surcharge per month will be levied on outstanding fees after the due date.

### LEARNING AND TEACHING STRATEGIES

- Course work in the respective field of specialisation will enable students to comprehend central issues or problems in the field.
- Discussion on the sources of literature will enable students to develop the skills to select, read and survey the recent developments in any particular area of research.
- Assignments including term papers on various research topics to be prepared by students during the course work.
- Participation in the journal club on weekly basis.
- Presentations of research papers at a journal club.
- Preparation and presentation of synopsis for the thesis.
- Carrying out research projects in participation with other students as a part of assignments.
- Leading undergraduate students in research as a project or getting them involved in their own research project.
- Presentations of posters in conferences and symposia.
- Presentations in symposia and conferences of research work.
- Writing research papers and publications in national and international journals.

### SEMESTER SUMMARY

**Pharmaceutics:** The students will learn the advanced level the immunity, infection, virology, microbial control and antimicrobial agent. The application of Pharmacokinetics and Pharmaceutical Biotechnology in the field of Pharmacy is taught along with the advanced level of the physical & biological principles which apply to the design, development, and evaluation of drug delivery systems.

**Pharmacology:** This subject deals with advance Pharmacokinetics and Pharmacodynamics knowledge of drugs, therapeutic study of the cardiovascular system, therapeutic modalities to treat cancer and management of antimicrobial therapy, study of common toxicity syndromes and standard protocols and pharmacology of derived autacoids.

**Pharmacognosy:** The programme focuses on the biosynthesis of secondary metabolites, isolation, purification, and characterization of natural compounds. The programme also includes research methodologies, experimental design, and statistical analysis, and equips students with the skills to plan and execute experiments and analyses research findings.

The programme emphasizes the management of diseases using herbal medicines. Additionally, students develop a research proposal that undergoes evaluation and approval before conducting original research presented in the form of a dissertation or thesis.

**Pharmaceutical Chemistry:** The curriculum for the M.Phil. & Ph.D. in Pharmaceutical Chemistry aims to strengthen and formalize students' extensive foundational knowledge and skills in the areas of drug design, stability, nanochemistry, chromatographic and electrochemical techniques, natural products and phytochemistry, spectrophotometric analysis and elucidation, synthesis of active pharmaceutical ingredients, advanced organic and medicinal chemistry, and targeted synthesis by computer-aided drug design.

**Pharmacy Practice:** The Pharmacy Practice programme will cater the needs of the clinical, hospital, industrial and retail pharmacy set up. Pharmacy Practice programme is a post graduate programme which is first of its kind in Pakistan that would offer the masters a platform to develop advanced skills and knowledge which can be applied for the betterment of their profession and healthcare. It would help in equipping the practicing pharmacists with the skills to progress into higher level clinical roles within healthcare organizations. Pharmacy Practice would be able to develop valuable practical skills including written and oral communication, and the ability to design a project, collect, analyze and interpret data.

### ATTENDANCE

Minimum 75 % attendance in a course is required to appear in the examination of that course.

### EXAMINATION

In each semester, students may be required to appear in quizzes, tests, mid-semester, final semester examinations, presentations (individual/group), group discussion, and submit projects/assignments/lab reports, studio work etc. These assessment marks (to be determined by the teacher concerned) will have different weightage contributing towards the overall assessment in percent marks. This weightage may be determined on the basis of the following table:

### COURSE SUBJECT MARKS DISTRIBUTION

Sr.No	Description	Theory of Max. 100 Marks	
		Marks Distribution	
i.	Continuous Assessment		
	• Quizzes/Class Test(s)	10	
	• Class Clinical Assignments/Project Presentation	10	
	• Mid Semester Exam	30	
ii.	Final Semester Exam:	50	
	<b>Total Marks</b>	<b>100</b>	

### GRADE & GRADE POINT

Grade	Grade Point	% Equivalence	Remarks
A	4.00	85 and above	
A-	3.66	80 – 84	
B+	3.33	75 – 79	
B	3.00	71 – 74	
B-	2.66	68 – 70	
C+	2.33	64 – 67	
C	2.00	61 – 63	
C-	1.66	58 – 60	
D+	.30	54 – 57	
D	1.00	50 – 53	
F	0.00	Below 50	
I (Incomplete)	0.0	-	Did not complete as mentioned 15.5/-15.68 *
W (Withdrawl)	0.0	-	Withdrawal from the course is allowed till the 6th week of semester. At the 6th week, students will be awarded <b>F</b> Grade
X (Exempted)	0.0	-	In case migration from other institution or studied courses in exchange programme **

### CGPA REQUIRED FOR THE COMPLETION OF POSTGRADUATE PROGRAMME - MPHIL/PHD

1. For completion of Ph.D degree, the minimum qualifying CGPA is 3.00 (For M.Phil 2.50).  
 2. In case a student secures less than 3.00 CGPA (2.50 for M.Phil) (minimum qualifying CGPA) at the end of final Semester, she/he may be allowed to get re-admission in one or more courses, in which his/her grade is C or below, provided that she/he is not debarred under the CGPA Improvement and time duration specified for the programme.

### WINTER SEMESTER

1. Winter semester will be offered as an optional semester of 8 weeks duration. Students will be offered courses to remove deficiencies and can register up to 9 credit hours for the winter semester.  
 2. Moreover, a student who has either failed or has been stopped to take the examination due to a shortage of class attendance or wishes to improve his/her grade is allowed to register in the winter semester.  
 3. The contact hours per week during the Winter Semester will be doubled to ensure that the course is completely taught in a winter session with half of the duration as compared to a regular (Fall/Spring) semester.  
 4. All the qualifying rules for the Fall/Spring semester will be applicable to the winter semester.  
 5. The course in the winter semester will be offered with the minimum course registration of

03 students (where intake of students is small, minimum course registration should be 50%, failure students)  
 6. In case of less number of students, the student will be admitted in next year winter semester.

### CAREER OPPORTUNITIES

- A postgraduate qualification can enhance the career and earning prospects, and sets apart from other students who only hold an undergraduate degree.
- Postgraduate studies will enable a student to operate effectively at a senior level and go on to successful careers in business, industry and academia.
- Postgraduate study can also equip a student with the knowledge and skills, anyone need to move into a different profession.
- It is the pathway to an academic career.

Areas where Postgraduate students can serve are;

- R&D sectors/firms involved in Drug Designing, Pharmaceutical Product Development and Medicine related researches like Clinical trials, Pharmacovigilance, Pharmacokinetics/Pharmacodynamics studies.
- Individual Entrepreneurs like consultants/advisors (Training/Workshops/Consultancy/Publishing etc)
- Pharmaceutical Industrial sector
- Regulatory Bodies/Authorities (Drug Regulatory Authority of Pakistan, MOH, Drug Control Administration.)





## PHARMACY TECHNICIAN PROGRAMME (B CATEGORY)

### INTRODUCTION

Keeping in view the growing demand and job opportunities at national and international level Ziauddin University has decided to undertake this noble task of offering a two year Pharmacy Technician Course. In this two year diploma course, students are required to study and have training in the subjects of pharmaceuticals, hospital pharmacy, dispensing pharmacy, anatomy, physiology, pharmacology, pharmacognosy, microbiology and biochemistry.

### ELIGIBILITY CRITERIA

Matriculation Examination (Secondary School Certificate Examination) with Science.

### CAREER OPPORTUNITIES

Pharmacy Technicians can work in a variety of locations, usually in community, retail and hospital pharmacies but also sometimes in long term care facilities as well as with pharmaceutical manufacturers, distributors or in government or teaching hospital facilities.

### FEES STRUCTURE

Admission Fee	15,000
Security Deposit	5,000
Tuition Fees	65,000 Annually
Examination Fees	Semester Examination Fee Charged as per actual (Submitted to Pharmacy Council of Sindh)
Registration Fees	Charged as per actual (PCP)
Total Fees for 1st Year	85,000



# COLLEGE OF PHARMACEUTICAL SCIENCES



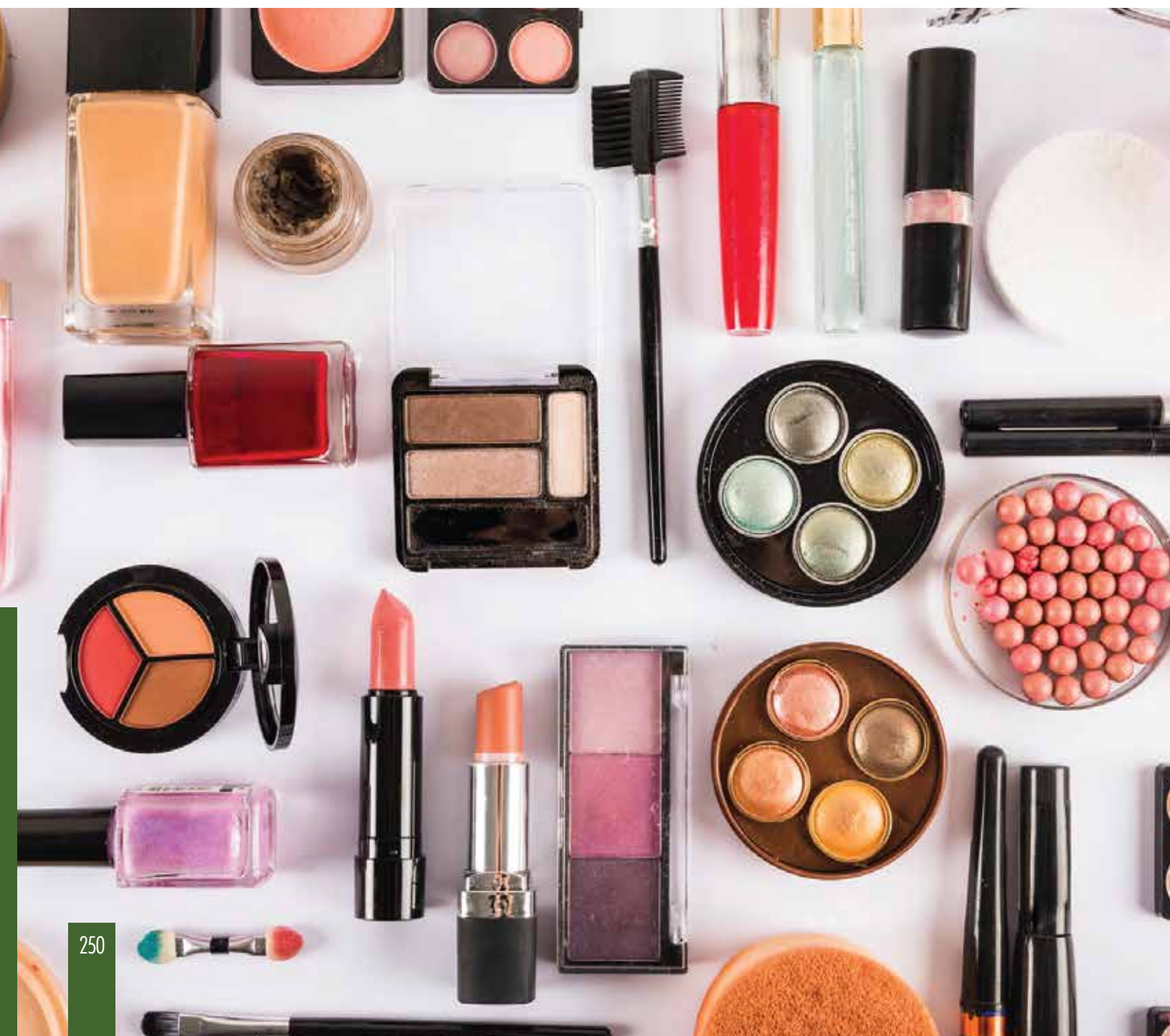
## INTRODUCTION

The College of Pharmaceutical Sciences (CPS) covers the Pharmaceutical, nutritional, cosmetics and aesthetic sciences needed for professional growth in the present era. College of Pharmaceutical Sciences started first batch in BS Cosmetic Science in 2023. The 4 years' degree program offers to contribute to the development and best utilization of the cosmetic products which could help to improve the overall health and beautification with great aesthetic excellence. The nutrition

department of College of Pharmaceutical Sciences is the next focusing target to be achieved with the aim to improve the overall health condition globally. The College of Pharmaceutical Sciences believes in quality education system with project-based learning, research environment and practical exposure to the students.

## PROGRAMMES

- BS in Cosmetic Sciences



## BS IN COSMETIC SCIENCES

### INTRODUCTION

Ziauddin University is proud to introducing a new programme BS in Cosmetic science, recognized by HEC. With 4 years (i-e; 8 semesters) of thorough course, step into the new world of Beauty, Fragrances and Cosmetics to become a qualified Cosmetic Scientist.

Pursue diverse roles as a cosmetic chemist, cosmetic merchandiser, cosmetic therapist and much more. We offer Excellent Learning Environment built by our highly qualified and well-trained teaching faculty, well-equipped laboratories and State of the Art building.

#### A Cosmetic Science Graduate can:

- Become an Entrepreneur
- Start own business using e-Commerce

- Formulate and test cosmetic products
- Run a Cosmetic Clinic
- Grab an appealing job in Cosmetic Industry
- Provide consultation Beauty Parlors and SPA

### ELIGIBILITY CRITERIA

A-level, HSC or Equivalent with premedical subjects securing 50% Marks.

### DURATION

**Programme:** BS in Cosmetic Sciences

**Duration:** 4 years (8 Semesters):

**Broad Discipline:** Natural Science

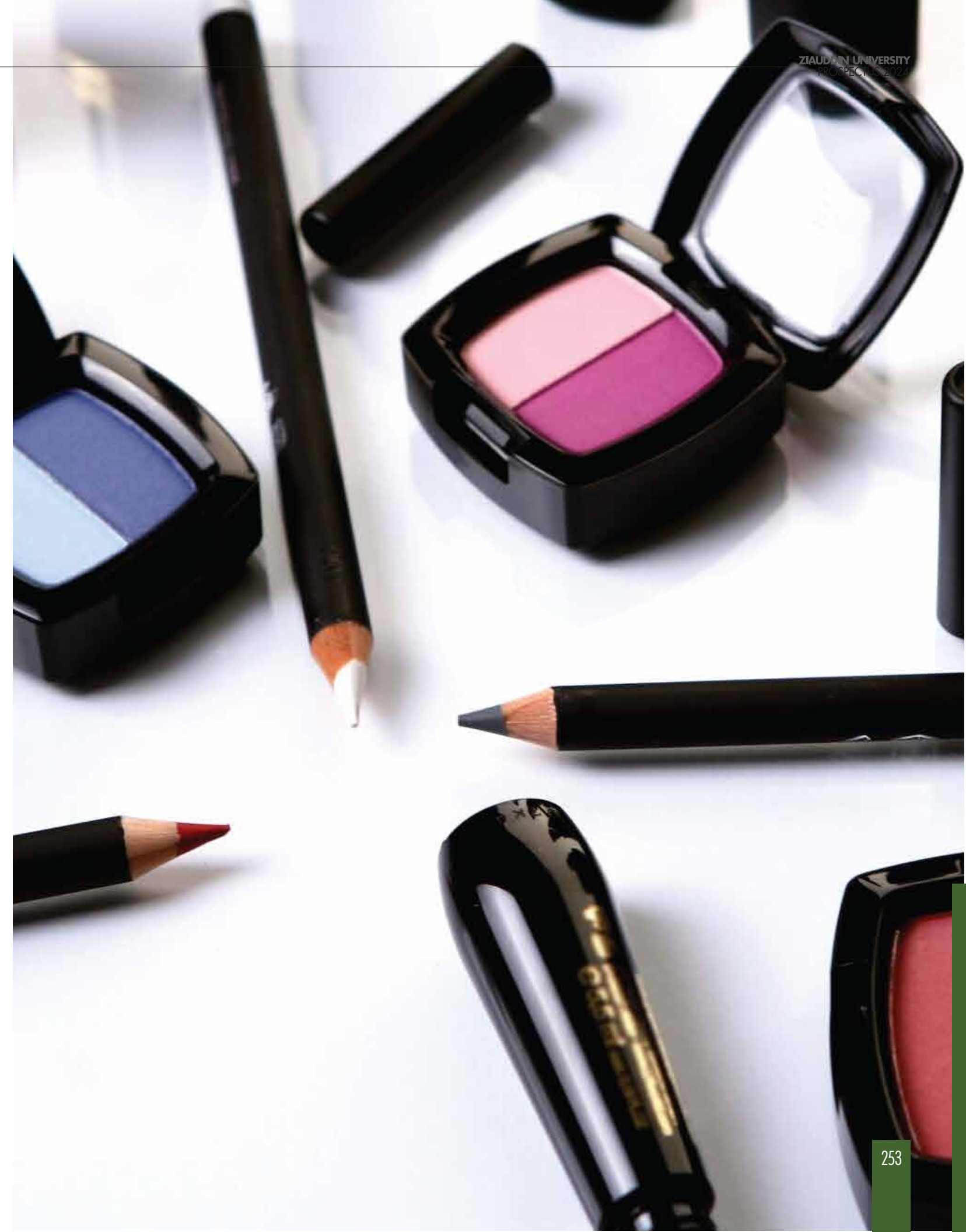
**Objective:** To produce an expert in cosmetic sciences with a sound knowledge of cosmetics, perfumes, and personal care products.

### SCHEME OF STUDY

1 <sup>st</sup> YEAR					
1 <sup>st</sup> Semester			2 <sup>nd</sup> semester		
Course No	Subject (Theory Courses)	Credit Hours	Course No	Subject (Theory Courses)	Credit Hours
CSM-301	Introduction to Cosmeceutical Sciences	3	CSM-302	Traditional Cosmetics	3
CSM -303	Physiology	3	CSM -304	Anatomy and Histology	3
CSM -305	Organic Chemistry	3	CSM -306	Biochemistry	3
CSM -307	Microbiology	3	CSM -308	Dermatology I	3
CSM -309	English	3	CSM -310	Islamiat	2
Course No	Subject(Lab Courses)	Credit Hours	Course No	Subject(Lab Courses)	Credit Hours
CSM -311	Physiology	1	CSM -312	Anatomy and Histology	1
CSM -313	Organic Chemistry	1	CSM -314	Biochemistry	1
CSM -315	Microbiology	1	CSM -316	Dermatology I	1
<b>Total Credit Hours</b>		<b>18</b>	<b>Total Credit Hours</b>		<b>17</b>

## FEES STRUCTURE

<b>1ST YEAR - 1ST SEMESTER FEE:</b>	
Admission Fee	Rs. 10,000/- (Non Refundable)
Tuition fee	Rs. 54,000/- (Per Semester)
Semester Examination Fee	Rs. 9,000/-
<b>Other Charges</b>	
Security Deposit	Rs. 5,000/- (Refundable)
Semester Charges	Rs. 5,000/-
Student Activity Fee	Rs 2,000
Total Other Charges	Rs. 12,000/-
1st Semester Fee	Rs. 85,000/-
<b>1ST YEAR - 2ND SEMESTER FEE:</b>	
Tuition Fee	Rs. 54,000/-
Semester Examination Fee	Rs. 8,000/-
Student Activity Fee	Rs. 2,000
2nd Semester Fee	Rs. 64,000/-





## FACULTY MEMBERS

### FACULTY OF PHARMACY AND PHARMACEUTICAL SCIENCES

DEAN  
PROF. DR. RAHELA IKRAM  
B.PHARM., M. PHARM., PH.D., (KU) R.PH.

### COLLEGE OF PHARMACY

**PRINCIPAL**  
PROF. DR. NUDRAT FATIMA  
B. PHARM., M.PHIL., PH.D. (K.U), R.PH.

### DEPARTMENT OF PHARMACEUTICS

**PROFESSOR**  
DR. ADEEL ARSALAN  
B. PHARM., (B.M.U), M. PHARM., (K.U),  
PH.D. (B.M.U), R.PH.

DR. ZEB-UN-NISA  
B. PHARM., M.PHIL., PH.D. (K.U), R.PH.

### ASSOCIATE PROFESSORS

DR. SYED IMRAN ALI (HOD)  
B. PHARM., M.PHARM., PH.D. (K.U), R.PH.

DR. SHAZIA ALAM  
B. PHARM., M.PHARM., PH.D. (K.U), R.PH.

DR. MAQSOOD AHMED KHAN  
B. PHARM., M. PHARM. (K.U), MBA (PAF KIET),  
PH.D. (K.U), R.PH.

### ASSISTANT PROFESSORS

DR. MARIA ASHFAQ  
PHARM. D., M.PHIL. (Z.U), R.PH.

DR. SYED ADEEL AHMED SHAH  
PHARM.D. M. PHIL (UNI. OF SINDH).

### LECTURER

DR. SIDRA HASSAN  
PHARM. D, (DUHS), M. PHIL. (Z.U), R.PH.

DR. JAVERIA AMEER  
PHARM. D, M. PHIL. (K.U), R.PH.  
DR. FAIZA KHAN  
PHARM. D., (K. U), M.PHIL. (Z.U), R.PH

DR. NIDA GHANI  
PHARM. D. (Z.U), R.PH.

### DEPARTMENT OF PHARMACOGNOSY

**PROFESSOR**  
DR. AMBREEN HUMA (HOD)  
B. PHARM., PH.D. (K.U), R.PH.

### ASSISTANT PROFESSOR

DR. MEHWISH KHAN  
PHARM. D., M.PHIL., PH.D., (JUW), R.PH.

DR. AHMED SHAHID MIRZA  
B.PHARM. (H.U), PHARM.D. (F.U.U.A.S.T),  
M. PHIL. (Z.U), R.PH.

### LECTURER

MS. SANOBER KAMAL  
B. PHARM., (BMU), M. PHIL, (JUW), R.PH

### DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

**PROFESSOR**  
DR. AMIR HASSAN  
B. PHARM., M.PHARM., PH. D, (K.U), R.PH

### ASSISTANT PROFESSORS

DR. HUMA PIRZADA (INCHARGE)  
B. PHARM., M.PHARM., PH. D, (K.U), R.PH.

DR. SYEDA UROOS QAZI  
PHARM. D, M. PHIL, PH. D, (K.U), R.PH.

DR. FAIZA AKHTAR  
PHARM. D., M. PHIL (J.U.W), R.PH.

### LECTURER

DR. NAZIA TABASSUM  
PHARM. D, M. PHIL. (K.U), R.PH.

DR. HIRA ARIF  
PHARM. D, M. PHIL. (K.U), R.PH.

DR. QURAT UL AEN ISMAIL  
PHARM. D, (JMDC), M. PHIL. (K.U), R.PH

### DEPARTMENT OF PHARMACOLOGY

**PROFESSOR**  
DR. GHULAM ABBAS (HOD)  
B. PHARM., PH.D. (K.U), R.PH.

### ASSOCIATE PROFESSORS

DR. SADAF IBRAHIM  
B. PHARM., M. PHARM. (K.U), PH.D. (B.M.U),  
R.PH.

DR. UZAIR NISAR  
B. PHARM. (IUB), M. PHIL. (BZU), PH.D. (K.U),  
R.PH.

### ASSISTANT PROFESSORS

DR. SABA MAJEED  
B. PHARM., M.PHIL., PH.D. (K.U), R.PH.

DR. MUNEEZA LODHI  
PHARM. D. (F.U.U.A.S.T), M.PHIL. PH.D. (Z.U),  
R.PH.

MS. SADIA KASHIF  
B. PHARM., M. PHIL., PH.D. (K.U), R.PH.

DR. TALHA BIN FAYYAZ  
PHARM. D., M.PHIL. (Z.U), R.PH.

DR. HAMMAD AHMED  
PHARM. D. (F.U.U.A.S.T), M.PHIL. (Z.U), R.PH

DR. MEHWISH MURAD ALI  
PHARM. D, M. PHIL. (Z.U), R.PH.

### SENIOR LECTURER

DR. ANUM ARIF  
PHARM. D., M.PHIL., (Z.U), R.PH.

### DEPARTMENT OF PHARMACY PRACTICE

#### PROFESSOR

DR. MIRZA TASAWER BAIG  
PHARM. D., M.PHIL. (F.U.U.A.S.T),  
PH.D. (Z.U), R.PH.

#### ASSOCIATE PROFESSOR

DR. ARIF SABAH (HOD)  
B. PHARM., PHARM. D., M. PHIL., PH.D.  
(B.M.U.), MBA (MAJU), R.PH.

#### ASSISTANT PROFESSORS

DR. SIDRA TANWIR  
B. PHARM., PHARM.D (K.U), M. PHIL (Z.U), R.PH.

DR. SAMINA SHEIKH  
PHARM.D. (J.U.W), M.PHIL. (B.M.U), R.PH.

DR. RASHEEDA FATIMA  
PHARM. D, M. PHIL. (Z.U), R.PH.

DR. NAYEL SYED  
PHARM. D, M. PHIL. (Z.U), R.PH

#### SENIOR LECTURERS

MS. SHEHLA SIDDIQUI  
B.SC. (HONS), M.SC. (K.U)

#### LECTURERS

DR. ANUM SATTAR  
PHARM.D., (FUUSAT)), M.PHIL., (JUW), R.PH

# FACULTY OF NURSING & MIDWIFERY

## KEY INFORMATION

### DEAN

Dr. Pamela Marshall

### CONTACT INFORMATION

Website:

[zufnm.zu.edu.pk](http://zufnm.zu.edu.pk)

Telephone:


+92-21-36648237-9 Ext: 6425, 5595

Fax:

+92-21-36641469

Locate Us:

K-65, Block-F, Allama Rasheed Turabi  
Road, North Nazimabad, Karachi.



"The wisdom encapsulated in Mike Stutman's quote, 'Every person who changed the world has taken responsibility for something that mattered, not just to them, but to mankind,' resonates deeply with me. It serves as a constant reminder of the responsibilities I bear as a student hailing from the breathtaking yet resource-constrained region of the Hunza Valley, situated in the northern areas of Pakistan. Witnessing individuals grappling with common cold-weather ailments such as cough, influenza, and pneumonia in the face of limited healthcare facilities has fueled my determination to pursue a career in a Bachelor of Nursing.

My educational journey at Ziauddin University has been nothing short of an adventure—a transformative experience that has not only shaped me professionally but also as an individual. I had the privilege of learning from distinguished faculty members who, through their excellence and compassion, inspired me to join their mission of community service and create a positive impact. Nursing, for me, transcended being merely a career; it became a passion that brought joy, presented challenges that spurred personal growth, and fostered a sense of fulfillment.

I must acknowledge that the unwavering support of my family and friends, combined with numerous extracurricular activities such as community visits, volunteering in camps, and camaraderie with my classmates, made my time at Ziauddin University truly enjoyable. The university provided the perfect environment for me to pursue my dreams.

Throughout my tenure at this esteemed institution, I have been surrounded by faculty members who not only imparted their knowledge but also assumed the role of mentors, guiding me through the intricacies of my chosen field. Their dedication to excellence has set a high standard, one that I am proud to have embraced. As I look ahead, I am filled with excitement about the future and the boundless possibilities awaiting us. May our paths be marked by continual growth, meaningful contributions, and success."

MEHVISH NAZ  
BSN



## INTRODUCTION

Ziauddin University, Faculty of Nursing and Midwifery, earlier known as the School of Nursing, was the first academic unit at Ziauddin University, established in 1986 and is recognised by Pakistan Nursing Council. In 2009, the School of Nursing was upgraded to the level of a college and became the Faculty of Nursing and Midwifery in 2020. The department offers various programme at the undergraduate and postgraduate level. The students come from varied ethics and socioeconomic backgrounds in Pakistan. The reputation of Ziauddin Faculty of Nursing and Midwifery has grown nationally and internationally owing to the competency, critical thinking and knowledge of the graduates.

## VISION

To be a catalyst for advancement of the nursing profession and healthcare system to achieve universal healthcare.

## MISSION

To strengthen the educational and research mandate for uplifting the Nursing profession and healthcare system by exhibiting effective leadership and collaboration in research, technology, scholarship and innovation.

## AIMS

Ziauddin Faculty of Nursing & Midwifery aims to prepare nurses with the advanced knowledge, skills, and attitude needed to practice efficient and skillful nursing at national and international level. Hence upon graduation, students are able to demonstrate responsibility and accountability to the nursing profession by:

- Adhering to established patterns of professional practices, which support legal, religious, and ethical tenants.
- Utilizing effective critical thinking and problem-solving skills in caring for individuals, families, and communities.
- Integrate scholarly skills and the use of scientific methods in critiquing, and applying existing nursing theories and research findings in selected practice

settings.

- Applying effective verbal and written communication in interpersonal and professional interactions with peers, patients, families, and other professionals.
- Demonstrating a high degree of competence in the use of available resources to support the identified needs of individuals, families, and communities.
- Developing leadership skills to promote the development of the nursing profession.

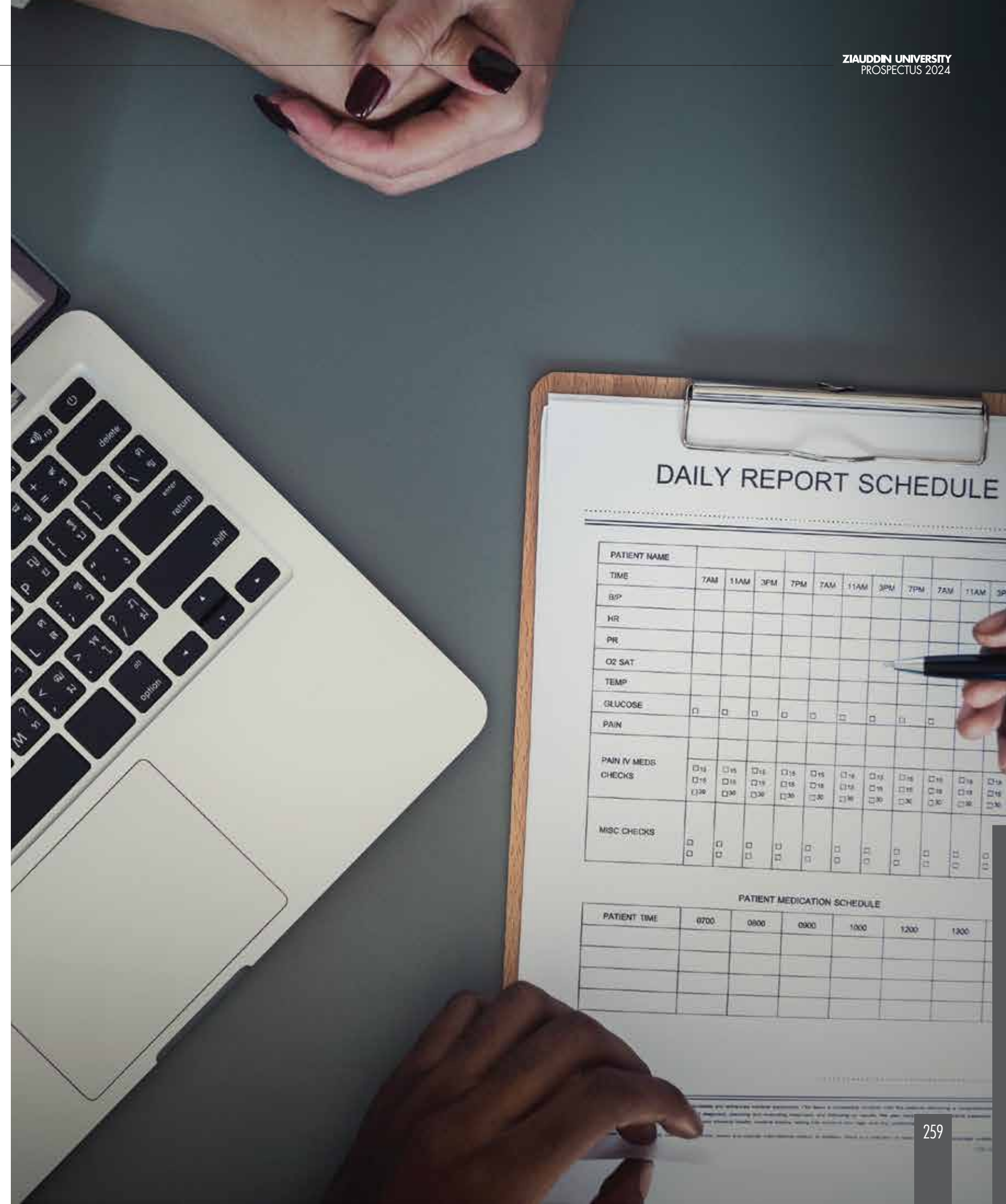
## EDUCATIONAL OBJECTIVES

- Maintain high-quality programmes of learning that prepare nursing students to meet the healthcare needs of individuals, families, and the communities we serve
- Provide effective and efficient support for learning and teaching
- Maintain effective systems of ongoing assessment and evaluation to assure high-quality programmes
- Engage in the discovery of knowledge through scholarly work, teaching, and service to add to the body of nursing science
- Provide an effective infrastructure for research to enhance faculty and student development
- Demonstrate effective critical thinking skills in providing care to individuals, families, and communities by using evidence-based literature and problem-solving skills

### Graduate attributes

The graduates of the Faculty of Nursing and Midwifery will demonstrate competence in clinical judgment, collaborate as members and leaders of inter-professional healthcare teams, and utilize evidence-based interventions that embrace equity and culturally effective care to patients, families, and populations in a scholarly environment that is accountable, respectful, adaptive and innovative.

As caring professionals, they will promote, maintain and restore health; as well as manage illness and provide end-of-life care for diverse individuals, families, populations, and global communities.



## DOCTOR OF PHILOSOPHY IN NURSING

### INTRODUCTION

Ziauddin University, Faculty of Nursing and Midwifery earlier known as the school of nursing was the first academic unit at Ziauddin university established in 1986 and is recognized by Pakistan nursing council. In 2009, the school of nursing was upgraded to the Level of college and becomes the faculty of nursing and midwifery in 2020. The department offers various programme at the undergraduate and post graduate level. The students coming from varied ethnic and socioeconomic backgrounds in Pakistan. The reputation of Ziauddin university faculty of nursing and midwifery has grown nationally and internationally owing to the competency. Critical thinking and knowledge of all programs students.

### MISSION

To develop graduates capable of establishing a program of research that generates nursing knowl-

edge, formulate policies and advances practice related to the health of individuals, families, and communities at all levels of healthcare.

### ELIGIBILITY CRITERIA

- Master of Science in Nursing (MSN) or equivalent, with Bachelor's degree in Nursing (BSN/Post RN BSN) (18 years of education)
- Minimum CGPA 3.00 out of 4.00 scale in a semester system or minimum first division in the annual system in Masters of Science in Nursing (MSN) or equivalent from HEC recognized university
- Passing University's entrance test or a Valid NTS-GAT/GRE score
- Valid IELTS Academic Score 6.5 overall and not less than 6 in any component
- Passing University's interview and research synopsis presentation
- Valid PNC license

### FEE STRUCTURE

Academic Session 2023-2024	Frequency	Fee
Admission Fee (non-refundable)	One Time	180,000
Enrollment Fee	One Time	15,000
Laboratory Charges	One Time	10,000
Students Fund	One Time	15,000
Security Deposit (Refundable)	One Time	15,000
Tuition Fee Year I Semester I	Per Semester	314,760
Examination Fee	Per Semester	12,000
<b>Total=Admission &amp; Semester-I Fee</b>		<b>561,760</b>
Thesis Process Fee (payable in Sem-III)		50,000
Thesis Defense Fee (payable in Sem-VI)		100,000

Note: \*All fee structures are subject to change\*

### REQUIRED DOCUMENTS:

The following documents will be required at the time of interview.

S.#	Attested Photocopies To be Submitted	Original Documents to Be Present.
1	Matric Mark Sheet	Matric Mark sheet
2	Matric Certificate	Matric Certificate
3	Intermediate Mark sheet (FSc. Pre Medical)**	Intermediate Mark sheet (FSc. Pre Medical)**
4	Intermediate Certificate (FSc. Pre Medical)**	Intermediate Certificate (FSc. Pre Medical)**
5	General Nursing Diploma Mark Sheet*	General Nursing Diploma Mark Sheet*
6	General Nursing Diploma Certificate*	General Nursing Diploma Certificate*
7	Specialization Mark Sheet*	Specialization Mark Sheet*
8	Specialization Certificate*	Specialization Certificate*
9	BSN/Post RN BSN Mark Sheet	BSN/Post RN BSN Mark Sheet
10	BSN/Post RN BSN Degree	BSN/Post RN BSN Degree
11	MSN Mark Sheet	MSN Mark Sheet
12	MSN Degree	MSN Degree
13	HEC equivalency certificate of 18 years of education	Domicile
14	NOC from the employer	<b>* For Post RN Qualified Candidate</b>
15	Proposed research project for PhD (write up + Presentation	
16	Statement of purpose (mentioning motivation for seeking admission into PhD programme)	
17	03 Letter of Recommendation (One form Immediate supervisor and two academic references)	
18	Valid PNC License	<b>** For BSN Qualified Candidate</b>
19	Domicile	
20	CNIC/ B.Form	
21	02 Passport Size Photographs	
22	Father's/Guardian's CNIC	

## MASTER OF SCIENCE IN NURSING

### INTRODUCTION

The Master of Science in Nursing (MSN) programme prepares nurse experts in education, advanced practice, and/or management for leadership in nursing. The programme broadens the perspective of students by requiring them to take innovative interdisciplinary approaches to resolve healthcare problems and enhance nursing education.

### MISSION

"To prepare graduates for the professional role as a nurse educator, researchers, nurse administrator or clinical nurse specialist and for providing quality care to the population at all levels of healthcare"

### FEE STRUCTURE

Academic Session 2023-2024	Frequency	Fee
Admission Fee (Non -Refundable)	One Time	144,000
Enrollment Fee	One Time	7,500
Laboratory Charges	One Time	10,000
Students Fund	One Time	15,000
Academic Visit	Per Semester	12,000
Documentation Fee	One Time	15,000
Thesis Process Fee	One Time	60,000
Thesis Defense Fee	One Time	15,000
Security Deposit (Refundable)	One Time	15,000
Tuition Fee Year I Semester I	Per Semester	253,382
Examination Fee	Per Semester	9,900
<b>Total=Admission &amp; Semester-I Fee</b>		<b>556,782</b>

Note: \*All fee structures are subject to change\*

### REQUIRED DOCUMENTS:

The following documents will be required at the time of interview.

S.#	Attested Photocopies To be Submitted	Original Documents to Be Present.
1	Matric Mark Sheet	Matric Mark sheet
2	Matric Certificate	Matric Certificate
3	Intermediate Mark sheet (FSc. Pre Medical)**	Intermediate Mark sheet (FSc. Pre Medical)**
4	Intermediate Certificate (FSc. Pre Medical)**	Intermediate Certificate (FSc. Pre Medical)**
5	General Nursing Diploma Mark Sheet*	General Nursing Diploma Mark Sheet*
6	General Nursing Diploma Certificate*	General Nursing Diploma Certificate*
7	Specialization Mark Sheet*	Specialization Mark Sheet*
8	Specialization Certificate*	Specialization Certificate*
9	BSN/Post RN BSN Mark Sheet	BSN/Post RN BSN Mark Sheet
10	BSN/Post RN BSN Degree	BSN/Post RN BSN Degree
11	01 Year Clinical Experience Letter*	01 Year Clinical Experience Letter*
12	01 Year Internship Letter**	01 Year Internship Letter**
13	02 Year Clinical Experience Letter**	02 Year Clinical Experience Letter**
14	NOC from Concerned Department (If Government Employee OR Sponsored)	Domicile
15	03 Reference Letters	<b>* For Post RN Qualified Candidate</b>
16	Statement of Purpose	
17	Research Intent (02 Pager)	
18	Valid PNC License	
19	Domicile	
20	CNIC/ B.Form	
21	02 Passport Size Photographs	<b>** For BSN Qualified Candidate</b>
22	Father's/Guardian's CNIC	
23	IBCC equivalency letter (in case of O/A level)	



## POST-RN BACHELOR OF SCIENCE IN NURSING

### INTRODUCTION

This is a two-year degree programme. The goal is to prepare nurses to gain in-depth knowledge, skills and develop professional independence, self-directedness, and critical thinking. This programme is offered as an evening programme.

### MISSION

"To produce graduates that can apply a multidisciplinary and integrated approach to nursing education, practice, and research to foster critical

thinking, evidence-based practice and confidence within the ever-changing context of health care"

### ELIGIBILITY CRITERIA

- 03-Year Diploma in General Nursing
- 01 Year Diploma in Midwifery or one year
- Post Basic Specialty Diploma for male candidates in lieu of Midwifery Registered With PNC (Valid)
- Experience:01 Year Experience as a Registered Nurse

### FEE STRUCTURE

Academic Session 2023-2024	Frequency	Fee
Admission Fee (Non -Refundable)	One Time	60,000
Enrollment Fee	One Time	3,000
Laboratory Charges	One Time	10,000
Students Fund	One Time	6,000
Academic Visit	One Time	6,000
Security Deposit (Refundable)	One Time	7,500
Tuition Fee Year I Semester I	Per Semester	54,120
Examination Fee	Per Semester	5,250
<b>Total= Admission &amp; Semester-I Fee</b>		<b>151,870</b>

Note: \*All fee structures are subject to change\*

### REQUIRED DOCUMENTS:

The following documents will be required at the time of interview.

S.#	Attested Photocopies To be Submitted	Original Documents to Be Present.
1	Matric Mark Sheet	Matric Mark sheet
2	Matric Certificate	Matric Certificate
3	Intermediate Mark sheet (FSc. Pre Medical)*	Intermediate Mark Sheet (FSc. Pre Medical)*
4	Intermediate Certificate (FSc. Pre Medical)*	Intermediate Certificate (FSc. Pre Medical)*
5	General Nursing Diploma Mark Sheet	General Nursing Diploma Mark Sheet
6	General Nursing Diploma Certificate	General Nursing Diploma Certificate
7	Specialization Mark Sheet	Specialization Mark Sheet
8	Specialization Certificate	Specialization Certificate
9	Domicile	Domicile
10	Valid PNC License	* If Applicable
11	CNIC/ B.Form	
12	02 Passport Size Photographs	
13	Father's/Guardian's CNIC	
14	IBCC equivalency letter (in case of O/A level)	
15	NOC (If Government Employee)	

## BACHELOR OF SCIENCE IN NURSING

### INTRODUCTION

This is a four year degree programme, leading to practice as a Registered Nurse. The degree programme fosters integrated nursing knowledge, skills, and professional attitude. Upon completion of this programme, the graduate is prepared to be a safe clinical nurse, who will be able to provide comprehensive care at primary, secondary, and tertiary levels within hospitals and community settings.

Moreover, the BSN students will be registered with Pakistan Nursing Council after completing a one-year internship as per the given PNC internship policy and must pass the PNC Licensure examination.

### MISSION

"To produce graduates that can apply a multi-disciplinary and integrated approach to nursing education, practice, and research to foster critical thinking, evidence-based practice and confidence within the ever-changing context of healthcare"

### ELIGIBILITY CRITERIA

- F.Sc (Pre-Medical) with a minimum overall score of 50%
- Domicile: Preference Sindh
- Gender: Male & Female
- AGE: 17-35 years

### FEE STRUCTURE

Academic Session 2023-2024	Frequency	Fee
Admission Fee (Non -Refundable)	One Time	72,000
Enrollment Fee	One Time	3,000
Laboratory Charges	One Time	10,000
Students Fund	One Time	6,000
Academic Visit	Per Semester	6,000
Security Deposit (Refundable)	One Time	6,000
Tuition Fee Year I Semester I	Per Semester	146,850
Examination Fee	Per Semester	5,250
<b>Total= Admission &amp; Semester-I Fee</b>		<b>255,100</b>

Note: \*All fee structures are subject to change\*

### REQUIRED DOCUMENTS:

The following documents will be required at the time of interview.

S.#	Attested Photocopies to be Submitted	Original Documents to Be Present.
1	Matric Mark Sheet	Matric Mark sheet
2	Matric Certificate	Matric Certificate
3	Intermediate Mark Sheet (FSc. Pre Medical)	Intermediate Mark Sheet (FSc. Pre Medical)
4	Intermediate Certificate (FSc. Pre Medical)	Intermediate Certificate (FSc. Pre Medical)
5	Domicile	Domicile
6	CNIC/ B.Form	
7	02 Passport Size Photographs	
8	Father's/Guardian's CNIC	
9	IBCC equivalency letter (in case of O/A level)	



## DIPLOMA IN NURSE MIDWIFERY

### INTRODUCTION

This is a one year programme, leading to a Diploma in Nurse Midwifery applicable for those candidates who have passed RN Examination (Post Basic). The goal of this programme is to reduce the high maternal mortality rates across the country.

### ELIGIBILITY CRITERIA

- RN/Generic BSN and registered with Pakistan Nursing Council (PNC)
- Female

### REQUIRED DOCUMENTS:

The following documents will be required at the time of interview.

S.#	Attested Photocopies To be Submitted	Original Documents to Be Present.
1	Matric Mark Sheet	Matric Mark sheet
2	Matric Certificate	Matric Certificate
3	General Nursing Diploma Mark Sheet	General Nursing Diploma Mark Sheet
4	General Nursing Diploma Certificate	General Nursing Diploma Certificate
5	Valid PNC License	Domicile
6	Domicile	
7	CNIC/ B.Form	
8	02 Passport Size Photographs	
9	Father's/Guardian's CNIC	
10	IBCC equivalency letter (in case of O/A level)	

### FEE STRUCTURE

Academic Session 2023-2024	Frequency	Fee
Admission Fee (Non -Refundable)	One Time	35,200
Laboratory Charges	One Time	3,300
Students Fund	One Time	5,500
Security Deposit (Refundable)	One Time	5,500
Academic Visit	One Time	5,500
Tuition Fee Year I	Per Year	165,000
Examination Fee	Per Year	5,500
<b>Total Fee</b>		<b>225,500</b>

Note: \*All fee structures are subject to change\*

## PARAMEDICAL TECHNICIAN COURSES

The Nursing field is one where the responsibility of the professionals to provide quality care and patient centered care to patients. Due to the pandemic COVID-19, the demand of professionals has increased. To fulfill the requirement of the profession and current situation, Ziauddin University College of Nursing, has taken initiative and offers different technician programmes to empower the members of the youth to join a professional training pathway to build a professional career after the secondary school certificate.

There are few approved technician programmes which are affiliated with the Sindh Medical Faculty (SMF). Other remaining programmes are under the College of Nursing, Ziauddin University. Depending upon the response and number of students interested in different technical nursing programmes they will also be later registered with SMF.

- EEG Technician
- ECG Technician
- X-Ray Technician

- Operation Theater Technician
- Emergency Medical Technician (Ambulance)

### ELIGIBILITY CRITERIA

- Matric Science (Biology Subject) with minimum 45% marks from any Educational Board of Sindh.
- Domicile only Sindh province, concerned district candidates will be given priority.
- For the admission in ICU, candidates must have a one year anesthesia course certificate.

### FEE STRUCTURE

Academic Session 2023-2024	Frequency	Fee
Admission Fee (Non -Refundable)	One Time	24,200
Laboratory Charges	One Time	3,300
Students Fund	One Time	5,500
Security Deposit (Refundable)	One Time	5,500
Tuition Fee Year I	Per Semester	121,000
Examination Fee	Per Semester	5,500
<b>Total Fee</b>		<b>165,000</b>

Note: \*All fee structures are subject to change\*

### REQUIRED DOCUMENTS:

The following documents will be required at the time of interview.

S.#	Attested Photocopies To be Submitted	Original Documents to Be Present.
1	Matric Mark Sheet	Matric Mark sheet
2	Matric Certificate	Matric Certificate
3	Anesthesia Course Certificate. (for admission in ICU Only)	Anesthesia Course Certificate. (for admission in ICU only)
4	Domicile Sindh Only	Domicile Sindh Only
5	CNIC/ B.Form	
6	02 Passport Size Photographs	
7	Father's/Guardian's CNIC	
8	IBCC equivalency letter (in case of O/A level)	





## FACULTY MEMBERS

### DEAN

DR. PAMELA MARSHALL  
PH.D. (NURSING), MPH (INTERNATIONAL  
HEALTH), POST RN BSCN

### ADV. TO CHANCELLOR

DR. YASMIN NOORALI AMARSI  
HONORARY PH.D., PH.D. (HEALTH SCIENCES),  
MSN, POST-RN

### ASSOCIATE PROFESSORS

AFSHAN NAZLY  
MASTERS IN ADMINISTRATIVE SCIENCES  
(HEALTH MANAGEMENT), POSTGRADUATE  
DIPLOMA IN PUBLIC ADMINISTRATION, POST-RN  
BSN

DR. SUMAIRA KHOWAJA PUNJWANI  
PH.D. (HEALTH PROFESSIONS EDUCATION), (IN  
PROGRESS) PH.D. (BIOETHICS, SUSTAINABILITY  
AND GLOBAL PUBLIC HEALTH), MBETH, BSCN

SHAHZAD BASHIR  
DOCTOR OF PHILOSOPHY SCHOLAR  
MSN (CARDIOLOGY), POST RN BSCN

MR. BADIL (PART TIME)  
DOCTOR OF PHILOSOPHY SCHOLAR  
MSN (CARDIOLOGY), POST RN BSN, POST  
BASIC SPECIALIZATION IN PSYCHIATRIC  
NURSING,

RAJA KATHRI  
PH.D. NURSING SCHOLAR, MSN, POST RN BSN,

SANTOSH  
DOCTOR OF PHILOSOPHY SCHOLAR, MASTER  
OF SCIENCE IN NURSING, BACHELOR OF  
SCIENCE IN NURSING (GENERIC)

SHIREEN ARIF  
PH.D. (NURSING EDUCATION), POST RN BSN

### ASSISTANT PROFESSORS

ANILA ALLANA  
MED (EARLY CHILDHOOD DEVELOPMENT),  
ADVANCED DIPLOMA IN EARLY CHILDHOOD  
DEVELOPMENT, BSCN

MS. FATIMA JAWAD  
PHD (NURSING EDUCATION) IN PROGRESS  
MSN HEALTHCARE MANGMENT  
POST RN- BSN

MS. ANNY ASHIQ ALI  
MASTERS IN NURSING  
POST RN- BSN

### SENIOR LECTURERS

STELLA NAHEED  
MSN, (IN PROGRESS) POST RN BSN, DIPLOMA  
RN, DIPLOMA RM, DTA, DWA

NADIA ALI MUHAMMAD  
MSN, (IN PROGRESS) POST RN BSN,

ANISA AMIR BHIMANI  
MSCHPM, BSCN,

SHEHNAZ  
MS (SOCIAL SCIENCES), BSC (SOCIAL  
SCIENCES)

MEHTAB MEHBOOB  
MSC. (MICROBIOLOGY), BSC.  
(MICROBIOLOGY)

IQRA QURESHI  
MSPH, (IN PROGRESS) MS.C (BIOCHEMISTRY),  
BS.C (BIOCHEMISTRY)

MS. NASIRA LATIF  
MA (CLINICAL PSYCHOLOGY), BSC  
(PSYCHOLOGY)

MR. ZEESHAN  
POST RN- BSN  
CHN (DIPLOMA)

MS. SOFIA MANSOOR  
MASTER IN HEALTHCARE MANAGEMENT  
POST RN- BSN

### LECTURERS

DR. AIMAN SIDDIQUI  
M.PHIL. (PHARMACOLOGY), (IN PROGRESS)  
PHARM-D

M. UBAID SIDDIQUI  
BSCS (COMPUTER SCIENCE)

MEHWISH ARIF  
M.ED, MA

NASIRA LATIF  
MA (CLINICAL PSYCHOLOGY), BSC  
(PSYCHOLOGY)

NARJIS SHAHID  
MA IN ENGLISH LITERATURE, BA IN ENGLISH  
LITERATURE

MS. ASIA RIZWAN  
MS IN APPLIED LINGUISTICS  
MA IN ENGLISH LITERATURE  
BA IN HUMANITIES

MS. JASIKA PATRAS  
BACHOLAR OF SCIENCE IN NURSING  
(GENERIC)

### SKILL LAB COORDINATOR

MS. GULSHAN IMRAN  
POST RN- BSN





# FACULTY OF EASTERN MEDICINE & NATURAL SCIENCES





# FACULTY OF EASTERN MEDICINE & NATURAL SCIENCES

## KEY INFORMATION

### DEAN

Prof. Dr. Tasneem Qureshi

### CONTACT INFORMATION

Website:

<https://femns.zu.edu.pk/>

Telephone:

+92-21-36648237-9 Ext 6560

Locate Us:

Block-B, North Nazimabad,  
Karachi-74700.



## INTRODUCTION

The Faculty of Eastern Medicine and Natural Sciences (FEMNS) focuses on outcome-based learning which ensures that students receive skills that are transferable to the workforce. Ziauddin University was founded in memory of Sir Dr. Ziauddin Ahmad vision to promote quality education through excellence in teaching, research, and public service. Following the vision of the founder, the Faculty of Eastern Medicine and Natural Sciences (FEMNS) is engaged to reassure the fulfillment of the vision contributing in providing a culture of collaborative research and collective responsibility to develop effective and consistent teaching practices to improve student achievement. This Faculty aims to implement its mission with the highest professional and ethical standards in an environment that enables our students towards excellence in clinical practice, research, diet therapy, and organic plant cultivation activities to serve the noble cause.

## VISION

- To equip graduates of the faculty with highest grade of knowledge and practical skills in their relevant field.
- To create a transformative impact on society through innovation in research, quality education and professional development.

## MISSION

- Make 'Eastern Medicine' a reliable, effective, safe and economical system of health care.
- Equip graduates with modern up to date knowledge of science and practical skills.
- Inculcate in graduates a sense of responsibility towards quality of human life.
- Make graduates realize the importance of sincerity, honesty and integrity in every walk of life.
- Adopt and practice the highest professional and ethical standards leading to excellence in academics and Research activities.





# COLLEGE OF EASTERN MEDICINE

## KEY INFORMATION

### DEAN

Prof. Dr. Tasneem Qureshi

### CONTACT INFORMATION

Website:

<https://femns.zu.edu.pk/>

Telephone:

+92-21-36648237-9 Ext 6560

Locate Us:

Block-B, North Nazimabad,  
Karachi-74700.



## VISION

• Eastern Medicine is recognized and made available to masses as an effective, economical and safe system of Healthcare in Pakistan.

## MISSION

- Produce graduates equipped with modern up to date knowledge of science and art of Eastern Medicine.
- Inculcate in our graduates a sense of responsibility towards quality of human life.
- Make our graduates realize the importance of sincerity, honesty and integrity in the practice of Eastern Medicine.
- Adopt and practice the highest professional and ethical standards leading to excellence in Clinical practice and Research activities.
- Strengthen and promote excellence in education, research and practice of Eastern Medicine.

## OBJECTIVES

- To produce competent health professionals with necessary knowledge and skills to care for individual and communities.
- To empower learners, educators, families and the communities with information on management, care, support and treatment

through Eastern Medicine.

- Research for new insights and innovative solutions to health problems.
- To facilitate the provision of clinical and patient care and support to those infected and affected in schools and in the community for improved quality life.
- Providing guidelines in designing curricula for the development of Eastern Medicine.
- To contribute in fulfilling the need of quality research by treatment of chronic diseases through innovative evidence based Eastern Medicine formulations.
- To combat diseases and improve maternal and mental health
- To establish a network of Eastern Medicine Clinics all over the country under the umbrella of Ziauddin University.
- To promote formal links with National and International Institutions and industry for knowledge sharing, collaborative research, clinical training and exchange programmes.

## AFFILIATIONS & ACCREDITATIONS

- National Council for Tibb (NCT)
- Course Curriculum approved by Ministry of Health as well as by Higher Education Commission (HEC)

# BACHELOR OF EASTERN MEDICINE

## CAREER PROSPECTS

- License for Clinical Practice in Pakistan and UAE
- Placement in Tehsil Head Quarter (THQ) and District Head Quarter (DHQ) Hospital
- License to cultivate, store, sale and manufacture Natural Medicines
- Scientific positions in DRAP (Drug Regulatory Authority of Pakistan)
- Scientific positions in National and International Research Organizations
- Scientific positions in National and International Public Health Organizations
- Lectureship in Eastern Medicine programme and Paramedical Institutes
- Scientific positions in Herbal Pharmaceutical and Nutraceutical Industries
- Post-graduation and research studies in Clinical and Non-Clinical Sciences

## ELIGIBILITY CRITERIA

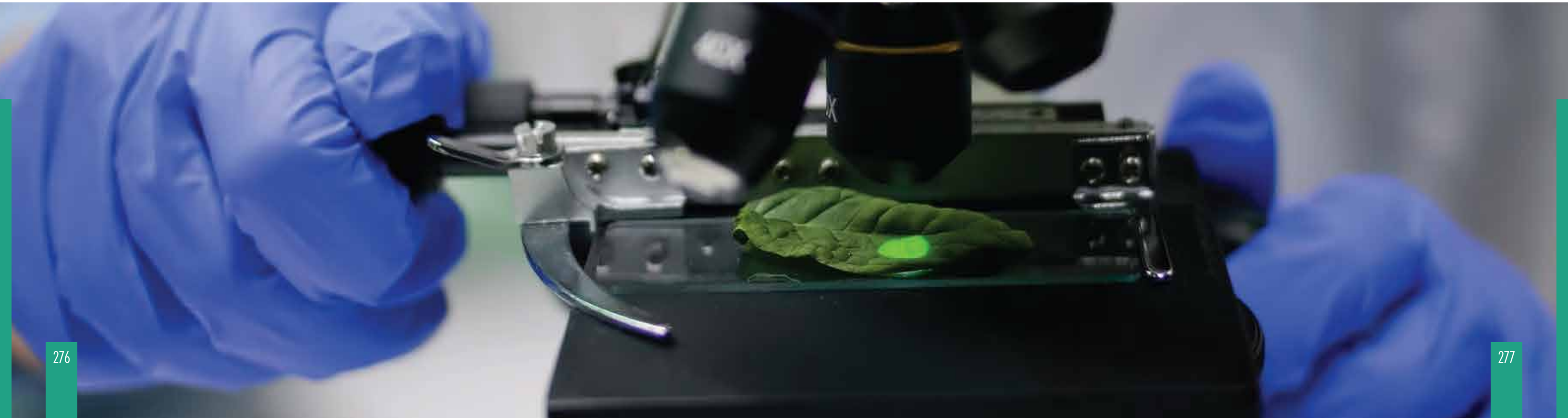
Intermediate Science (Pre-Medical), A level Biology OR Equivalent Qualification from recognized Institution.

## FEES STRUCTURE

<b>Admission Fee (One time)</b>	Rs.15,000/=
<b>Documentation Fee (One time)</b>	Rs.3000/=
<b>Enrollment Fee (One time)</b>	Rs.2600/=
<b>Security Deposit (One time)</b>	Rs.10,000/=
<b>Laboratory Fee (Per semester)</b>	Rs.3000/=
<b>Examination Fee (Per semester)</b>	Rs.3400/=
<b>Tuition Fee (Per semester)</b>	Rs.80,000/=
<b>Processing Fee (One time)</b>	Rs.4000/=
<b>Total</b>	Rs.121,000/=

## DURATION OF PROGRAMME

5 Years degree programme with one-year house job.





## SEMESTERS CREDIT HOURS 2024

Course Code	Course No.	First Semester	Marks	Cr. Hr.
ANA	111	Anatomy-I	100+100	3+1
PHY	112	Physiology-I	100+100	3+1
BIO	113	Biochemistry-I	100+100	3+1
PEM	114	Principles of Eastern Medicine-I	100+100	3+1
HEM	115	History of Eastern Medicine-I	100	3
ISE	116	Islamic Studies/Ethical Behavior	100	2
ENG	117	English Functional	100	2
<b>Total Course 7</b>			1100	19+4
<b>Total Credit Hours : 44, Total Marks 2100</b>				

Course Code	Course No.	Second Semester	Marks	Cr. Hr.
ANA	121	Anatomy-II	100+100	3+1
PHY	122	Physiology-II	100+100	3+1
BIO	123	Biochemistry-II	100+100	3+1
PEM	124	Principles of Eastern Medicine-II	100+100	3+1
HEM	125	History of Eastern Medicine-II	100	3
PAS	126	Pakistan Studies	100	2
<b>Total Course 6</b>			1000	17+4

### B.E.M.S Second Professional

Course Code	Course No.	Third Semester	Marks	Cr. Hr.
ANA	231	Anatomy-III	100+100	3+1
PHY	232	Physiology-III	100+100	3+1
BIO	233	Biochemistry-III	100+100	3+1
PEM	234	Principles of Eastern Medicine-III	100+100	3+1
PHS	235	Pharmacognosy-I	100+100	3+1
<b>Total Course 5</b>			1000	15+5
<b>Total Credit Hours : 44, Total Marks 2200</b>				

Course Code	Course No.	Fourth Semester	Marks	Cr. Hr.
ANA	241	Anatomy-IV	100+100	3+1
PHY	242	Physiology-IV	100+100	3+1
BIO	243	Biochemistry-IV	100+100	3+1
PEM	244	Principles of Eastern Medicine-IV	100+100	3+1
PHS	245	Pharmacognosy-II	100+100	3+1
BIT	246	Bioinformatics	100+100	3+1
<b>Total Course 6</b>			1200	18+6

### B.E.M.S Third Professional

Course Code	Course No.	Fifth Semester	Marks	Cr. Hr.
PHP	351	Pharmacy-I	100+100	3+1
PAT	352	Pathology-I	100+100	3+1
MTM	353	Materia Medica-I	100+100	3+1
PHS	354	Pharmacognosy-III	100+100	3+1
MED	355	Mualijat (Medicine)-I	100+100	3+1
COM	356	Community Medicine	100+100	3+1
<b>Total Course 6</b>			1200	18+6
<b>Total Credit Hours : 48, Total Marks 2400</b>				

Course Code	Course No.	Sixth Semester	Marks	Cr. Hr.
PHP	361	Pharmacy-II	100+100	3+1
MIC	362	Microbiology and Parasitology	100+100	3+1
MTM	363	Materia Medica-II	100+100	3+1
PHS	364	Pharmacognosy-IV	100+100	3+1
MED	365	Mualijat (Medicine)-II	100+100	3+1
FMT	366	Forensic Medicine and Toxicology	100+100	3+1
<b>Total Course 6</b>			1200	18+6

### B.E.M.S Fourth Professional

Course Code	Course No.	Seventh Semester	Marks	Cr. Hr.
PAT	471	Pathology-II	100+100	3+1
SUR	472	Surgery-I	100+100	2+1
MTM	473	Materia Medica-III	100+100	3+1
GOS	474	Gynaecology-I	100+100	2+1
MED	475	Mualijat (Medicine)-III	100+100	3+1
PSY	476	Clinical Psychology and Psychiatry	100+100	3+1
IRS	477	Introduction To Research	100	2
<b>Total Course 6</b>			1300	18+6
<b>Total Credit Hours : 40, Total Marks 2400</b>				

Course Code	Course No.	Eighth Semester	Marks	Cr. Hr.
PAT	481	Pathology-III	100+100	3+1
SUR	482	Surgery-II	100+100	2+1
MTM	483	Materia Medica-IV	100+100	3+1
GOS	484	Gynaecology-II	100+100	2+1
MED	485	Mualijat (Medicine)-IV	100+100	3+1
BIS	486	Biostatistics	100	2
<b>Total Course 5</b>			1100	15+5

### B.E.M.S Final Professional

Course Code	Course No.	Ninth Semester	Marks	Cr. Hr.
PED	591	Pediatrics-I	100+100	2+1
OPT	592	Ophthalmology	100+100	2+1
OBS	593	Obstetrics-I	100+100	2+1
SUR	594	Surgery-III	100+100	2+1
CLD	595	Clinical Diagnostics-I	100+100	3+1
MED	596	Mualijat (Medicine)-V	100+100	3+1
<b>Total Course 7</b>			1200	14+6

Course Code	Course No.	Tenth Semester	Marks	Cr. Hr.
PED	5101	Pediatrics-II	100+100	2+1
ENT	5102	ENT	100+100	2+1
OBS	5103	Obstetrics-II	100+100	2+1
SUR	5104	Surgery-IV	100+100	2+1
CLD	5105	Clinical Diagnostics-II	100+100	3+1
MED	5106	Mualijat (Medicine)-VI	100+100	3+1
EPS	5107	Entrepreneurship	100	2
<b>Total Marks / Total Course 7</b>			1300	16+6

## FACULTY MEMBERS

### DEAN

PROF. DR. TASNEEM QURESHI  
PH.D. (EASTERN MEDICINE) DEAN, FACULTY OF  
EASTERN MEDICINE AND NATURAL SCIENCES,  
ZIAUDDIN UNIVERSITY

### FACULTY MEMBERS

PROF. DR. EJAZ MOHIUDDIN  
PH.D. (EASTERN MEDICINE) PRINCIPAL, COLLEGE  
OF EASTERN MEDICINE,

DR. TANVEER ALI  
PH.D. FELLOW (EASTERN MEDICINE) ASSISTANT  
PROFESSOR

DR. MUHAMMAD FAISAL SIDDIQUI  
M.PHIL. FELLOW (EASTERN MEDICINE) SENIOR  
LECTURER

### STAFF MEMBERS

MUHAMMAD UMAIR  
OFFICE BOY

SYED DANISH HAIDER  
LAB. ASSISTANT

TALHA MOIN  
INCHARGE ADMINISTRATION

NOMAN AHMED  
ACADEMIC OFFICE

SAMAR MAJEED  
LIBRARIAN

### LOCATION

**Address:** 4<sup>th</sup> Floor, DPT Building, Ziauddin University, Wahid Colony, Block B, North Nazimabad, Karachi.

### CONTACT INFORMATION

**Phone:** (021)-38892014 Ext. 6560

**Email:** ejaz.mohiuddin@zu.edu.pk



# FACULTY OF LAW, POLITICS, & GOVERNANCE





# FACULTY OF LAW, POLITICS, & GOVERNANCE

## KEY INFORMATION

### DEAN

Ms. Shaaista Sarki

### CONTACT INFORMATION

Website: <https://zflpg.zu.edu.pk/>

Telephone:

+92-21-35862937 Ext: 2516/2518

Official Cell:

+92 321 366 5941

Locate Us:

4/B, Shahrah-e-Ghalib, Block 6, Clifton, Karachi.



The journey of life is like threads weaving richly elaborated tapestries of wisdom and experience. My story is of a curious girl, fascinated by the mysteries of Law, who dauntlessly dreams and works tirelessly to turn those dreams into reality. Yes, Law was always my first choice and Ziauddin University Faculty of Law Politics and Governance nurtured that passion; five years ago, I came to law school with a dream to make a difference and today I am graduating with the right tools to turn that dream into a reality.

Back then, when I enrolled in Ziauddin University, I was a very shy person who barely would engage with the community around her but here at the law school, I did not just get the legal knowledge but ignited the flames of passion, critical thinking, and determination within me all because of the extraordinary, amazing and trustworthy teachers and mentors who taught me to turn challenges into opportunities and to engage with the community to benefit from collective wisdom and efforts. Moreover, the internship and late-night study sessions delved me more into this field and shaped me into a better person and, ultimately, a better Lawyer.

I applied what I learned and was provided with an environment both at school and at home to function relentlessly; achieving the dream of the Gold Medal itself is a testament to this support and my consistency, persistence, and determination to make my parents, teachers, and mentors proud. The support of our visionary Dean, incredible faculty members, and the most talented and competitive class fellows not only made this entire experience exceptional but also prepared me to fulfil the responsibilities of legal education and now that of a lawyer with complete honesty and integrity. I will forever be proud to be from the first batch of the Ziauddin University Faculty of Law Politics and Governance!

**ZAIB UN NISA AKRAM**  
LL.B.



## INTRODUCTION

Over the course of 20 years, Ziauddin University has emerged as a diverse platform in academia. With an aspiration to broaden its academic horizons, Ziauddin University introduces the Faculty of Law, Politics, & Governance.

Under the dynamic leadership of Ms. Shaaista Sarki, the Dean Faculty of Law, Politics, & Governance aims to instill expert legal reasoning that responds to social phenomena and contributes to the development of various institutions. Ziauddin Faculty of Law, Politics & Governance, is currently offering five years LL.B. Degree programme, spreading over ten semesters. The curriculum is following Federal HEC standards & Pakistan Bar Council.

## MISSION

We commit to excellence and humanity. Not just in theory but in practice.





## BACHELOR OF LAWS (LL.B.)

### INTRODUCTION

Ziauddin Faculty of Law, Politics & Governance offers a five-year undergraduate degree programme leading to a Bachelor of Laws LL.B. (Hons.). Following are the details:

Categories	No. of Courses Min - Max	Credit Hours Min - Max
Compulsory Courses	10 - 10	28 - 28
General and Foundation Courses	10 - 10	29 - 29
Discipline-Specific Major Courses including Research Project/Internship	36 - 36	110 - 110
Electives within the major	4 - 4	12 - 12
	60 - 60	179 - 179

Total number of Credit Hours: 179

Duration: 5 Years

Semester duration: 16-18 weeks

Semesters: 10

Course Load per Semester: 16-18 Cr. Hrs.

Number of courses per semester: 5-6

### LL.B. (Hons.)

LL.B. (Hons.) programme is divided into five academic years; each year comprises a number of modules related to subject specific information, in accordance with PAKISTAN BAR COUNCIL and HEC recognised curriculum.

### ELIGIBILITY CRITERIA

Eligibility/Pre-requisite for admission: FA/FSc/A-levels

Admission to Ziauddin Faculty of Law, for a five years LL.B. degree programme is open to all individuals who meet the selection criteria. All candidates are selected for their academic achievements and potential. Students are admitted to the first year of LL.B. on previous high school and/or college academic record,

passing of LAT (conducted by HEC) and interview conducted by the Ziauddin University.

Selection of student is on the basis of an admission policy approved by the Governing Body of Ziauddin University, which is in line with the regulations of Pakistan Bar Council and HEC.

### LEARNING OBJECTIVES

To inculcate in students a broad understanding of the social, political and economic contexts within which the Pakistani and global legal system operates. To equip students with knowledge and understanding of the fundamental doctrines of law.

### FEE STRUCTURE

Application Fee:	PKR 5,000
Admission Fee:	PKR 30,000
Security Deposit:	PKR 25,000
Student Fund (Per Semester):	PKR 1,500
Tuition Fee (Per Semester):	PKR 200,000
Examination Fee (Per Semester):	PKR 11,500
Pakistan Bar Council (PBC):	PKR 3,000

Not including taxes

Note: Any additional taxes imposed by the government will be the liability of the students/parents/guardian.

The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.

Advance fees to be paid semester-wise. All dues need to be cleared within two weeks of the commencement of the academic year. 2% surcharge per month will be levied on outstanding fees after the due date.



## CENTRE FOR ACCESS TO JUSTICE

### INTRODUCTION

ZU-CAJ located within the Faculty of Law, Politics & Governance, uses law and legal knowledge as an effective tool for social change. The mission of the center is threefold;

### PRO-BONO LEGAL CLINIC

ZU Centre for Access to Justice offers members of marginalized and poverty-stricken sections of society, legal advice free of cost. This advice is delivered in person and over modern means of communication and extends to those areas of the law which are concerned with social welfare, e.g. inheritance, custody and bails.

This legal advice is offered due to the pro bono work that both faculty members and law students at Ziauddin University extend. The university and the centre encourage students to work pro bono not only for the benefit of society but also their own benefit, as it results in personal and professional growth through exposure to the practical and real legal world. The result is innovation and greater participation in the law.

### ZU LAW REVIEW

Another aspect of Access to Justice is legal research, which unfortunately is one area

where the great nation of Pakistan lacks behind in the global order. Ziauddin Law Review seeks to address all areas of the law and publish articles on all aspects of law. As a matter of priority, the law review aims to develop a discourse on contemporary legal developments, whether prompted by judicial decisions or legislation and would be especially devoted to the development of jurisprudence. It would seek to reform the law in line with notions of fairness and justice and provide solutions aimed towards legal restructuring, a dire need for the country. The law review would be of interest to all and sundry, legal practitioners, law students, legal academia, judges and the bureaucracy.

### LEGAL SEMINARS AND CONFERENCES

The Centre for Access to Justice will not only provide pro bono legal advice and legal research as projects for legal and social change, but would also conduct legal education and supervision at public forums to develop legal awareness, and would use all mediums including conferences and seminars to effect legal and social change.





## CENTRE FOR HUMAN RIGHTS

### INTRODUCTION

All human beings are born with equal and inalienable rights and fundamental freedoms. The United Nations is committed to upholding, promoting and protecting the human rights of every individual. This commitment stems from the United Nations Charter, which reaffirms the faith of the people of the world in fundamental human rights and in the dignity and worth of the human person. In the Universal Declaration of Human Rights, the United Nations has stated in clear and simple terms the rights which belong equally to every person. These rights belong to you. They are your rights. Familiarise yourself with them. Help to promote and defend them for yourself as well as for your fellow human beings.

UN Charter 1947

### CENTRE FOR HUMAN RIGHTS

ZU-CHR located within the Faculty of Law, Politics & Governance, uses law and legal knowledge as an effective tool for promoting and securing human rights. To accomplish this momentous task we have different segments within the center to address the top areas:

- Advocacy
- Peace & Conflict Studies
- Child Rights Programme
- Prison Project

### ADVOCACY

The Advocacy for Human Rights works to create public policy that respects, protects, and fulfills human rights obligations in our home community and around the world.

#### Our Priorities

Our advocacy priorities are protecting the human rights of asylum seekers, refugees and immigrants; protecting the human rights of women and girls; supporting the work of human rights defenders and working to help incorporate international human rights standards in Pakistan.

#### Our Strategies

Using international human rights mechanisms, including those of the United Nations, to highlight human rights violations and advocate for policy change;

- Advocating for public policy changes in Pakistan both on a local and national level on multiple platforms: media, talks, seminars, and etc.
- Providing direct legal advocacy in public litigation cases and supporting causes promoting human rights
- Advancing our priorities by working in local, national, and international coalitions.

### PEACE & CONFLICT STUDIES

Peace and conflict studies is a social science field that identifies and analyzes violent and nonviolent behaviors as well as the structural mechanisms attending conflicts (including social conflicts), with a view towards understanding those processes which lead to a more desirable human condition.

#### Our Strategies

- Promotion of Alternative Dispute Resolution particularly Mediation training and workshops
- Conducting field studies to arriving at the heart of common conflicts within the general public in Pakistan, be it local or international.
- Regional emphasis on Afghanistan & India peace & conflict studies
- De-radicalisation efforts thru engagement with government institutions and NGOs in the promotion of peace and dialogue

### CHILD RIGHTS PROGRAMME

Children are the most vulnerable of all human beings and their protection is of the utmost important as they are the future.

At ZU-CHR the Child Rights Programme is geared to work with Child Protection Unit government bodies, orphanages, and adoption agencies for the active change and development in policies to enhance children rights.

#### Our Strategies

- Promoting and advocating the Hague Convention Child protocols
- Working with international adoption agencies and providing training to orphanages to secure children rights within institutions
- Working in sensitive areas for street children and providing solutions protecting their rights
- Conducting studies to tackle child abandonment and mechanisms to prevent trafficking

### THE PRISON PROJECT

Prisoner Rights have been a key area within Human Rights often neglected. Giving voice to the voiceless is an important element. Working

with NGOs and government institutions to bring appropriate prison reform to enhance prisoner rights and help create a full rehabilitation programme

#### Our Strategies

- Prison Rehabilitation Programmes promotion particularly Bacha Jail
- Legal Aid to pending cases
- Jail visits and inspection reports to influence policy change
- Focusing on international prisoners and their repatriation to their home countries
- Half-way house and follow up after release



# CENTRE FOR LAW & TECHNOLOGY

## INTRODUCTION

The 21st Century has brought with it a boom in technological advancement, arguably becoming an era in history that will be seen as the one which saw progress manifest the quickest and most disruptively. The word 'disruptive' (in the context of technology) only insinuates that the technology was so far-reaching, so pervasive, and so all-encompassing that it resulted in drastic changes to the modes in which society and commercial activities operate.

It is no secret that codified law always lags behind the zeitgeist of an era. Matters which require regulation are without exception regulated in retrospect rather than proactively. The reason for this is summarised eloquently in the Collingridge Dilemma. The dilemma highlights a hard problem with regulating technology in 2 simple prongs. First, when a technology is created, not enough is known about it in order to effectively regulate it before understanding its ramifications on society, economics and individuals. Second, when such knowledge is attained (after the passage of time), that technology is far too entrenched in society to be effectively regulated. A good example is the internet. When it was initially created, it was a closed network started by DARPA (a US Military Programme) for intelligence-sharing and secure communication. However, at the time of its creation, not even its creators could imagine the impact that the internet would have on the world once it became globalised. Today, the internet's reach is (relatively) well understood, but it is far too entrenched in our everyday lives to be effectively regulated without completely changing the nature and use of the internet.

An understanding of the complex problems revolving around technology is essential for every lawyer, social scientist, politician, and businessperson, in order for our world to move forward in a careful, balanced and thoughtful manner. The industrial revolution reaped great

results in terms of technology put into practice, but the costs to natural resources and air/ozone quality were not well understood. Thus today, we see an escalation in climate change which can largely be attributed (and traced back to) the boom in industry. There will definitely be negative impacts of technology on the environment, on economics and even on the very fabric of our social values, and thus it is imperative to ensure our policymakers are aware of the multifarious elements which progress along with technology in order to effectively utilize it whilst minimizing associated risks.

## THE CENTRE FOR LAW & TECHNOLOGY

There is a philosophical concept that reads: 'what we create, in turn, creates us'. The same is true for technology we create. Granted, Pakistan is an emerging name on the global map when it comes to technology innovation. However, a lack of infrastructure and innovation-related opportunities does not need to percolate into our legal community- lawyers ought to be, and are expected to be at par with all global shifts in technology and must remain up-to-date with developments in these areas.

In order to assist the Courts or legislative assemblies, lawyers and lawmakers must be aware of the multifarious nature and modalities of technology. This understanding can only exist once a systematic, considered approach is taken to understand the fundamentals of technology and its impact on the various aspects of the status quo.

With the novel Centre for Law & Technology, we aim to ensure that the students who graduate from the Ziauddin Faculty of Law, Politics & Governance are at par with their foreign counterparts, and are well-versed with internationally-acclaimed ideas revolving around the use of various modalities of technology, and subsequently, the regulation of such technologies. Our contribution to the society of the 21st Century is not only the need of the hour but rather

will pave the way our society sees technology for decades to come.

Our team is spearheading national research and is engaging in targeted, merit-based advocacy in this regard.

## FLAGSHIP RESEARCH

With international and national collaborations, strategic academic partnerships, and expert opinions, the Centre for Law and Technology is engaged in research on topics of international importance.

- Personal Data & its Implications in the digital world
- Data Protection in Pakistan
- Cybersecurity & data
- Pakistan's [tech-centric] legislative landscape

## CENTRE FOR INTERNATIONAL AND CONSTITUTIONAL LAW

International and constitutional law are subjects that sometimes feel like poor relations, even the orphans of wider legal study. They are frequently dismissed as being too theoretical or as lacking in practical application. There is a widespread perception that international law is ignored by powerful states most of the time, and then hypocritically championed when it suits them. This kind of neo-realist approach can be identified in the US/UK approach to the invasion of Iraq in 2003. This invasion was illegal under international law, yet this did little to dissuade the powerful states from invading a weak state with few allies in the world. In 2014, Russia annexed the Crimean Peninsula from Ukraine to a chorus of protests that this was an illegal act under international law. It undoubtedly was, but it is hard to see why this should make any difference to the political calculations being made in the Kremlin. President Putin is a hard man to understand, but we can guess his logic was something like: 'No one cares enough about Ukraine to intervene militarily. And if they attack me legally, they will be exposed as hypocrites.'

Similarly, constitutional law is sometimes regarded as a weak concept that does little to really influence the behaviour of the politicians and officials that it is supposed to regulate. So many leaders enter power committed to their state's constitution, only to change it radically so they can stay in power for life, or else suspend it entirely and let the military take over. The United Kingdom does not even have a codified constitution, whilst Pakistan has one that is extremely complicated and thus hard for the people to follow. There are strong constitutional systems in the world, but they are far from universal.

Yet constitutional systems are relevant in governing most of the world. Most of the states in the world do follow some form of a codified constitution. These systems have similarities and differences and one can thus engage in a meaningful comparison. The reality is that we tend to hear more about constitutional systems collapsing because that is how the news media works. Problems and protests in an African state where the constitutional order has gone awry make the news. The fact that things are running relatively smoothly in Argentina, does not. The Centre aims to take a constructive approach to constitutional matters, both at home and abroad.

Similarly, international law is still alive and well, especially in the age of COVID. International travel has resumed. International law allows states to cooperate in ensuring that this travel is safe and does not lead to further spreading of the virus. International law helps to ensure that vaccines are both developed and shipped across borders. If the record of international law on the use of force has been weak in recent years, its record on enabling cooperation in health, science and technology is one of the great unsung success stories of our time.



## LEGAL INCUBATION CENTRE

The Legal Incubation Centre bridges the gap between theory and legal practice in Pakistan. We mentor students for a smooth transition from classroom to courtroom. Our team of qualified legal experts shares practical experience, knowledge, and skills, preparing students for their professional journey. We offer

internships at renowned law firms and chambers, providing hands-on insights into Pakistan's legal system. Our mission is to produce dynamic legal minds, develop critical thinking, and instill values, integrity, and professional ethics while refining legal acumen and advocacy skills.

## CENTRE FOR MOOTING AND ADVOCACY

The Centre for Mooting and Advocacy at Ziauddin University is dedicated to fostering excellence in legal education through practical training. Our centre provides students with opportunities to hone their advocacy skills, engage in simulated court proceedings, and

participate in national and international mooting competitions. With a focus on experiential learning, we aim to bridge the gap between theory and practice, equipping future lawyers with the confidence and competence to excel in the courtroom.





## FACULTY MEMBERS

SHAAISTA SARKI

ALEXANDER LAWSON

DR. MUHAMMAD KHALID HAYAT

ALY HASSAM UL HAQ

ZAINAB EFFENDI-HAQQI

BARRISTER HUSSAIN BOHRA

SAFDAR SHAHEEN NIAZI

RAJA ADNAN KHAN

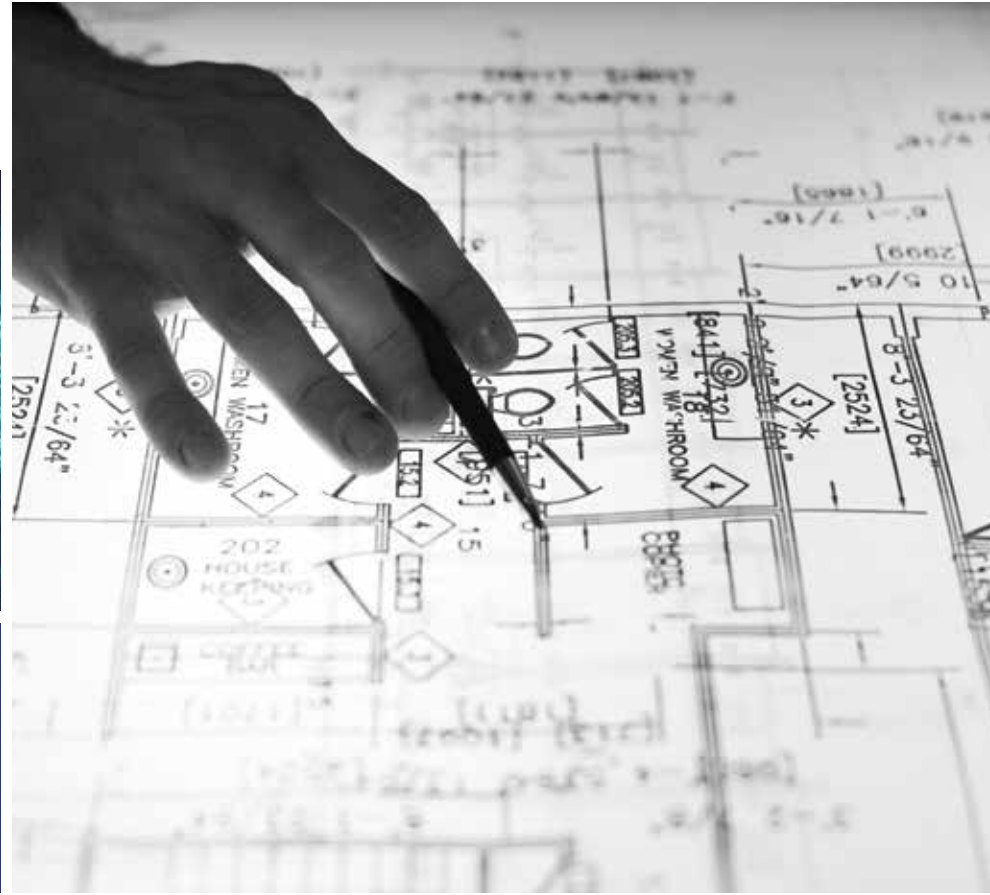
ASGHAR WAHEED

AHSAN QAZI





# FACULTY OF ENGINEERING SCIENCE, TECHNOLOGY & MANAGEMENT



# FACULTY OF ENGINEERING SCIENCE & TECHNOLOGY MANAGEMENT

## KEY INFORMATION

DEAN, FACULTY OF ENGINEERING  
SCIENCE & TECHNOLOGY

Dr. Fahad Azim

## CONTACT INFORMATION

**Website:**

<https://ZUFESTM.zu.edu.pk/>

**Telephone:**

+92-21-36644153

+92-21-36648237-9 Ext: 334

**Email:**

fahad.azim@zu.edu.pk

**Locate Us:**

(SITE I): Education City, Link Road,  
Darsano Chano, Karachi

(SITE II): F-103, Block B, North  
Nazimabad, Karachi.



## VISION

Exploring uncharted waters of knowledge to make the world a better place to live.

## MISSION

Ziauddin University Faculty of Engineering, Science, Technology & Management (ZUFESTM) aims to create robust and well-led academic units that produce efficient & agile engineers with an improved research base to facilitate the development of an ambitious blueprint for continued growth in a knowledge based economy.

## INTRODUCTION

Since Ziauddin University has been running the College of Biomedical Engineering for the last nine years, and after sustaining and consolidating this engineering unit, we've evolved and expanded. As per the directives of the worthy Chancellor, the knowledge areas of Engineering, Science, Technology and Management are being integrated into the Ziauddin University Faculty of Engineering, Science, Technology & Management (ZUFESTM). This integration will enable us to offer Bachelor's, Master's, and PhD degree programmes with full consent and consultation from the concerned regulators.

ZUFESTM aims to develop as a "contributing community" than just an academic unit. We are focused to provide an environment where faculty, students and staff should be motivated ambitious and willing workers. Our goal is to create strong bonds, encouraging future alumni to actively support and propel the growth and development of their alma mater.

The leadership of ZU recognizes that an organization's inner strength lies in its human resources. Therefore, capacity building of existing manpower and attracting a new highly qualified workforce is the prime focus of ZUFESTM. The highly qualified faculty is committed to supporting the organization's vision and mission. ZUFESTM is dedicated to becoming known for its innovative pedagogic approach, integrating interactive learning tools and case study-based teaching, and fostering a

research environment where studies are conducted with a greater purpose than mere publication. ZUFESTM aims to emerge as one of the most responsive research units, addressing upcoming opportunities and social issues.

In the pursuit of opening new horizons, ZUFESTM aims to launch programmes in line with market needs. Our objective is to produce graduates in disciplines with high job scopes. ZUFESTM graduates will highlight an entrepreneurial attitude, emphasizing market leadership over job seeking.

### ZUFESTM undergraduate policies

#### 1. Number of Semester per Academic year

1.1. There will be two regular semesters (fall, spring) in an academic year.

1.2. Fall/Spring semesters will spread over 16-18 weeks (exclusive of 1-2 weeks for exams).

1.3. There shall be two scheduled examinations in one semester i.e. Mid Term (8 weeks teaching + 9th week for examination) and Final Term (8 weeks of teaching + 18th week for examination). Chairpersons of the departments ensure to post the schedule of examination on the students notice board at-least two weeks before the conduction in consultation with Head Invigilator.

1.4. A Summer Semester may be of 8 weeks of concentrated study for completing remedial/-deficiency course work.

1.5. Summer semester may be offered as an optional semester of 8 weeks duration (exclusive of 1 week for exams). Students will be offered courses to remove deficiencies and can enroll in upto a maximum of 2 courses during summer.

1.6. Moreover, a student who has either failed or has been stopped to take the examination due to the shortage of class attendance or wishes to improve his/her grade is allowed to register in summer.

1.7. The contact hours per week during the summer semester will be doubled to ensure that the course is completely taught in a summer session with half of the duration as compared to a regular (Fall/Spring) semester.

1.8. If any student repeats any course during his/her undergrad degree programme, he/she

will be disqualified from the Gold Medal.

#### 2. Course load for Fall and Spring Semester

2.1. An undergraduate programme of instruction generally includes a 12-18 credit hours course load including exams in a regular semester.

2.2. In case any student wishes to enroll for one more course beyond 18 cr. Hours he/she may be allowed by the concerned Chairperson on recommendation of Class Advisor in either of the two cases—

a. If his/her CGPA is above 3.2

b. The student needs the course to graduate on time in the Final year

#### 3. Enrollment/Registration in courses

3.1. Chairperson will assign a Class advisor to each section/Batch of the programme. The advisor and the student of that section together will develop a course registration strategy subject to student academic performance. The advising file will be updated each semester and will include copies of transcripts and GPA earned.

3.2. Students are required to choose the courses they wish to enroll in, before the start of a semester with the advice of the class advisor taking into consideration the pre-requisite courses.

3.3. A student who wishes to add or drop a course, or change a section of a course after registration must complete the relevant procedure as prescribed by ZUFESTM within two week of semester commencement.

3.4. No drop and add will be allowed after the second week of the semester commencement.

#### 4. Admission

4.1. Admission will be announced twice a year in (fall and spring) for undergraduate programmes.

4.2. The Number of batch intakes per year per programme will be maintained as per the approval of the respective accreditation council recommendation for every programme.

4.3. The number of students per batch will be maintained as per the approval of the respective accreditation council recommendation for every programme.

4.4. Provisional admission may be given by the departmental chairperson in consultation with

the Dean. However, the maximum provision time given to any candidate should not exceed 30 days from the date of provisional admission.

4.5. Failing to meet the 30 days may result in cancellation of provisional admission without any further extension and no fees will be refunded.

4.6. In the case of percentage deficiency cases, transfer of programme within ZUFESTM may be considered, providing the applicant fulfills all the admission requirement of that programme and sufficient number of seats is available to accommodate the student.

4.7. All the prospective students need to apply online via the portal and need to submit admission processing fees as prescribed by the university (recommended Rs 2500 for all ZUFESTM undergraduate programme).

4.8. All undergraduate student need to appear in university aptitude test and their merit is defined as per following criteria:

Criteria	Weightage
Aptitude test	50%
Intermediate matriculation	40%
	10%

\* Subject to appear in interview

4.9. Council recommendation must be followed for DAE/BTECH/BS Technology quota for admission in Engineering and all undergraduate programmes.

4.10. IBCC equivalence must be required for all foreign recognised qualifications including A-levels.

#### 5. Repeating courses/improvement of CGPA

5.1. If a student gets 'F' grade, s/he will be required to repeat the course in full. There will be no Supplementary/Special Examination in a Semester System; if a student fails in a course, s/he is required to repeat it.

5.2. Students may be allowed to repeat a course in which s/he has obtained grade below "C". In such a case both the previous and new grade obtained will be recorded on the transcript, however, only the better grade shall be used in the calculation of CGPA. The students are allowed to take a maximum (6) of courses to repeat in 8 semester degree



programme.

#### **6. Freezing of a semester**

6.1. If a student freezes a semester(s), s/he will resume his/her studies from the same stage where s/he left (froze). No freezing during the semester will be allowed. The maximum duration of the degree programme shall remain the same i.e. 7 years from the date of admission.

6.2. If a student is not enrolled in any course in a semester, s/he will not be considered a regular student of the university in that period. The student may then enroll in these courses in a subsequent semester; however, s/he will have to meet pre-requisites of any course taken. In addition, it is understood that the university is not required to offer all courses in each semester.

6.3. The maximum duration of freezing is one year; a candidate who gets a semester freeze can get registration of next year with upcoming batch.

6.4. The student needs to pay semester charges to freeze semester.

6.5. Freezing of semester will only be allowed after the successful completion of 1st semester as prerequisite as the case may be for other semester's predecessor to the freezing Semesters.

6.6. Under following special circumstances, freezing of the first semester can be considered by the approval of competent authority:

- a. Iddah
- b. Maternity
- c. Death in the immediate family
- d. Any other subject to acceptance on justified rationale

6.7. Student can avail the freeze option, only 2 times, during undergrad programme; however two consecutive freezing applications shall not be entertained.

#### **7. Transfer of credit hours for undergraduate programme**

7.1. Transfer of credits from HEC recognised institute may be permissible if the programme in consideration is approved from HEC and the respective accreditation council for the HEI from where students want to transfer.





7.2. On receiving a request of transfer from a prospective applicant, a three member departmental standing committee headed by the Departmental Chairperson work on the equivalency of the credits earned in other HEI. The Chairperson will submit the credit transfer recommendations to Vice Chancellor/Academic Council through Dean within two weeks of receiving of application.

7.3. Credits are transferred on course to course basis i.e. a person taking course A at HEI X is allowed to transfer his/her credits to ZUFESTM provided that course A is equivalent to course B taught at ZUFESTM.

7.4. No credit hour of a course will be transferred if the grade is D.

7.5. Credit hours may only be transferred between duly recognised HEIs and internationally recognised universities.

7.6. The transfer of credit does not alter the maximum time duration for completion of the degree. The total time duration will be counted from the date of admission to the degree programme in first HEI.

### 8. Requirement of the award of degree

8.1. A student must have a regular admission in the Undergraduate programme of the institution and should earn a minimum of 50% credit hours out of a total of 128–140 credit hours from ZUFESTM from where s/he will be entitled to the degree. (This para should be read in conjunction with para 7).

8.2. For completion of the degree, the minimum qualifying CGPAs for BS is 2.0

8.3. In case a student secures less than 2.00 CGPA (minimum qualifying CGPA) at the end of the final semester, s/he may be allowed to get re-admission in one or more courses, in which his/her Grade is below C, along with the forthcoming semester, provided that s/he is not debarred under the CGPA Improvement Regulation and time duration specified for the programme i.e. 7 years. ((This para should be read in conjunction with para 5).

### 9. Programme Duration

All the undergraduate programmes in ZUFESTM must be of minimum 8 regular semester (excluding summer semester)

9.1. Minimum duration to complete an under-

graduate programme is 4 years.

9.2. Maximum duration to complete an under-graduate programme is 7 years.

### 10. Cancellation of University Enrollment

Admission and University enrollment of the student will be canceled in any of the following circumstances:

10.1. If a student fails to attend any lecture during the first four weeks after the commencement of the first semester as per the announced schedule.

10.2. If the prerequisite academic documents of the students are found fake, forged, altered or not in requirement with admission criteria mentioned by the university even after graduation from the university.

10.3. If it does not meet the minimum admission criteria set by the respective regulatory/accreditation council.

10.4. If the provision admission requirements do not meet by the deadline specified in the letter for submission of a certain mentioned milestone.

10.5. If a student fails to register in two consecutive semesters without any written prior approval from Chairperson and Dean.

10.6. If a student has involved in serious disciplinary misconduct.

10.7. If a student fails to complete the degree requirement within 7 years duration In case of cancellation of admission because of any of the clauses as mentioned above) no fees will be returned.

### 11. Fee refund Policy

Fee deposited at the time of admission by fresh students or before the start of the semester, shall only be refunded under the following time frame:

- Upto 7th day (inclusive of holidays) of the commencement of classes 100%
- Upto 14th day (inclusive of holidays) of the commencement of classes 50%
- Only security will be refunded if a request for withdrawal is made after 14 days

### 12. Grading policy

12.1. In general, Relative Grading System is adopted in ZUFEST

12.2. Following letter grade and equivalent

GPA are used:

Letter Grade	Grade Point
A	4.00
B+	3.70
B	3.50
B-	3.00
C+	2.70
C	2.50
C-	2.30
D	2.00
F	0.00
W	Withdraw
I	Incomplete

12.3. In case of class size less than 20 students, course instructor may opt for absolute grading with the written permission of Dean on recommendation of Chairperson after course registration completion.

12.4. Both in case of relative and absolute grading it is recommended to normalised the result to maintain the standard of grading practice.

12.5. Grading Policy for each course identifies weightage of Homework, Quizzes, Mid-Semester Examination, Final Examination, Lab and Project etc. as approved by respective departmental chairperson is as follows:

Nature of Examination	Courses With Lab	Courses Without Lab
Sessional Examinations (Quizzes/ Assignments/ Presentations)	13.33%	20%
Midterm Examination	20%	30%
Final Examination	33.33%	50%
Lab (Lab Exam/Lab Report/Lab Assignments/ Projects)	33.33%	

12.6. Students may be allowed to withdraw from a course within 6 weeks of the semester. In such a case the transcript shall record the student enrolled in the course and withdrew.

Consequently, grade 'W' will be awarded to the student which shall have no impact on the calculation of the SGPA/CGPA of the student. However, at the time of re-registration, this course will be treated as a new course and full fees will be charged. Additionally, any such course does not come under deficiency courses so it cannot be opted in the summer semester.

12.7. A student withdrawing after the 6th week shall be automatically awarded "F" grade which shall count in the GPA and stay on the transcript.

12.8. Full fees will be charged for all withdraw courses. There shall be "no full or partial refund of fee" allowed under any circumstances

12.9. If a student fails to appear in the final examination of any registered course because of the reason/circumstance subject to acceptance on the justified rationale. S/he will be marked with grade "I". The status, of course, will be incomplete.

12.10. For grade "I", the student must have attendance (>75%) in that specific course and have satisfactory performance (>70%) in mid-term, quiz, assignment and all academic activities of that class.

12.11. At the time of re-registration of course with grade "I" no course fee will be charged. Additionally, such courses come under deficiency courses and maybe opted in the summer semester. However, the maximum course load in the summer semester should not exceed two courses including this course.

12.12. All the written request following the policy of "W" and "I" grades must be a route through the respective class advisor and submitted to Dean for approval on recommendation of Departmental chairperson.

12.13. No request for "W" grade is entertained after 6 weeks of commencement of classes. No request for the "I" grade is entertained after the end of the final examination.

### 13. Make up Examination

13.1. No make-up/re-take examination shall be allowed in a case where a student falls short of the required level of attendance or he/she fails the course. In such cases, the student shall

repeat the complete course. Full course fees shall be charged when students again re-register for failed courses.

13.2. The make-up final examination may, however, be allowed with the next semester examination in case of death of parents, spouse or children of the student and course with "I" grade.

#### 14. Student grievance committee

14.1. A four (4) member committee constituted of a senior faculty member/Head Invigilator, relevant departmental Chairperson, Dean headed by Controller of Examinations to redress the grievances of the students about any course instructor or grades or for any other issue pertaining to final examination.

14.2. In respect of grade, a student must submit the grievance application if any, in writing to the departmental Chairperson within (07) seven working days of the receipt of the grade. The departmental Chairperson shall forward the grievance application to the Committee. It will be mandatory for the Committee to hear both sides (student and the instructor) and will give its final decision within (05) five working days or before the start of registration for the new semester, whichever comes earlier. The decision of the committee will be deemed final and will be binding on all parties.

#### 15. Harassment policy

"Harassment covers the following

- i. Passing remarks, placing visual or written material, aimed at a specific person or gender with the intention of physical assault or causing harm to the person.
- ii. Any unauthorised use of electronic or other devices to make a picture or audio/video record of any person while on University premises without his or her prior knowledge."

15.1. The University does not tolerate any form

of harassment or victimisation and expects all students and teacher to treat each other with respect, courtesy and consideration

15.2. Any student feels s/he has been subject to harassment can make a written complain to Departmental Chairperson via the appropriate Procedure in relation to complaints about university staff or university student.

15.3. All such complains shall be forwarded to Registrar office for further action via Dean within (03) working days of the receipt of the written complain after initial scrutiny/fact finding.

#### 16. Attendance Policy

16.1. Attendance in classes is mandatory especially in a semester system. Students need to maintain minimum attendance (>75 %) in a course to complete the requirements of a course.

16.2. The instructor should inform student about his attendance and must report in written student's absences at-least once before mid-term examination to his departmental chairperson. The department should officially warn the student via notice to maintain minimum attendance to qualify for final examination immediately after midterm examination.

16.3. A student may be stopped from appearing in the course final examination if he is unable to maintain minimum attendance in that specific course. He will be assigned "F" grade in that course and need to re-register in the course.

16.4. A student with exceptional cases such as serious accident or serious health ailment may request in written with a official hospital discharge sheet and medical report for relaxation upto further 10% to Departmental Chairperson through course instructor. However this cannot be availed more than twice during the whole student tenure.





## COLLEGE OF ENGINEERING & TECHNOLOGY

"I am Moazzam Ali Khan, a proud graduate from batch 11 of the Biomedical Engineering programme at Ziauddin University. My academic journey has been an enriching experience, marked by rigorous coursework, hands-on learning, and invaluable mentorship. Being part of this esteemed institution has not only equipped me with technical expertise but also instilled a passion for contributing to the field of biomedical engineering. Being awarded the gold medal is a great honour and shows the result of years of dedication. This recognition is more than just an award; it reflects my commitment to doing well and a responsibility to use what I've learned to improve healthcare and technology. As I transition to the next phase of my career, I carry with me the pride of this achievement, and I am motivated to make a positive impact in the field of biomedical engineering."

Moazzam Ali Khan  
BE Biomedical Engineering



## DEPARTMENT OF BIOMEDICAL ENGINEERING

### VISION

To become a top tier Department of Biomedical Engineering across the nation by imparting engineering knowledge to serve healthcare industry with excellence.

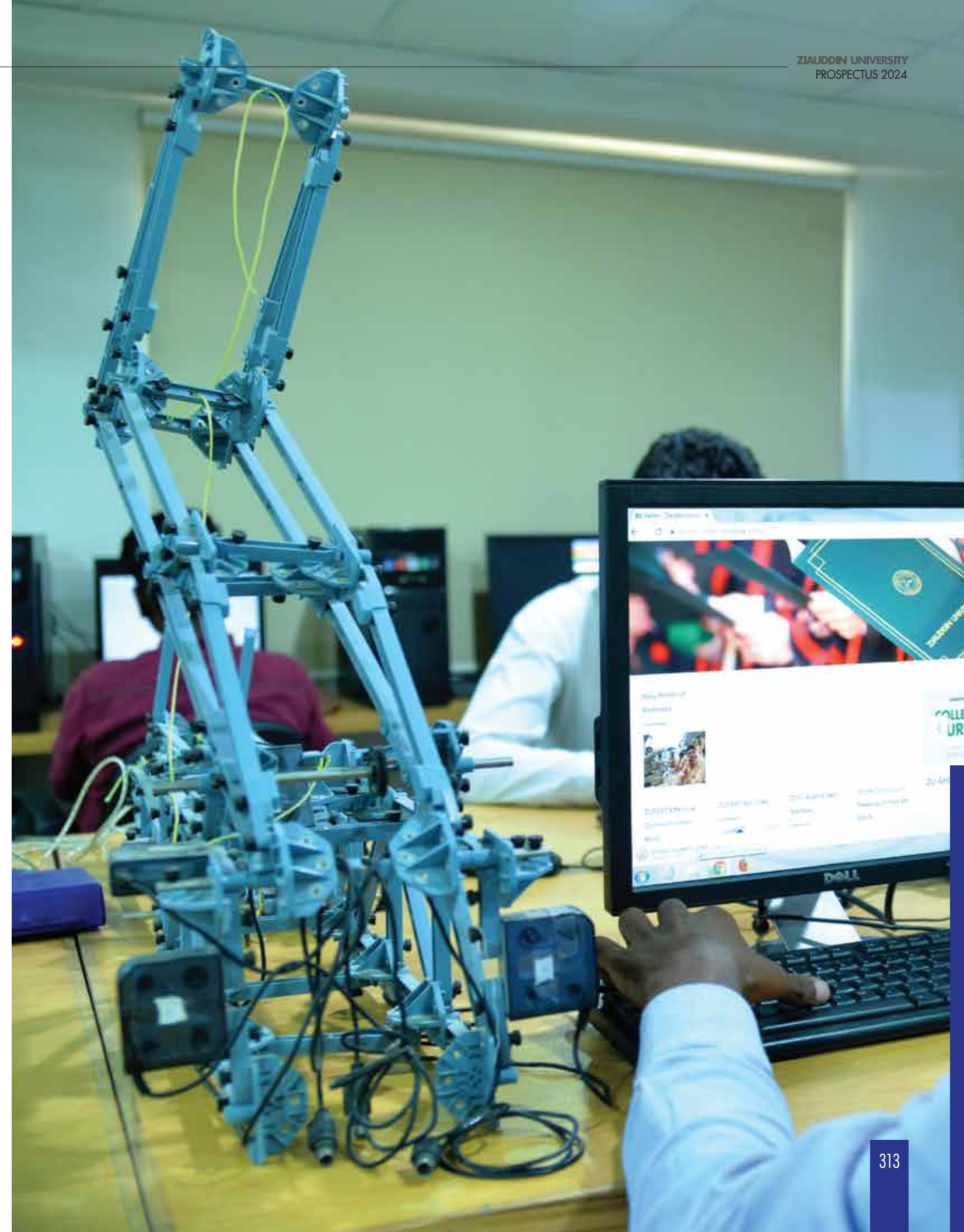
### MISSION

The Department of Biomedical Engineering aims to serve the society in the best manner wherein the graduates will be equipped with required technical and interpersonal skills, motivated for research and lifelong learning; ethical values along with leadership and entrepreneurship qualities.

### INTRODUCTION

Ziauddin University, Faculty of Engineering Science and Technology is offering 4 years bachelor programme entitling BE Biomedical Engineering at Ziauddin University, Biomedical Engineering is more focused on the instrumentation and biomedical computing. The instrumentation or more formerly Bio-Instrumentation is the field for travel enthusiastic person, as the installation, sales and service of the biomedical instruments. It keeps the engineers on the wheel, in order to maintain the instruments operational for the patient support in hospitals, pharmaceutical industries and healthcare laboratories. Moreover, the instrumentation track of Biomedical Engineering also serves

humanity by developing assistive devices for patients and elderly people. The patient can wear the robotic suits, also known as exo-skeleton. These suits assist the wearer in achieving the mobility they lost due to disease, trauma or age factor. Also, the development and rehabilitation of artificial limbs lies under the umbrella of instrumentation track. The emerging focused area of Biomedical Engineering at ZUFESTM shall be Biomedical Computing. The biomedical computing facilitates the development of complex biomedical systems like clinical and computer-based decision support, knowledge acquisition and management, medical imaging, computational intelligence in bio-clinical medicine, molecular medicine, and healthcare organizational aspects. It implies the use of Artificial intelligence for the purpose of machine learning, bioinformatics for genes and protein modelling, and Medical Image Processing. In order to incorporate these skills with the knowledge of the students, Biomedical Engineering at ZUFEST introducing Telemedicine system, Computational Fluid Dynamics, Bioinformatics, and Hospital information system. Five batches of Biomedical Engineering have been successfully passed out and accredited by PEC, and almost all the students are well placed at suitable biomedical jobs in the market. The curriculum is in line with HEC/NCRC.





# BE BIOMEDICAL ENGINEERING

## INTRODUCTION

After the COVID 19 pandemic, the need of ventilators, masks, face shields, assistive respiratory devices and SPO2 Monitor has suddenly increased which marks the importance of biomedical engineering field which merges the electronics, mechanical & computer principle with health care industry. As a graduate of this programme of top-ranking university, you will have the confidence and ability to communicate with different players in the life science fields, from clinicians and nurses to designers, scientists and other engineers.

## FACILITIES

1. Level II Washington Accord Accreditation by Pakistan Engineering Council
2. Purpose-built Campus at Education City (Link Road)
3. Ziauddin Hospital Facility available for trainings/internships
4. Top students shall be facilitated to get jobs right after graduation

5. Fully Equipped Classrooms
6. State of the art labs
7. Latest book available in Library
8. E-access available, HINARI, PERN, IEEE (Digital Library)
9. PhD Faculty
10. Financial Assistance available
11. Flavour of Artificial Intelligence, instrumentation, mechanics, materials, biotechnology & genetic engineering
12. IEEE chapter of the campus
13. Industrial Collaboration
14. Sports activities, picnic and extracurricular activities

## CAREER PROSPECTS

- Research Assistant
- Health care researcher
- Sales Engineer
- Service Engineer
- Entrepreneur
- Biomedical Content Writer
- Scholarships at postgraduate level

## ELIGIBILITY CRITERIA

S.No.	Programme	Eligibility	DAE	Pct.(%)
1	BE Biomedical Engineering	Inter (Pre Engg, Pre Med), A-level - Phy, Chem, (Bio or Maths)	i. Automation ii. Biomedical iii. Electrical iv. Electronics v. Healthcare vi. Instrumentation vii. Instrumentation & Process Control viii. Mechatronics ix. Radar x. Radio	60%

## FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	10,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	17 * 3500
Examination Fees 1st Semester	8,500
Tuition /Semester Credit hours Fee	59,500
Miscellaneous Charges	45,000
<b>Total Fee at the time of admission</b>	<b>135,000</b>
<b>Tuition Fee</b>	<b>120,000</b>

## DURATION OF PROGRAMME

Be Biomedical Engineering - 4 Years

## LOCATION

Education City, Link Road, Gadap Town, Karachi

## CONTACT INFORMATION

021-36644153, 021-36684406



## BS FOOD SCIENCE AND TECHNOLOGY

### INTRODUCTION

Food science and technology is a multidisciplinary field; it opens up a myriad of opportunities for a food technologist. They can work with a milk processing industry, a winery, bakery industry, meat processing, flavor development, etc. If you are a food lover, then, working in this industry would be like a dream come true. Creating and testing products will expose you to good food. You will also get an opportunity to explore new dishes and flavors.

Food science and technology serves those who have interest in serving society by assuring availability, abundance, affordability, wholesomeness and safety of food. A degree in food science offers many opportunities to earn top-salaries with a good growth rate. Nobody can survive without eating food. Therefore, food industries will always keep processing food and hiring professionals.

### CAREER PROSPECTS

Food technology is a growing industry of Pakistan's total food exports. There is a high demand of trained food professional in both government and private sector. Graduates from the department can work as a food technologist in production/operation/ QA/QC. They can also serve as a research and development analyst for development of new product and processes. A food technologist is not only involved in the food processing, but also in designing of the food plant and various equipment used in processing. They can also involve in the safety and regulatory aspects of the developed product, inspection and accreditation of the food plant etc.

Graduates from food science and technology programme can serve in multidisciplinary fields

- Food manufacturing companies
- Research laboratories

### ELIGIBILITY CRITERIA

S.No.	Programme	Eligibility	DAE
1	BS Food Science & Tech.	Inter (Computer, Pre Engg, Pre Med), A-level – Phy, Chem, (Bio or Maths)	DAE any or Diploma in Homeopathic, Medical Tech – 3 year

### FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	10,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	15*3500
Examination Fees 1st Semester	7,500
Tuition /Semester Credit hours Fee	52,500
Miscellaneous Charges	0
<b>Total Fee at the time of admission</b>	<b>82,000</b>
<b>TUITION FEE</b>	<b>67,000</b>

### DURATION OF PROGRAMME

BS Food Science and Technology - 4 Years

### LOCATIONS

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600  
Education City, Link Road, Gadap Town, Karachi

### CONTACT INFORMATION

021-36644153, 021-36684406





## BS BIOTECHNOLOGY

### INTRODUCTION

Biotechnology is one of the most progressive, advanced, evolving and fruitful branches of science and technology. It is an interdisciplinary field deals with chemistry, physics, biology, mathematics and engineering concepts that are pooled together to develop technologies for the betterment of human life. It will provide you with the opportunity to enhance your research skills in using biological principles and systems to create new products, services and industries. Biotechnology is not confined or bound as a single discipline but includes many interdisciplinary fields of science rapidly gaining significance and opportunities for youngsters who want to explore the new frontiers of science.

### CAREER PROSPECTS

- Biotechnology has a huge variety of career opportunities extending from the research and

development to sales and marketing from manufacturing to quality control and assurance in industrial sector such as textiles industry, food & beverages industry, biological products, medicines and pharmaceuticals. Moreover, biotechnologist can fit in the Agriculture, Animal Technician, Animal Husbandry, Clinical Research Associate, Documentation Coordinator, Bioinformatics Specialist Environment Conservation, Forensic DNA Analyst, Genetic Engineering, Greenhouse And Field Technician, Health Care, Industrial Research And Development Medicine, Instrumentation/Calibration Technician, Laboratory Automation Specialist, Laboratory Technician, Manufacturing Assistant, Quality Control Technician, Quality Assurance Specialist, Research Associate, Sales Representative. It is predicted that biotechnology will become one of the most important applied sciences of this century.

### ELIGIBILITY CRITERIA

S.No.	Programme	Eligibility	DAE
1	BS Biotechnology	Inter (Computer, Pre Engg, Pre Med), A-level – Phy, Chem, (Bio or Maths)	DAE any or Diploma in Homeopathic, Medical Tech – 3 year

### FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	10,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	15*3500
Examination Fees 1st Semester	7,500
Tuition /Semester Credit hours Fee	52,500
Miscellaneous Charges	0
<b>Total Fee at the time of admission</b>	<b>82,000</b>
<b>TUITION FEE</b>	<b>67,000</b>

### DURATION OF PROGRAMME

BS Biotechnology - 4 Years

### LOCATION

F-103, Block-B Block B North Nazimabad Town, Karachi, Sindh 74600

### CONTACT INFORMATION

021-36644153, 021-36684406



## BS BIOMEDICAL ENGINEERING TECHNOLOGY

### INTRODUCTION

With a degree in Biomedical Engineering Technology, students are prepared for entry-level jobs trouble shooting, diagnosing, repairing and calibrating biomedical equipment. The evening programme allows them to continue their education without compromising with their job responsibilities. This will not only provide them with ease of mind but also enable them for self-sustainability. Studying biomedical engineering technology at university will help equip

you with a range of transferable skills that are highly desirable to employers across a variety of industries and professions.

### CAREER PROSPECTS

- Sales and Service Engineer
- Clinical Engineer
- Entrepreneur
- Foreign Scholarships at Postgraduate level
- Research Associates / Assistants

### ELIGIBILITY CRITERIA

S.No.	Programme	Eligibility	DAE	Pct.(%)
1	BS Biomedical Engineering Technology	Inter (Pre Engg, Pre Med) , A-level - Phy, Chem, (Bio or Maths)	DAE any or Diploma any - Inter Equ	50%

### FEE STRUCTURE

Admission Fee	15,000
Security Deposit(refundable)	5,000
Total at the time of admission	20,000
Per Month Fees 04 Years	8,500

### DURATION OF PROGRAMME

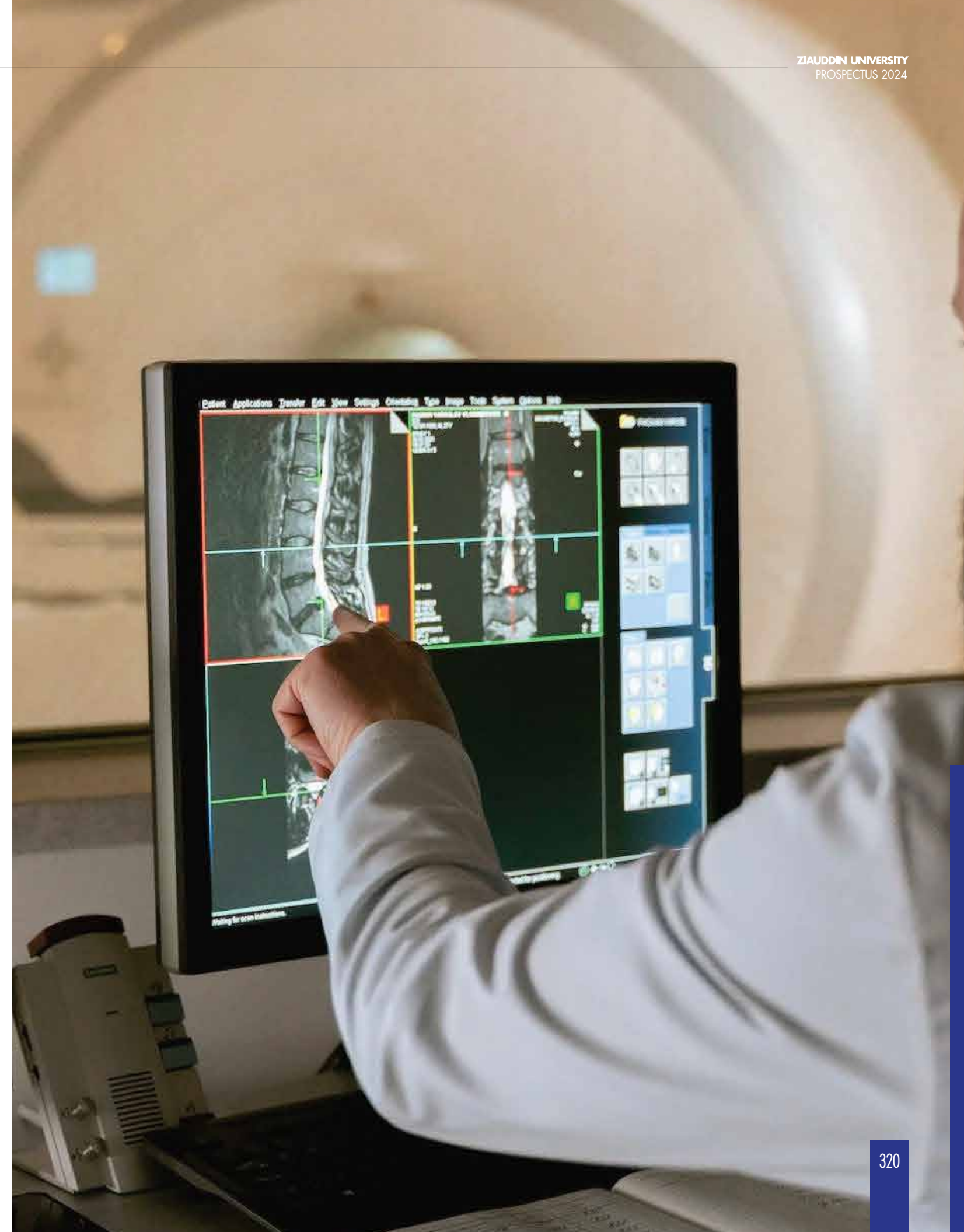
BS Biomedical Engineering Technology - 4 Years

### LOCATION

F-103, Block-B North Nazimabad Town,  
Karachi, Sindh 74600

### CONTACT INFORMATION

021-36644153, 021-36684406





## BS MICROBIOLOGY

### INTRODUCTION

Microbiology is an excellent major for undergraduate students who want a good general education with emphasis on an important and interesting branch of biology. It is one of the most significant branches of biology. Microbiology is one of the largest and most complex of the biological sciences as it deals with many diverse biological disciplines. It has become an umbrella term that cover up many fields of studies for instance medical, molecular, veterinary, industrial, environmental, parasitology, mycology, bacteriology, virology and numerous other. It has the very demanding scope and going high and high with the passage of time not only in Pakistan but all over the globe. Microbiologists can pursue their careers in various fields such as agriculture, food, environ-

### ELIGIBILITY CRITERIA

HSC in Pre-engineering / Pre-medical / Computer Science, A-levels / DAE or Equivalent

### FACILITIES/RESOURCES

The university provides the best resources and facilities to their students and also support their learning with diverse research and teaching. Some of the facilities includes:

- Ziauddin Hospital facility available for training purpose
- Within city campus (easy-to-reach), district central
- Fully equipped (AC, Multimedia, Computer facilities) classrooms
- State-of-the-art labs at Education City (Link Road) Campus
- Latest books available in the library
- E-access available, HINARI, PERN, IEEE (Digital Library)
- Ph.D. faculty
- Affordable fee
- Financial Assistance available

### DURATION OF PROGRAMME

BS Microbiology - 4 Years

### CONTACT INFORMATION

021-36644153, 021-36684406

### LOCATION

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600

ment, industrial microbiology, public health, pharmaceuticals, resource management, and academia.

### CAREER PROSPECTS

The scope of microbiology in Pakistan is increasing day by day with the advancement of science and technology. A microbiologist can easily get the employee in any one of the job areas: Pathology Labs, Biotechnology Firms, Chemical Industries, Veterinary Labs, Food and Nutrition based Companies, Poultry Industries, Beverages Industries, Pharmaceutical Firms, Dairy Farms, Agriculture Sectors, Medical and Clinical Laboratory Technologist and Technicians, Research Departments, Epidemiologist, Consultations and Academic jobs.

### FACULTY MEMBERS

The Faculty of Ziauddin University is highly enthusiastic with an excellent teaching skill also the faculty performance strengths included knowledgeable and strategic teacher, creating a positive learning environment, demonstrating professionalism, displaying scholarly traits, and being supportive. The faculty members have great knowledge about their subjects most of them are PhD scholars from national and international universities and have excellent research and teaching skills. Moreover, the faculty is very active in developing linkages with national and international universities regarding teaching, research, publications and collaborative assignments between universities and institutions.

## MS BIOMEDICAL ENGINEERING (WEEKEND PROGRAMME)

There are three MS tracks offering in the field of Biomedical Engineering at ZUFESTM.

Each MS student has to select four courses as offered by the University from the list of core courses and four or six elective courses from the specialization stream. A student can opt six credit hours research work/thesis instead of two courses from the specialization steam.

Semester 1	
Course	Credit Hours
Research Methodology	03
Advanced Computational Biology	03
Elective 1	03
Semester 2	
Course	Credit Hours
Advanced Biomedical Signals and Systems	03
Elective 2	03
Elective 3	03
Elective 4	03
Semester 3	
Course	Credit Hours
Advanced Biomedical Control Systems	03

### LIST OF CORE COURSES

Course	Credit Hours
Research Methodology	03
Advanced Computational Biology	03
Advanced Biomedical Signals and Systems	03
Advanced Biomedical Control Systems	03

**Note:** Any additional taxes imposed by the government will be the liability of the students/parents/guardian.

The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.

At the time of admission, selected candidates will be required to deposit fee either under Option 1 or Option 2. Therefore monthly or semester fee will be deposited by students within two weeks of commencement of every semester in advance according to the official notification on the notice board. 2% surcharge per month will be levied on outstanding fees after the due date.

### LIST OF ELECTIVES

Course	Credit Hours
Medical Informatics	03
Biomedical Ethics	03
Tissue & Cell Engineering	03
Telemedicine System	03
Pattern Recognition	03
Proteomics	03
Modeling & Simulation of Physiological Systems	03
Functional Genomics	03
Mechatronics System Design	03
Techniques in Biomolecules Analysis	03
Medical Image Processing	03
Cancer Biology	03
Advanced Medical Imaging	03

### ELIGIBILITY CRITERIA

16 years of education in the relevant discipline (biomedical/electrical/electronic engineering) with a minimum CGPA of 2.50/4.00 or equivalent Passed GAT (General) or University admission test.

### FEE STRUCTURE

Tuition fee/ credit	Exam fee / credit	No. of credit / sem	Tuition fees	Exam fees	Sem registration fee
13000	2000	3	39000	6000	0
Activity fee / sem	Security Deposit	Enrollment fees	Semester fees	Admission fee	
0	5000	5000	70,000	15000	



## MPHIL BIOTECHNOLOGY (WEEKEND PROGRAMME)

### INTRODUCTION

physics, biology, mathematics and engineering concepts that are pooled together to produce products that advances healthcare, medicine, agriculture, food, pharmaceuticals and environment control. It is one of the most progressive, advanced, evolving and fruitful branches of science and technology. Biotechnology is not restricted as a single discipline but includes many interdisciplinary fields of science rapidly gaining significance and opportunities for youngsters who want to explore the new frontiers of science. The M.Phil. Program in Biotechnology will empower students to become highly qualified scholars and professionals who would serve efficiently in academia and other relevant companies/ organizations through their quality education along with the analytical and research skills in the specialized areas of Biotechnology.

### CAREER PROSPECTS

Biotechnology is a multidisciplinary field with a wide variety of career opportunities extending from the research and development to sales and marketing from manufacturing to quality control and assurance in industrial sector such as textiles industry, food & beverages industry, biological products, medicines and pharmaceuticals. There is a high demand of trained biotechnologist in both government and private sector. It is predicted that biotechnology will become one of the most important applied sciences of this century.

Biotechnologist can work in multidisciplinary fields:

- Clinical Research Associate
- Agriculture, Animal Technician, Animal Husbandry
- Forensic DNA Analyst
- Documentation Coordinator
- Bioinformatics Specialist Environment Conservation
- Genetic Engineering
- Greenhouse and Field Technician
- Health Care
- Industrial Research and Development

Medicine

- Instrumentation/Calibration Technician
- Laboratory Automation Specialist
- Laboratory Technician
- Manufacturing Assistant
- Quality Control Technician
- Quality Assurance Specialist
- Research Associate
- Sales Representative

### STRENGTH OF FACULTY MEMBERS

The faculty of biotechnology includes qualified professionals with expertise in both teaching and research. The faculty is engaged in research activities and have publication in national and international journals. The faculty performance strengths included knowledgeable and strategic teacher, creating a positive learning environment, demonstrating professionalism, displaying scholarly traits, and being supportive. The faculty is dedicated to provide the best scientific training also the faculty members are PhD scholars from national and international universities and have great knowledge about their subjects and have excellent research and teaching skills. Moreover the faculty is very active in developing linkages with national and international universities regarding teaching, research, publications and collaborative assignments between Universities and institutions.

### ELIGIBILITY CRITERIA

- 5 years professional education (MBBS / DPT / Pharm-D) with a minimum CGPA of 2.0 out of 4.0 OR 55% marks (percentage will only be considered if CGPA is not mentioned on the transcript).

OR

- 4 years professional education in Life Sciences (Biotechnology / Biochemistry / Molecular Biology/ Bioinformatics etc) after HSSC / A-levels with minimum CGPA of 2.0 out of 4.0 OR 55% marks (percentage will only be considered if CGPA is not mentioned on the transcript)

OR

- MSc after two years BSc / Three years BSc

Hons, in any subject related to life sciences with minimum CGPA of 2.0 out of 4.0 OR 55% marks (percentage will only be considered if CGPA is not mentioned on the transcript).

OR

- 4 years professional education in Biomedical Engineering and Biomedical Engineering Technology or Relevant with minimum CGPA of 2.0 out of 4.0 OR 55% marks (percentage will only be considered if CGPA is not mentioned on the transcript).

### Application for Admission

Applications for admission will be accepted between 8TH November and 30th December, 2021. Candidates must apply online by logging on to admission.zu.edu.pk.

**Please Note:** Seats are limited, first come first serve formula shall be followed

### FEE STRUCTURE

Tuition fee/ credit	Exam fee / credit	No. of credit / sem	Tuition fees	Exam fees	Security Deposit
13000	2000	3	39000	6000	5000
Enrollment fees	Semester fees	Admission fee			
5000	70,000	15000			

**Note:** Any additional taxes imposed by the government will be the liability of the students/parents/guardian.

The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.

At the time of admission, selected candidates will be required to deposit fee either under Option 1 or Option 2. Therefore monthly or semester fee will be deposited by students within two weeks of commencement of every semester in advance according to the official notification on the notice board. 2% surcharge per month will be levied on outstanding fees after the due date.

The students claiming exemptions from any course or courses will be required to pay exemption fee @ Rs. 2,500/- per subject in the beginning of semester.

Fees once deposited are not refundable, except security deposits, for any reason whatsoever.





## DEPARTMENT OF ELECTRICAL ENGINEERING

### MISSION

To impart quality education in electrical engineering technology and produce graduates that conduct research, develop technologies and contribute to the national and international scientific and socioeconomic growth.

### INTRODUCTION

The Department of Electrical Engineering, established in 2017 under Ziauddin University Faculty of Engineering, Science, Technology, and Management (ZUFESTM), has the primary goal of producing high-quality scientists for research and development, as well as engineers and technologists equipped with the necessary skill set to meet market demands. Located at the North Nazimabad Campus in Karachi, the department offers three undergraduate and two postgraduate programmes, all of which are approved by the Higher Education Commission (HEC). Furthermore, the department boasts state-of-the-art laboratories for both undergraduate and postgraduate students, along with research facilities, and is staffed by a highly qualified faculty with extensive

industrial and academic experience in their respective areas of expertise.

The programmes offered include a BE in Electrical Engineering and a BS in Internet of Things (IoT) in the morning, and a BS in Electrical Engineering Technology in the evening. These undergraduate programmes typically span four years (8 semesters). The BE Electrical Engineering programme holds accreditation from the Pakistan Engineering Council (PEC), while the BS Electrical Engineering Technology programme is accredited by the National Technology Council (NTC).

The MS in Electrical Engineering typically spans one and a half years (3 semesters) and is offered with the option of either a coursework-based approach involving 10 courses or a coursework-based approach with 8 courses plus a thesis. The Ph.D. in Electrical Engineering is typically a four-year (8 semesters) programme offered with a coursework and dissertation requirement. Both programmes are approved by the Higher Education Commission (HEC).

### LOCATION

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600

### CONTACT INFORMATION

+92 (213) 664-4153, +92 (213) 668-4406

## BE ELECTRICAL ENGINEERING

### INTRODUCTION

Electrical Engineering encompasses the study, design, and application of equipment, devices, and systems that utilize electricity and electronics. The Department of Electrical Engineering at Ziauddin University, North Nazimabad, Karachi, offers a Bachelor of Engineering (BE) programme in Electrical Engineering, typically spanning four years (8 semesters) and conducted in the morning. This programme is approved by the Higher Education Commission (HEC) and accredited by the Pakistan Engineering Council (PEC).

### ELIGIBILITY CRITERIA

HSc., (Pre-Engineering) or A-Level (with Physics, Mathematics and Chemistry) or DAE in (Electrical / Electronics), with 60% and above.

### SCOPE AND OPPORTUNITIES

An Electrical Engineering Graduate is capable of:

- Design, plan, research, evaluate and test electrical and electronic equipment and systems.
- Employed by electrical utilities, communication companies, manufacturers of electrical and electronic equipment, consulting firms.

### CAREER PROSPECTS

A BE Electrical Engineering opens up a wide range of career prospects for graduates such as:

Electrical / Electronic Engineer, Control Systems Engineer, Power Systems Engineer, Renewable Energy Engineer, Telecommunications Engineering, Instrumentation Engineer, Entrepreneur, Academic and Research Positions.

### FEE STRUCTURE

<b>Admission Processing Fees</b>	<b>2500</b>
<b>Admission Fees</b>	10,000
<b>Security Deposit (refundable)</b>	5,000
<b>Student Activity Fee (Per Semester)</b>	2,000
<b>Semester Reg. Fee (per semester)</b>	5,000
<b>First Semester Credit Hours Fee</b>	<b>17*2700</b>
<b>Examination Fees 1st Semester</b>	4,250
<b>Tuition /Semester Credit hours Fee</b>	45,900
<b>Miscellaneous Charges</b>	0
<b>Total Fee at the time of admission</b>	<b>72,150</b>
<b>TUITION FEE</b>	<b>57,150</b>

## BS ELECTRICAL ENGINEERING TECHNOLOGY

### INTRODUCTION

Electrical Engineering Technology involves the study of machines, equipment, and systems related to electricity. The Department of Electrical Engineering at Ziauddin University, North Nazimabad, Karachi, offers a Bachelor of Science (BS) in Electrical Engineering Technology, typically spanning four years (8 semesters) as an evening programme. This programme is approved by the Higher Education Commission (HEC) and accredited by the National Technology Council (NTC).

### ELIGIBILITY CRITERIA

H.Sc. (Pre-Engineering / Computer Science), or A-level, or DAE (in Electrical/Electronics or a relevant trade) with 50% marks and above.

### SCOPE AND OPPORTUNITIES

An Electrical Engineering Technology Graduate is capable of:

- Develop electrical products, conduct electrical system testing, engaging in technical sales, and provide field service.
- Employed by electrical power generation and transmission companies, construction firms and, manufacturing Industries.

### CAREER PROSPECTS

A BS Electrical Engineering Technology opens up a wide range of career prospects for graduates such as:

- Electrical Technologist, Electronics Technician, Control System Technician, Power System Technician, Automation Technician, Instrumentation Technician, Telecommunications Technician, Field Service Technician.

### FEE STRUCTURE

Admission Fee	15,000
Security Deposit(refundable)	5,000
Total at the time of admission	20,000
Per Month Fees 04 Years	8,500

## BS INTERNET OF THINGS (IOT)

### INTRODUCTION

The Internet of Things (IoT) facilitates connectivity among a collection of physical devices equipped with sensors for data exchange over the Internet and communication networks. The Department of Electrical Engineering at Ziauddin University, North Nazimabad, Karachi, offers a Bachelor of Science (BS) programme in Internet of Things (IoT), typically spanning four years (8 semesters) as a morning programme.

### ELIGIBILITY CRITERIA

HSc., (Pre-Engineering / Pre-Medical or Computer Science) or A-Level or DAE in (Electrical / Electronics / Computer Information Technology or Equivalent). Students with pre-medical background are required to take an additional mathematics course.

### SCOPE AND OPPORTUNITIES

An Internet of Things (IoT) Graduate is capable of:

- Cross-Industry Applicability, Growing Demand, Innovation and Entrepreneurship, Global Opportunities, Interdisciplinary Roles.

### CAREER PROSPECTS

A BS IoT Graduate is capable of:

- IoT Developer, IoT Solutions Architect, Embedded Systems Engineer, IoT Security Specialist, IoT System Integrator, IoT Researcher, IoT in Industrial Automation, IoT in Energy Management.

### FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	10,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	18*2700
Examination Fees 1st Semester	4,250
Tuition /Semester Credit hours Fee	48,600
Miscellaneous Charges	0
Total Fee at the time of admission	74,850
TUITION FEE	59,850





## MS ELECTRICAL ENGINEERING

### INTRODUCTION

The Master of Science (MS) programme in Electrical Engineering generally extends over one and a half years, comprising three semesters. Students have the flexibility to choose between two programme tracks: one centered on coursework with ten courses or an alternative track featuring eight courses combined with a thesis project. Within this programme, students can specialize in one of three areas of focus: (a) Control and Automation, (b) Computer and Communication Networks, or (c) Telecommunication Systems.

### ELIGIBILITY CRITERIA

Applicants are required to have completed 16 years of education in the relevant discipline with a minimum CGPA of 2.0/4.0 or 60% marks.

### FEE STRUCTURE

MS Electrical Engineering Fee Structure	Per Cr. Hr.	No. of Courses	Total (PKR)
Tuition Fee per course	13,000	3	39,000
Examination Fee per course	2,000	3	6,000
Admission (One Time Only)	-	-	15,000
Security Deposit (One Time Only and Refundable)	-	-	5,000
Enrollment Fee	-	-	5,000
Grand Total (1st Semester)			70,000

**Note:** The University reserves the right to modify the fees (if required). Fees once deposited is non-refundable, except security deposit. Admission processing fee PKR 2500 is applicable.

Additionally, they must either pass the HEC/NTS HAT (general) or successfully pass the university admission test, followed by an interview.

### SCOPE AND OPPORTUNITIES

An MS Electrical Engineering Graduate is capable of:

- Research and Development, Academia, Consulting, Entrepreneurship, Management Roles, Global Opportunities.

### CAREER PROSPECTS

An MS Electrical Engineering Graduate is capable of:

- Electrical Engineer, Control Systems Engineer, Electronics Engineer, Power Systems Engineer, Research Scientist, Technical Manager, Consultant / Advisor, Quality Assurance Engineer.

## PHD ELECTRICAL ENGINEERING

### INTRODUCTION

The Ph.D. in Electrical Engineering is an advanced and rigorous academic programme, typically lasting four years (8 semesters). It is designed to impart students with profound expertise in the dynamic field of electrical engineering. This comprehensive programme incorporates a complex blend of coursework and dissertation research, offering candidates a well-rounded education and an in-depth understanding of the subject matter. Within the Ph.D. programme, students have a unique opportunity to specialize in one of three distinct and crucial areas: (a) Electrical/Electronic Engineering, (b) Computer Engineering, or (c) Telecommunication Engineering.

### ELIGIBILITY CRITERIA

To apply for the Ph.D. in Electrical Engineering, candidates require 18 years of relevant education, a CGPA of 3.0/4.0 or a First Division in M.Phil/M.S/Equivalent. Additionally, they

must pass the NTS/HEC HAT (Subject) with a minimum score of 60% or the university admission test with a qualifying score of 70%. These scores must be submitted before or during the first semester.

### SCOPE AND OPPORTUNITIES

A PhD Electrical Engineering Graduate is capable of:

- Advanced Research, Academic Career, Industry Research and Development, Consulting, Entrepreneurship, International Collaboration.

### CAREER PROSPECTS

A PhD Electrical Engineering Graduate is capable of:

- Research Scientist, University Professor, Director of Research and Development, Principal Engineer, Technical Consultant, Energy and Sustainability Expert, Advanced Control Systems Engineer.

### FEE STRUCTURE

PhD Electrical Engineering Fee Structure	Per Cr. Hr.	No. of Courses	Total (PKR)
Tuition Fee per course	15,000	3	45,000
Examination Fee per course	3,000	3	9,000
Admission (One Time Only)	-	-	20,000
Security Deposit (One Time Only and Refundable)	-	-	5,000
Enrollment Fee	-	-	10,000
Grand Total (1st Semester)			89,000

**Note:** The University reserves the right to modify the fees (if required). Fees once deposited is non-refundable, except security deposit. Admission processing fee PKR 2500 is applicable.





## DEPARTMENT OF CIVIL ENGINEERING

### INTRODUCTION

The Department of Civil Engineering was established in 2017 under the Faculty of Engineering, Science, Technology and Management (ZUFESTM) with the aim to produce proficient scientists, engineers, and technologists equipped to meet the evolving demands of the industry. The department is currently offering two undergraduate and one postgraduate programmes, approved by the Higher Education Commission (HEC), at the Link Road Campus, Karachi.

The Department of Civil Engineering is committed to provide cutting-edge laboratory facilities, an interactive learning environment and highly qualified faculty members. The department is well equipped with laboratories of Surveying, Engineering Mechanics, Fluid Mechanics & Hydrology, Mechanics of Solids, Construction Engineering, Material Testing, Drawing studio and Computing Lab. A strong emphasis is placed on the practical application of knowledge, ensuring a balanced integration of theory and hands-on experience. The faculty members bring a depth of industrial and academic expertise to the table, enriching the learning process. To further support students, a dedicated team of lab staff and attendants is maintained. In the pursuit of advancing the frontiers of Civil Engineering research, the Dr. Aijaz Fatima Library has an extensive collection of Civil Engineering titles tailored to various specializations at the Link Road Campus.

Furthermore, the department takes pride in its PEC and NTC accreditations for its programmes, as well as the alignment of its curriculum with HEC/NCRC standards.

The Department of Civil Engineering is dedicated to fostering a vibrant academic community where innovation and collaboration thrive. The aim is to empower students to make informed choices and contribute effectively to the ever-evolving landscape of Civil Engineering, equipped with both theoretical knowledge and practical skills. Students are encouraged to engage in research projects, internships, and extracurricular activities that not only enhance their academic journey but also prepare them for real-world challenges in the field. As students progress through the programmes, they develop the technical prowess and discerning capabilities necessary to excel in the field of Civil Engineering. Through a holistic approach to education, the department strives to produce graduates who not only excel in their technical skills but also possess strong problem-solving abilities, effective communication skills, and a deep commitment to ethical practices in Civil Engineering. Overall, this effort is shaping the future of the industry and empowering students to become leaders in their chosen fields.





## B.E. CIVIL ENGINEERING (PEC Accredited Programme)

### MISSION

To produce versatile professionals with diverse technical knowledge, leadership skills, and ethical awareness, driving innovation through sustainable solutions, fostering impactful careers through dynamic learning and professional excellence, while also contributing to socioeconomic advancement.

### INTRODUCTION

The B.E. Civil Engineering programme is designed to equip students with the knowledge and skills necessary to thrive in the dynamic field of civil engineering. Civil Engineering plays a crucial role in shaping our built environment, encompassing the design, construction, and maintenance of infrastructure essential to society. From bridges and highways to buildings and water supply systems, civil engineers are at the forefront of creating sustainable and innovative solutions to meet the evolving needs of our modern world.

During this comprehensive programme, students will delve into various disciplines within civil engineering, gaining a solid foundation in core concepts and techniques. They will learn to analyze and design structures, develop sustainable infrastructure, and tackle challenges related to transportation, environmental impact, and urban development. By merging theory with practical applications, students will acquire the necessary skills to become proficient problem-solvers, effective communicators, and ethical professionals in the field.

The programme offers a diverse curriculum that covers key areas such as structural engineering, geotechnical engineering, transportation engineering, water resources

engineering, and construction management. Students will engage in hands-on projects, laboratory work, and internships to gain valuable real-world experience. Additionally, they will have access to state-of-the-art facilities and cutting-edge software tools, enabling them to simulate and analyze complex engineering scenarios.

### CAREER PROSPECTS

1. Graduates have the opportunity to embark on entrepreneurial ventures, establishing their construction firms or consultancy businesses, offering services as contractors and designers.
2. Graduates can apply their expertise in water resources, contributing to projects involving the construction of dams, barrages, culverts, and other critical infrastructure.
3. Graduates can make a significant impact by contributing their skills to enhance Irrigation Engineering in underdeveloped regions of Pakistan, improving agricultural productivity and water management.
4. Collaborating with transportation companies, graduates can conduct vital studies such as traffic management, safety assessments, signage planning, road furniture design, and infrastructure enhancement projects, ensuring smoother and safer journeys.
5. Graduates can contribute their knowledge to soil testing laboratories, ensuring the quality and safety of construction projects by analyzing soil properties and making recommendations.
6. Graduates can play a pivotal role in industries related to wastewater treatment and solid waste management, aligning with the scope of projects like the China-Pakistan Economic Corridor (CPEC) to promote environmental sustainability and responsible resource management.

### FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	10,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	17 *4000
Examination Fees 1st Semester	8,500
Tuition /Semester Credit hours Fee	68,000
Miscellaneous Charges	45,000
<b>Total Fee at the time of admission</b>	<b>143,500</b>
<b>TUITION FEE</b>	<b>128,500</b>



# BS CIVIL ENGINEERING TECHNOLOGY

(NTC Accredited Programme)

## MISSION

To produce graduates with essential technical knowledge, practical skills and capacity development, enabling them to effectively lead the industry through the implementation of project management lifecycle, innovative sustainable practices, and a strong societal and ethical awareness.

## INTRODUCTION

The field of Civil Engineering Technology is experiencing a growing demand as the market continually evolves. This increasing demand is closely tied to the rapid expansion of high-rise buildings and infrastructure projects. Consequently, there is an urgent need for individuals to become part of the broader civil engineering technology profession to meet these dynamic challenges.

Civil Engineering Technology encompasses a range of focused areas, providing students with a diverse and comprehensive skill set. These specialized areas include Construction Management, which equips students with the expertise to oversee complex construction projects efficiently. Additionally, students delve into Traffic and Transportation, where they learn to address traffic flow and transportation network optimization, crucial for urban planning and development. Geotechnical and Foundation Works is another essential facet, enabling students to understand soil mechanics, foundation design, and the critical role they play in constructing safe and stable structures. Coastal and Harbour Works delve into the intricate world of coastal engineering, preparing students to tackle the unique challenges posed by maritime environments. Environmental Assessment is yet another vital component, where students learn to evaluate the environmental impact of engineering projects, ensuring sustainable practices.

The Civil Engineering Technology programme is designed to be accessible and beneficial to a diverse range of students. Whether one has

embarked on a mixed venture career path, faced time constraints, or has work-related responsibilities, the programme is structured to accommodate their needs. It is understood that not everyone follows a linear academic trajectory, and students who may not have initially qualified for traditional engineering programmes due to fluctuations in academic performance are welcomed.

The department is committed to providing a supportive and inclusive learning environment where students can acquire the knowledge and skills necessary to thrive in the dynamic and ever-expanding field of Civil Engineering Technology. By joining this programme, students become part of a community dedicated to shaping the future of infrastructure and construction, ensuring the sustainable development of our cities and environments.

## CAREER PROSPECTS

1. Graduates can pursue careers as infrastructure project managers, overseeing large-scale infrastructure projects such as highways, bridges, and utility systems, ensuring their successful completion and compliance with regulations.
2. Graduates can focus on urban planning, revitalization, and development, contributing to the growth and improvement of cities and metropolitan areas.
3. Graduates can explore roles in technology and innovation, working on the development of new construction technologies, materials, and methodologies to improve efficiency and sustainability in the construction industry.
4. Graduates can work as sustainability consultants, helping organizations and communities develop eco-friendly and sustainable infrastructure projects, aligning them with environmental regulations and sustainable practices.
5. Graduates can start their own construction-related businesses, offering a wide range of services, from construction management and consulting to materials testing and inspection services.

## ELIGIBILITY CRITERIA

S.No.	Programme	Eligibility	DAE	Pct.(%)
1	BS Civil Engineering Tech.	Inter (Computer, Pre Engg, Pre Med) , A-level (Phy, Chem, Maths)	i. Architecture ii. Civil iii. Civil with any specialization iv. Environmental v. Land & Mine Surveying	50%
2	BE Civil Engineering	Inter (Computer, Pre Engg, Pre Med) , A-level (Phy, Chem, Maths)	i. Architecture ii. Civil iii. Civil with any specialization iv. Environmental v. Land & Mine Surveying	60%

## FEE STRUCTURE

Admission Fee	15,000
Security Deposit(refundable)	5,000
Total at the time of admission	20,000
Per Month Fees 04 Years	8,500

## DURATION OF PROGRAMME

BE Civil Engineering  
04 Years

BS Civil Engineering Technology  
04 Years

## LOCATION

BE Civil Engineering  
Education City, Link Road, Gadap Town, Karachi

BS Civil Engineering Technology  
F-103, Block-B North Nazimabad Town,  
Karachi, Sindh 74600

## CONTACT INFORMATION

021-36644153, 021-36684406



## PHD CIVIL ENGINEERING

### MISSION

To produce graduates equipped with creative, self-directed thinking and a multi-disciplinary approach to global challenges, driving sustainability and prosperity, while becoming versatile professionals, committed researchers, and impactful leaders.

### INTRODUCTION

The Ph.D. in Civil Engineering programme represents the pinnacle of academic achievement in the field, catering to aspiring scholars and experts who seek to make groundbreaking contributions to the ever-evolving realm of civil engineering. With a profound commitment to advancing knowledge and innovation, this programme is designed to empower students to push the boundaries of their discipline and redefine the future of civil engineering.

In the course of this rigorous doctoral programme, students will engage in intensive research across a spectrum of specialised domains within civil engineering, enabling them to master the complexities of the field and to transcend conventional boundaries. They will be challenged to explore, question, and innovate in areas ranging from structural engineering, geotechnical engineering, and transportation engineering to water resources engineering and construction management.

Emphasising both theoretical and practical knowledge, our Ph.D. candidates will not only conduct cutting-edge research but also translate their findings into practical, sustainable solutions. Through a blend of advanced coursework, hands-on experimentation, and research projects, they will develop a deep understanding of the complexities of civil engineering and gain expertise in addressing real-world challenges.

The Ph.D. programme is committed to fostering the next generation of leaders and professionals in civil engineering. Graduates will emerge

as influential figures who are capable of making transformative contributions to the field, inspiring innovation, and leaving a permanent mark on the future of civil engineering.

### SCOPE

Individuals pursuing a Ph.D. in Civil Engineering can aim at a vast array of different careers in different fields. Civil Engineering is in high demand with the passage of time and growing trends. In recent times, there has been an increase in the number of developments of high-rise buildings and infrastructure; hence, there is an immense need to be part of Civil Engineering profession from a broader perspective. The area of Civil Engineering is very broad and linked with the industrial development of the country. In addition, CPEC and other big international projects have increased the demand for new buildings, airports, transportation and roads infrastructure, which is directly linked with Civil Engineering.

### ELIGIBILITY CRITERIA

- 18 Years of education with relevant specialization, Minimum CGPA 3.00/4.00 or First Division (in the Annual System) in M.Phil/M.S/Equivalent is required, Passed NTS/HEC GAT (Subject) or the University admission test.
- In the case of GAT Subject test with minimum of 60% marks is required to take admission. Presently following subjects are available for GAT subject test and are eligible to apply for PhD. in Civil Engineering, If the Test is not available in GAT subject list, then a University Committee consisting of at least three Ph.D. faculty members in the subject area and approved by the HEC will conduct the Test at par with GRE Subject Test and qualifying score for this will be 70% score.

Students admitted in Ph.D. Programs have to submit the requisite GAT Subject or GRE Subject at the time of admission preferably or before the end of first semester of the respective program.

### FEE STRUCTURE

Tuition fee/ credit	Exam fee / credit	No. of credit / sem
15000	3000	3
Activity fee / sem	Security Deposit	Enrollment fees
-	5000	10000
Tuition fees	Exam fees	Sem registration fee
45000	9000	-
Semester fees	Admission fee	
89,000	20000	

**Note:** Any additional taxes imposed by the government will be the liability of the students/parents/guardian.

The University reserves the right to increase the fees if required according to the recommendation of the Governing Body.

At the time of admission, selected candidates will be required to deposit fee either under Option 1 or Option 2. Therefore monthly or semester fee will be deposited by students within two weeks of commencement of every semester in advance according to the official notification on the notice board. 2% surcharge per month will be levied on outstanding fees after the due date.

The students claiming exemptions from any course or courses will be required to pay exemption fee @ Rs. 2,500/- per subject in the beginning of semester.

Fees once deposited are not refundable, except security deposits, for any reason whatsoever.

### LOCATION

PhD Civil Engineering  
F-103, Block-B Block B North Nazimabad Town,  
Karachi, Sindh 74600

### CONTACT INFORMATION

021-36644153, 021-36684406



## COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING

“During my studies as a student of Software Engineering, I have had the opportunity to contribute to groundbreaking projects, collaborate with talented professionals, and stay at the forefront of technological advancements. This accomplishment is a testament to the hard work and commitment that I bring to my work each day. I am grateful for the support of my teachers and mentors and the opportunities that have allowed me to grow in my career. I am eager to continue making meaningful contributions to the world of software engineering, driving innovation, and solving complex challenges. This achievement reflects my dedication to excellence, continuous learning, and a passion for pushing the boundaries of technology.

Thanks to the whole Ziauddin University for being part of my journey, and I look forward to the exciting developments that lie ahead.”

Shah Ahmed  
BS Software Engineer



## DEPARTMENT OF COMPUTER SCIENCE

### VISION

To be recognized as academic leaders, experts and innovators in the diverse and ever evolving disciplines of computing.

### INTRODUCTION

Welcome to the Department of Computer Science and Software Engineering at Ziauddin University. We are delighted that you have taken the first step in exploring the limitless possibilities that a career in technology can offer. Our department is a vibrant and innovative hub where cutting-edge research, hands-on learning, and real-world applications converge to shape the future of computing.

In today's fast-paced and interconnected world, technology plays a pivotal role in shaping every aspect of our lives. From the apps we use on our smartphones to the complex algorithms powering the next breakthroughs in artificial intelligence, the impact of computer science and software engineering is profound and far-reaching. It is an exciting time to embark on a journey into the world of computing, and our department is here to guide you every step of the way.

Our commitment to excellence is reflected in our dedicated faculty, who are not only experts in their fields but also passionate educators. They bring a wealth of knowledge, industry experience, and a deep understanding of the rapidly evolving tech landscape to the classroom. Whether you are interested in designing the next big software application, unraveling the mysteries of machine learning, or securing the digital world against cyber

threats, our faculty will provide you with the guidance and mentorship you need to thrive. At Ziauddin University, we understand that learning by doing is key to mastering the art and science of computer technology. Our state-of-the-art laboratories, collaborative project spaces, and internship opportunities with industry-leading companies will ensure that you gain practical experience and valuable skills that are in high demand in the job market.

We also believe in fostering a diverse and inclusive community where students from all backgrounds can thrive. Innovation thrives when diverse perspectives come together, and we are committed to creating an environment where everyone can excel.

We invite you to explore our website, meet our faculty, learn about our research projects, and discover the exciting opportunities that await you. If you are a parent, we understand that choosing the right educational path for your child is a significant decision, and we are here to provide you with all the information and support you need to make an informed choice.

Thank you for considering the Department of Computer Science and Software Engineering at [Your University's Name] as your educational home. We look forward to welcoming you to our community, where innovation knows no bounds, and the future of technology is yours to shape. Join us on this thrilling journey of discovery, creativity, and limitless possibilities.

## BS COMPUTER SCIENCE

### MISSION

To provide students with a solid foundation in fundamental knowledge, design and development principles, ethical practices, effective communication skills, and the ability to work collaboratively in teams leading to ever-evolving technological landscape.

### INTRODUCTION

Welcome to the 4-Year Bachelor of Science in Computer Science programme at Ziauddin University.

In today's digital era, computer science stands as the driving force behind innovation, fundamentally shaping our daily lives, our workplaces, and the world at large. If you're driven by curiosity, possess a passion for problem-solving, and aspire to play a pivotal role in defining the future of technology, our computer science programme is your gateway to an intellectually stimulating and rewarding career.

At Ziauddin University, we believe that computer science is not merely about writing lines of code; it's about crafting solutions to intricate challenges, engineering ground breaking software and systems, and pushing the boundaries of technological possibilities. Our programme is thoughtfully designed to provide you with a holistic and rigorous education in computer science, equipping you with the skills and knowledge necessary to excel in this ever-evolving field.

Our commitment to academic excellence is unwavering. Our distinguished faculty members are leaders in the realm of computer science, deeply dedicated to fostering your success. You'll have the privilege of learning from experts who are not only passionate about teaching but also actively engaged in pioneering research, ensuring that you receive a world-class education.

One of the distinctive features of our programme is the strong emphasis on hands-on learning. Throughout your academ-

ic journey, you'll engage in real-world projects, collaborate closely with faculty on ground breaking research initiatives, and have the opportunity to intern with renowned tech companies. This practical experience will not only reinforce your classroom learning but also provide you with a competitive edge in the job market.

As a computer science student at Ziauddin University, you'll have the flexibility to explore diverse areas within the field. Whether your interests lie in artificial intelligence, data science, cybersecurity, software engineering, or computer graphics, our programme offers a rich array of electives and concentrations to tailor your education to your passions and career aspirations.

Diversity and inclusion are at the heart of our programme. We firmly believe that the most innovative solutions emerge from diverse perspectives, and we eagerly welcome students from all backgrounds to join our inclusive community. Your unique experiences and viewpoints will contribute to the vibrant tapestry of ideas that propel innovation in computer science.

As you navigate our website, you'll discover comprehensive information about our curriculum, esteemed faculty members, research opportunities, and the exciting career pathways that await our graduates. We invite you to delve into these resources, pose any questions you may have, and envision the boundless possibilities that a degree in computer science from Ziauddin University can unlock for you.

Your journey toward becoming an adept computer scientist begins here, and we are thrilled to be a part of it. We eagerly await your arrival in our programme, where you'll acquire the knowledge and skills to shape the future of technology. Join us in embracing the thrilling adventure of computer science at Ziauddin University.

## CAREER PROSPECTS

Students who pursue this degree will have the opportunity to gain expertise in various areas of the field, allowing them to pursue diverse career paths. Let's take a closer look at each focus area:

**1. Artificial Intelligence:** This specialization equips students with a deep understanding of AI principles and techniques. Graduates will be able to contribute to the development of intelligent systems and applications by leveraging their knowledge of machine learning, data analysis, and problem-solving.

**2. Computer graphics:** Students focusing on computer graphics will explore the world of visual computing. They will develop skills in creating and manipulating images, animations, and virtual environments. This specialization prepares graduates for careers in areas such as game development, animation, virtual reality, and computer-aided design.

**3. Computer networking:** This specialization focuses on the intricacies of network design, administration, and security. Students will gain expertise in building robust and efficient communication infrastructures. Graduates can pursue careers as network administrators, network engineers, or network security specialists.

**4. Information security:** With a focus on information security, students will learn about the complexities of safeguarding information and data. They will acquire skills in protecting against cyber threats and ensuring data

integrity. Graduates can pursue careers as cybersecurity analysts, information security consultants, or ethical hackers.

**5. Machine learning:** This specialization delves into machine learning algorithms and models. Students will learn how to extract insights and make predictions from complex datasets. Graduates will be well-equipped for roles such as machine learning engineers, data scientists, or AI researchers.

**6. Robotics:** Students focusing on robotics will explore the field of designing, programming, and controlling intelligent robots and autonomous systems. This specialization prepares graduates for careers in areas such as robotics engineering, automation, and artificial intelligence.

**7. Software design and engineering:** This specialization provides students with the necessary skills to develop high-quality software. They will learn about efficient design principles, coding practices, and software testing. Graduates can pursue careers as software engineers, software developers, or software architects.

By offering these diverse specializations, ZU's software engineering degree programme prepares students for a wide range of career opportunities. It allows them to explore their interests and develop expertise in specific areas of software engineering, making them well-rounded professionals in the field.

## ELIGIBILITY CRITERIA

At least 50% marks in Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics, certified by IBCC. OR At least 50% marks in Intermediate (HSSC) examination with pre-Medical or

equivalent qualification, certified by IBCC.

Deficiency: Students with pre-medical must have to pass deficiency courses of Mathematics of 06 credit hours in first two semesters.

S.No.	Programme	Eligibility	DAE	Pct. (%)
1	BS COMPUTER SCIENCE	Inter (Computer, Pre-Engineering, Pre Med), A-level Physics, Chemistry, (Bio or Math's)	DAE Any	50%

## SCHEME OF STUDIES

SEMESTER I						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	NS-201	Linear Algebra	3	0	3+0	
2	NS-106T	Applied Physics (Theory)	2	0	2+1	
3	NS-106L	Applied Physics (Labs)	0	1		
4	HS-100	English Composition & Comprehension	3	0	3+0	
5	CS-107T	Introduction to Info. & Comm. Technologies (Theory)	2	0	2+1	
6	CS-107L	Introduction to Info. & Comm. Technologies (Labs)	0	1		
7	CS-104T	Programming Fundamentals (Theory)	3	0	3+1	
8	CS-104L	Programming Fundamentals (Labs)	0	1		
<b>Total</b>			<b>13</b>	<b>3</b>	<b>16</b>	

SUMMER I						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	NS-115	Basic Mathematics	6	0	NC	
<b>Total</b>					<b>NC</b>	

SEMESTER II						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	HS-103	Pakistan Studies	2	0	2+0	
2	MS-101	Principles of Accounting (University Elective-I)	3	0	3+0	
3	CS-102T	Web Engineering (Theory)	2	0	2+1	
4	CS-102L	Web Engineering (Labs)	0	1		
5	CS-112T	Object Oriented Programming (Theory)	3	0	3+1	Programming Fundamentals (Theory and Labs)
6	CS-112L	Object Oriented Programming (Labs)	0	1		
7	SE-100T	Introduction to Software Engineering (Theory)	2	0	2+1	
8	SE-100L	Introduction to Software Engineering (Labs)	0	1		
9	CS-103	Discrete Structures	3	0	3+0	
<b>Total</b>			<b>15</b>	<b>3</b>	<b>18</b>	





SEMESTER III						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	MS-214	Entrepreneurship (University Elective-IV)	3	0	3+0	
2	SE-244	Human Computer Interaction	3	0	3+0	Software Engineering
3	CS-232T	Data Structures and Algorithms (Theory)	3	0	3+1	Programming Fundamentals (Theory and Labs)
4	CS-232L	Data Structures and Algorithms (Labs)	0	1		
5	MT-101	Calculus and Analytical Geometry	3	0	3+0	
6	MS-203	Human Resource Management (University Elective-II)	3	0	3+0	
7	HS-101 or HS-102	Islamic Studies or Ethical Behavior	2	0	2+0	
<b>Total</b>			<b>17</b>	<b>1</b>	<b>18</b>	

SUMMER II						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CV-211	Civics and Community Engagement	0	2	0+2	
<b>Total</b>			<b>0</b>	<b>2</b>	<b>2</b>	

SEMESTER IV						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-256	Design and Analysis of Algorithms	3	0	3+0	
2	MT-206	Probability and Statistics	3	0	3+0	
3	CS-233T	Introduction to Database System (Theory)	3	0	3+1	Data Structures & Algorithms (Theory and Labs)
4	CS-233L	Introduction to Database System (Labs)	0	1		
5	CS-234T	Operating Systems (Theory)	3	0	3+1	Data Structures & Algorithms (Theory and Labs)
6	CS-234L	Operating Systems (Labs)	0	1		
7	EE-202T	Digital Logic Design (Theory)	3	0	3+1	
8	EE-202L	Digital Logic Design (Labs)	0	1		
<b>Total</b>			<b>15</b>	<b>3</b>	<b>18</b>	

SEMESTER V						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	MT-216	Differential Equations	3	0	3+0	Calculus and Analytical Geometry
2	CS-351	Automata Theory and Formal Language	3	0	3+0	
3	CS-302T	Mobile Application Development (CS Elective-II) (Theory)	2	0	2+1	
4	CS-302L	Mobile Application Development (CS Elective-II) (Labs)	0	1		
5	CS-353T	Computer Communication and Networks (Theory)	3	0	3+1	
6	CS-353L	Computer Communication and Networks (Labs)	0	1		
7	HS-311	Communication & Presentation Skills	3	0	3+0	English Composition & Comprehension
<b>Total</b>			<b>14</b>	<b>2</b>	<b>16</b>	

SEMESTER VI						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-306	Compiler Construction	3	0	3+0	
2	CS-304	Information Security	3	0	3+0	
3	HS-331	Technical and Business Writing	3	0	3+0	Communication & Presentation Skills
4	HS-332	Professional Practices	3	0	3+0	
5	SE-313	Graph Theory (CS Supporting -I)	3	0	3+0	Discrete Structures
6	MT-311T	Numerical and Symbolic Computing (CS Supporting - II) (Theory)	2	0	2+1	
7	MT-311L	Numerical and Symbolic Computing (CS Supporting -II) (Labs)	0	1		
<b>Total</b>			<b>17</b>	<b>1</b>	<b>18</b>	

SEMESTER VII						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-402	Computer Org. & Assembly Language (Theory)	3	0	3+1	
2	CS-402	Computer Org. & Assembly Language (Labs)	0	1		
3	CS-455	Wireless and Mobile Security (CS Elective - 3)	3	0	3+0	
4	CS-451	Final Year Project -I	0	3	0+3	
5	CS-453T	Parallel & Distributed Computing (Theory)	2	0	2+1	
6	CS-453L	Parallel & Distributed Computing (Labs)	0	1		
7	AH-416	Photography	1	1	1+1	
<b>Total</b>			<b>9</b>	<b>6</b>	<b>15</b>	

SEMESTER VIII						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-401T	Artificial Intelligence (Theory)	3	0	3+1	
2	CS-401L	Artificial Intelligence (Labs)	0	1		
3	CS-454T	Cloud Computing (CS Elective-V) (Theory)	2	0	2+1	
4	CS-454L	Cloud Computing (CS Elective-V) (Labs)	0	1		
5	CS-431T	Blockchain Technology and Application (Theory) (CS Elective - I)	2	0	2+1	
6	CS-431L	Blockchain Technology and Application (Lab) (CS Elective - I)	0	1		
7	CS-452	Final Year Project -II	0	3	0+3	
<b>Total</b>			<b>7</b>	<b>6</b>	<b>13</b>	

Total Credit Hours = 134  
Total Lab Credit Hours=27  
Total Theory Credit Hours = 107

### FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	10,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	16 * 3500
Examination Fees 1st Semester	8,000
Tuition /Semester Credit hours Fee	56,000
Miscellaneous Charges	0
<b>Total Fee at the time of admission</b>	<b>86,000</b>
<b>TUITION FEE</b>	<b>71,000</b>

### DURATION OF PROGRAMME

BS-COMPUTER SCIENCE - 04 YEARS

### LOCATION

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600

### CONTACT INFORMATION

+92 (213) 664-4153, +92 (213) 668-4406





# DEPARTMENT OF SOFTWARE ENGINEERING

## BS SOFTWARE ENGINEERING

### MISSION

To instill our graduates with a strong foundation in software engineering principles, they will be well-prepared to analyze, design, develop, and optimize software systems with ethical standards that transform industries and society.

### INTRODUCTION

Welcome to the 4-Year Bachelor of Science in Software Engineering Programme at Ziauddin University.

In today's digital age, software engineers are the architects and builders of the technology that drives our world. If you have a passion for problem-solving, creativity, and a desire to shape the future of technology, our software engineering programme is the perfect place for you to embark on an exciting and rewarding journey.

Software engineering is not just about writing code; it's about designing elegant solutions to complex problems, creating user-friendly applications, and ensuring the reliability and security of software systems. Our programme is meticulously designed to provide you with a well-rounded education in software engineering, equipping you with the skills and knowledge needed to thrive in this ever-evolving field.

At Ziauddin University, we take pride in our commitment to excellence in education. Our faculty members are accomplished experts in software engineering, and they are dedicated to helping you succeed. You will learn from industry professionals, engage in hands-on projects, and have access to cutting-edge technologies that will prepare you for a successful career in software engineering.

Our programme places a strong emphasis on practical experience. You will have the opportunity to work on real-world projects, collaborate with industry partners, and intern

with leading tech companies. This hands-on approach ensures that you graduate with not only theoretical knowledge but also the practical skills and industry insights that are highly valued by employers.

As a software engineering student at Ziauddin University, you will also have the chance to explore various specializations within the field. Whether your interests lie in web development, mobile app development, cloud computing, cybersecurity, or artificial intelligence, our programme offers a flexible curriculum that allows you to tailor your education to your passions and career goals.

We believe in fostering a supportive and inclusive learning environment. Diversity of thought and perspective is essential in software engineering, and we welcome students from all backgrounds to join our community. Your unique experiences and viewpoints will contribute to the rich tapestry of ideas that drive innovation in our field.

As you navigate our website, you'll find detailed information about our curriculum, faculty, research opportunities, and the exciting careers that await our graduates. We invite you to explore these resources, ask questions, and envision the possibilities that a degree in software engineering from Ziauddin University can offer you.

Your journey to becoming a skilled software engineer starts here, and we are excited to be part of it. We look forward to welcoming you to our programme, where you will gain the expertise and confidence to create the software solutions of tomorrow. Join us in shaping the future of technology through the Bachelor of Science in Software Engineering programme at Ziauddin University.

### CAREER PROSPECTS

Students who pursue this degree will have the opportunity to gain expertise in various areas of the field, allowing them to pursue diverse

career paths. Let's take a closer look at each focus area:

**1. Artificial Intelligence:** This specialization equips students with a deep understanding of AI principles and techniques. Graduates will be able to contribute to the development of intelligent systems and applications by leveraging their knowledge of machine learning, data analysis, and problem-solving.

**2. Computer graphics:** Students focusing on computer graphics will explore the world of visual computing. They will develop skills in creating and manipulating images, animations, and virtual environments. This specialization prepares graduates for careers in areas such as game development, animation, virtual reality, and computer-aided design.

**3. Computer networking:** This specialization focuses on the intricacies of network design, administration, and security. Students will gain expertise in building robust and efficient communication infrastructures. Graduates can pursue careers as network administrators, network engineers, or network security specialists.

**4. Information security:** With a focus on information security, students will learn about the complexities of safeguarding information and data. They will acquire skills in protecting against cyber threats and ensuring data integrity. Graduates can pursue careers as cybersecurity analysts, information security

consultants, or ethical hackers.

**5. Machine learning:** This specialization delves into machine learning algorithms and models. Students will learn how to extract insights and make predictions from complex datasets. Graduates will be well-equipped for roles such as machine learning engineers, data scientists, or AI researchers.

**6. Robotics:** Students focusing on robotics will explore the field of designing, programming, and controlling intelligent robots and autonomous systems. This specialization prepares graduates for careers in areas such as robotics engineering, automation, and artificial intelligence.

**7. Software design and engineering:** This specialization provides students with the necessary skills to develop high-quality software. They will learn about efficient design principles, coding practices, and software testing. Graduates can pursue careers as software engineers, software developers, or software architects.

By offering these diverse specializations, ZU's software engineering degree programme prepares students for a wide range of career opportunities. It allows them to explore their interests and develop expertise in specific areas of software engineering, making them well-rounded professionals in the field.

lent qualification, certified by IBCC.

Deficiency: Students with pre-medical/Commerce must pass deficiency courses of Mathematics of 06 credit hours in first two semesters.

### ELIGIBILITY CRITERIA

At least 50% marks in Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics, certified by IBCC. OR At least 50% marks in Intermediate (HSSC) examination with pre-Medical/Commerce or equivalent

S.No.	Programme	Eligibility	DAE	Pct. (%)
1	BS SOFTWARE ENGINEERING	Inter (Computer, Pre Engineering, Pre Med), A-level Physics, Chemistry, (Bio or Math's)	DAE Any	50%

## SCHEME OF STUDIES

SEMESTER I						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	NS-201	Linear Algebra	3	0	3+0	
2	NS-106T	Applied Physics (Theory)	2	0	2+1	
3	NS-106L	Applied Physics (Labs)	0	1		
4	HS-100	English Composition & Comprehension	3	0	3+0	
5	CS-107T	Introduction to Info. & Comm. Technologies (Theory)	2	0	2+1	
6	CS-107L	Introduction to Info. & Comm. Technologies (Labs)	0	1		
7	CS-104T	Programming Fundamentals (Theory)	3	0	3+1	
8	CS-104L	Programming Fundamentals (Labs)	0	1		
<b>Total</b>			<b>13</b>	<b>3</b>	<b>16</b>	

SUMMER I						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	NS-115	Basic Mathematics	6	0	NC	
<b>Total</b>					<b>NC</b>	

SEMESTER II						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	HS-103	Pakistan Studies	2	0	2+0	
2	MS-101	Principles of Accounting (University Elective-I)	3	0	3+0	
3	CS-102T	Web Engineering	2	0	2+1	
4	CS-102L	Web Engineering (Labs)	0	1		
5	CS-112T	Object Oriented Programming (Theory)	3	0	3+1	Programming Fundamentals (Theory and Labs)
6	CS-112L	Object Oriented Programming (Labs)	0	1		
7	SE-100T	Introduction to Software Engineering (Theory)	2	0	2+1	
8	SE-100L	Introduction to Software Engineering (Labs)	0	1		
9	CS-103	Discrete Structures	3	0	3+0	
<b>Total</b>			<b>15</b>	<b>3</b>	<b>18</b>	

SEMESTER III						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	SE-211	Software Requirement Engineering	3	0	3+0	Software Engineering
2	SE-244	Human Computer Interaction	3	0	3+0	Software Engineering
3	CS-232T	Data Structures and Algorithms (Theory)	3	0	3+1	Object Oriented Programming (Theory and Labs)
4	CS-232L	Data Structures and Algorithms (Labs)	0	1		
5	MT-101	Calculus and Analytical Geometry	3	0	3+0	
6	MS-203	Human Resource Management (University Elective-II)	3	0	3+0	
7	HS-101 or HS-102	Islamic Studies or Ethical Behavior	2	0	2+0	
<b>Total</b>			<b>17</b>	<b>1</b>	<b>18</b>	

SUMMER II						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CV-211	Civics and Community Engagement	0	2	0+2	
<b>Total</b>			<b>0</b>	<b>2</b>	<b>2</b>	

SEMESTER IV						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	HS-207	Psychology (University Elective-III)	3	0	3+0	
2	MT-206	Probability and Statistics	3	0	3+0	
3	CS-233T	Introduction to Database System (Theory)	3	0	3+1	Data Structures & Algorithms (Theory and Labs)
4	CS-233L	Introduction to Database System (Labs)	0	1		
5	CS-234T	Operating Systems (Theory)	3	0	3+1	Data Structures & Algorithms (Theory and Labs)
6	CS-234L	Operating Systems (Labs)	0	1		
7	SE-243T	Software Architecture & Design (Theory)	2	0	2+1	Software Requirement Engineering
8	SE-243L	Software Architecture & Design (Labs)	0	1		
<b>Total</b>			<b>14</b>	<b>3</b>	<b>17</b>	





SEMESTER V						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	SE-351T	Software Construction and Development (Theory)	2	0	2+1	Software Design and Architecture
2	SE-351L	Software Construction and Development (Labs)	0	1		
3	CS-351	Automata Theory and Formal Language (SE Elective-I)	3	0	3+0	
4	CS-302T	Mobile Application Development (SE Elective-II) (Theory)	2	0	2+1	
5	CS-302L	Mobile Application Development (SE Elective-II) (Labs)	0	1		
6	CS-353T	Computer Communication and Networks (Theory)	3	0	3+1	
7	CS-353L	Computer Communication and Networks (Labs)	0	1		
8	HS-311	Communication & Presentation Skills	3	0	3+0	English Composition & Comprehension
<b>Total</b>			<b>13</b>	<b>3</b>	<b>16</b>	

SEMESTER VI						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	SE-312	Software Quality Engineering	3	0	3+0	Software Engineering
2	CS-304	Information Security	3	0	3+0	
3	HS-331	Technical and Business Writing	3	0	3+0	Communication & Presentation Skills
4	HS-332	Professional Practices	3	0	3+0	
5	SE-313	Formal Methods in Software Engineering (SE Supporting -I)	3	0	3+0	Discrete Structures
6	CS-311T	Modeling and Simulation (SE Supporting -II) (Theory)	2	0	2+1	Programming Fundamentals (Theory and Labs)
7	CS-311L	Modeling and Simulation (SE Supporting -II) (Labs)	0	1		
<b>Total</b>			<b>17</b>	<b>1</b>	<b>18</b>	

SEMESTER VII						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	SE-442	Software Project Management	3	0	3+0	Software Engineering
2	SE-453	Software Re-Engineering	3	0	3+0	Software Construction & Development (Theory and Lab)
3	SE-451	Final Year Project -I	0	3	0+3	
4	CS-451	Distributed Computing (SE Elective-III)	3	0	3+0	
5	CS-453T	Neural Networks and Fuzzy Logic (Theory) (SE Elective-IV)	2	0	2+1	
6	CS-453L	Neural Networks and Fuzzy Logic (Labs) (SE Elective-IV)	0	1		
7	AH-416	Photography	1	1	1+1	
<b>Total</b>			<b>12</b>	<b>5</b>	<b>17</b>	

SEMESTER VIII						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	SE-463	Business Process Engineering (SE Supporting -III)	3	0	3+0	
2	SE-452	Final Year Project -II	0	3	0+3	
3	CS-454T	Cloud Computing (SE Elective-V) (Theory)	2	0	2+1	
4	CS-454L	Cloud Computing (SE Elective-V) (Labs)	0	1		
5	MS-414	Entrepreneurship (University Elective-IV)	3	0	3+0	
<b>Total</b>			<b>8</b>	<b>4</b>	<b>12</b>	

Total Credit Hours = 134

Total Lab Credit Hours = 25

Total Theory Credit Hours = 109

### FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	10,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	16 * 3500
Examination Fees 1st Semester	8,000
Tuition /Semester Credit hours Fee	56,000
Miscellaneous Charges	0
<b>Total Fee at the time of admission</b>	<b>86,000</b>
<b>TUITION FEE</b>	<b>71,000</b>

### DURATION OF PROGRAMME

BS SOFTWARE ENGINEERING- 04 YEARS

### LOCATION

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600

### CONTACT INFORMATION

+92 (213) 664-4153, +92 (213) 668-4406

## BS SOFTWARE ENGINEERING TECHNOLOGY

### MISSION

To empower students with the knowledge, skills, and practical experience needed to excel in the dynamic field of software engineering technology. We are committed to providing a comprehensive and contemporary education that fosters innovation, critical thinking, and professionalism. Our programme aims to prepare graduates to meet the evolving demands of the technology industry, contribute to the development of cutting-edge software solutions, and make a positive impact on society through ethical and responsible practices. Through a combination of rigorous academics, hands-on learning, and industrial training, we strive to produce well-rounded, adaptable software engineering technology professionals who are ready to address the challenges of today and tomorrow.

### INTRODUCTION

The BSc Software Engineering Technology programme is a rigorous and comprehensive academic curriculum designed to equip students like you with the necessary skills and knowledge to thrive in the dynamic field of software development. Throughout the programme, you will delve deep into the intricacies of various programming languages, software design principles, and algorithms, enabling you to develop robust and efficient software solutions. Additionally, you will gain expertise in database management, software testing methodologies, and project management techniques, ensuring that you possess a well-rounded skill set in all aspects of software technology. The programme also emphasises practical, hands-on experience, allowing you to apply your theoretical knowledge to real-world scenarios. Collaborative projects, industry internships, and experiential learning opportunities will further enhance your understanding and prepare you for the challenges of the industry. By the end of the programme, students will be well-prepared for a variety of roles, such as software technologist, software technology developer, or even project or technical manager. The BSc Software Engineering Technology programme opens up a world of exciting career prospects in the

ever-evolving realm of technology. So, get ready to embark on a transformative educational journey that will shape your future in the digital world!

### WHY B.SC. (SOFTWARE ENGINEERING TECHNOLOGY)

The BSc Software Engineering Technology programme can be a great choice for several reasons. Firstly, it provides a strong foundation in software development, equipping you with the necessary skills to excel in the field. Additionally, the programme often incorporates practical hands-on experience, allowing you to apply what you learn in real-world scenarios. This can be invaluable when it comes to securing internships or job opportunities in the future. Furthermore, the programme may also offer specialisation options, allowing you to focus on specific areas of interest within software engineering. Overall, choosing the BSc Software Engineering Technology programme can open up a world of opportunities in the ever-growing field of technology.

### WHY B.SC. (SOFTWARE ENGINEERING TECHNOLOGY)

The eligibility/admission criteria for admission in the BSc (Software Engineering Technology) programme are strictly as defined in NTC's Accreditation Manual, Clause 3.2.4.1.

The primary requirements for eligibility/admission are:

- At least 50% marks in DAE/FSC (Pre-engineering) or other equivalent qualifications such as A-level/ICS/B.Sc. (sports and Hafiz-e-Quran marks are not included) and
- Entrance Test
- Weightage:
  - a.70% for academics (DAE/FSC etc.)
  - b.30% for Entrance Test

## SCHEME OF STUDIES

SEMESTER I						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	CS-107T	Introduction to Info. & Comm. Technologies (Theory) (Computing-I)	1	0	1+2	
2	CS-107L	Introduction to Info. & Comm. Technologies (Lab) (Computing-I)	0	2		
2	CS-104T	Programming Fundamentals (Theory) (Computing-II)	2	0	2+2	
3	CS-104L	Programming Fundamentals (Lab) (Computing-II)	0	2		
4	NS-109	Calculus And Analytical Geometry (Natural Sciences-I)	3	0	3+0	
5	NS-106T	Applied Physics (Theory) (Natural Sciences-II)	2	0	2+1	
6	NS-106L	Applied Physics (Lab) (Natural Sciences-II)	0	1		
7	HS-100	English Composition & Comprehension (Humanities and Social Sciences-I)	2	0	2+0	
8	HS-101 HS-102	Islamic Studies/Ethical Behavior (Humanities and Social Sciences-II)	2	0	2+0	
<b>Total</b>			<b>12</b>	<b>5</b>	<b>17</b>	

SEMESTER II						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	CS-112T	Object Oriented Programming (Theory) (Software Engineering) Foundation-I	2	0	2+2	Programming Fundamentals (Theory and Lab)
2	CS-112L	Object Oriented Programming (Lab) (Software Engineering) Foundation-I	0	2		
3	EE-100T	Digital Logic Design (Theory) (Software Engineering) Foundation-II	2	0	2+1	
4	EE-100L	Digital Logic Design (Lab) (Software Engineering) Foundation-II	0	1		
5	HS-103	Pakistan Studies (Humanities and Social Sciences-III)	2	0	2+0	
6	HS-114	Communication and Presentation Skills (Humanities and Social Sciences-IV)	3	0	3+0	English Composition & Comprehension
7	NS-110	Linear Algebra (Natural Sciences-III)	2	0	2+0	Calculus and Analytical Geometry
8	CS-102T	Web Engineering (Theory) (Software Engineering) Foundation-III	1	0	1+2	
9	CS-102L	Web Engineering (Lab) (Software Engineering) Foundation-III	0	2		
<b>Total</b>			<b>12</b>	<b>5</b>	<b>17</b>	



SEMESTER III						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	CS-211T	Data Structures and Algorithms (Theory) (Software Engineering) Foundation-IV	2	0	2+1	Programming Fundamentals (Theory and Lab)
2	CS-211L	Data Structures and Algorithms (Lab) (Software Engineering) Foundation-IV	0	1		
3	CS-203T	Computer Communication Networks (Theory) (Software Engineering) Foundation-V	2	0	2+2	
4	CS-203L	Computer Communication Networks (Lab) (Software Engineering) Foundation-V	0	2		
5	HS-231	Technical and Business Writing (Humanities and Social Sciences-V)	2	0	3+0	Communication & Presentation Skills
6	SE-231T	Introduction to Software Engineering (Theory) (Software Engineering) Breadth-II	2	0	2+1	Object Oriented Programming (Theory & Lab)
7	SE-231L	Introduction to Software Engineering (Lab) (Software Engineering) Breadth-II	0	1		
8	NS-206	Probability and Statistics (Natural Sciences-IV)	3	0	3+0	
9	CS-213T	Introduction to Database System (Theory) (Software Engineering) Foundation-V	2	0	2+1	Data Structures & Algorithms (Theory and Lab)
10	CS-213L	Introduction to Database System (Lab) (Software Engineering) Foundation-V	0	1		
<b>Total</b>			<b>13</b>	<b>5</b>	<b>18</b>	

SEMESTER IV						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	CS-234T	Operating Systems (Theory) (Software Engineering) Breadth -III	2	0	2+1	Data Structures & Algorithms (Theory and Lab)
2	CS-234L	Operating Systems (Lab) (Software Engineering) Breadth - III	0	1		
3	SE-232T	Software Construction and Development (Theory)	2	0	2+1	Introduction to Software Engineering (Theory and Lab)
4	SE-232L	Software Construction and Development (Lab)	0	1		
5	CS-235T	Artificial Intelligence (Theory) (Software Engineering) Breadth -V	1	0	1+1	Object Oriented Programming (Theory and Lab)
6	CS-235L	Artificial Intelligence (Lab) (Software Engineering) Breadth -V	0	1		
7	SE-243T	Software Design and Architecture (Theory) (Software Engineering) Breadth -IV	1	0	1+2	Software Construction and Development (Theory & Lab)
8	SE-243L	Software Design and Architecture (Lab) (Software Engineering) Breadth -IV	0	2		
9	SE-212T	Software Quality Engineering (Theory) (Software Engineering) Foundation-VI	2	0	2+1	Software Construction and Development (Theory & Lab)
10	SE-212L	Software Quality Engineering (Lab) (Software Engineering) Foundation-VI	0	1		
11	HS-207	Psychology (University Elective-1)	3	0	3+0	
<b>Total</b>			<b>11</b>	<b>6</b>	<b>17</b>	

SEMESTER V						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	MS-303	Human Resource Management (University Elective-II)	3	0	3+0	
2	SE-355T	Software Testing and Automation (Theory) (Depth Elective-1)	1	0	1+2	Software Quality Engineering (Theory & Lab)
3	SE-355L	Software Testing and Automation (Lab) (Depth Elective-1)	0	2		
4	SE-351T	Software Re-Engineering (Theory) (Depth Elective-II)	2	0	2+2	
5	SE-351L	Software Re-Engineering (Lab) (Depth Elective-II)	0	2		
6	HS-304	Professional Practices (Humanities and Social Sciences-VI)	2	0	2+0	
7	MS-304	Entrepreneurship and Leadership (Management Elective-1)	3	0	3+0	
<b>Total</b>			<b>11</b>	<b>4</b>	<b>15</b>	

SEMESTER VI						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	SE-361	Final Year Project-I	0	3	0+3	
2	MS-300	Software Project Management (Management Elective-II)	2	0	2+0	
3	SE-352T	Modeling and Simulation (Theory) (Depth Elective-III)	1	0	1+2	
4	SE-352L	Modeling and Simulation (Lab) (Depth Elective-III)	0	2		
5	CS-3532T	Mobile Application Development (Theory)	2	0	2+1	
6	CS-353L	Mobile Application Development (Lab)	0	1		
7	SE-331T	Formal Methods in Software Engineering (Theory)	2	0	2+1	
8	SE-331L	Formal Methods in Software Engineering (Lab)	0	1		
9	BM-301T	Bioinformatics (Theory) (IDTE-I)	1	0	1+1	
10	BM-301L	Bioinformatics (Lab) (IDTE-I)	0	1		
<b>Total</b>			<b>8</b>	<b>8</b>	<b>16</b>	

SEMESTER VII						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	SE-462	FYP-II	0	3	0+3	
2	SE-463	Business Process Engineering	1	0	1+0	
3	SE-453T	Agile Software Development (Theory) (Depth Elective-IV)	2	0	2+1	Software Construction and Development (Theory & Lab)
4	SE-453L	Agile Software Development (Lab) (Depth Elective-IV)	0	1		
5	CS-454T	Cloud Computing (Theory) (Depth Elective-V)	2	0	2+1	
6	CS-454L	Cloud Computing (Lab) (Depth Elective-V)	0	1		
7	CS-457T	Machine Learning (Theory)	2	0	2+1	Artificial Intelligence (Theory & Lab)
8	CS-457L	Machine Learning (Lab)	0	1		
9	EE-464	Renewable Energy (IDTE-II)	2	0	2+0	
<b>Total</b>			<b>9</b>	<b>6</b>	<b>15</b>	

SEMESTER VIII						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	SE-464	Supervise Industrial Training (Compulsory)	0	16	0+16	
<b>Total</b>			<b>0</b>	<b>16</b>	<b>16</b>	

Total Credit Hours = 131

Total Lab Credit Hours=55 (41.99%)

Total Theory Credit Hours = 76 (58.01%)

### FEE STRUCTURE

Admission Fee (Only once)	Rs.15,000
Security Deposit (only once and refundable)	Rs.5,000
Tuition Fee (per semester)	Rs.51,000 (Rs.8500*6)
Examination Fee (per annum)	Rs.5,100 (Rs.850*6)
<b>Total</b>	<b>Rs.76,100/Semester</b>





# DEPARTMENT OF INFORMATION TECHNOLOGY

## BS DATA SCIENCE

### MISSION

To produce graduates with a comprehensive education in Data Science, equipping them with the advanced knowledge and skills to extract meaningful insights from vast datasets and develop data-driven decision-making systems with ethical consideration and lifelong learning to drive positive change in the society.

### INTRODUCTION

Welcome to our Data Science 4-Year Undergraduate programme!

In a world increasingly driven by data, there's no better time to embark on a journey into the fascinating realm of Data Science. Our Data Science programme at Ziauddin University is designed to equip you with the knowledge, skills, and practical experience needed to excel in this dynamic and high-demand field. Data Science is more than just a buzzword; it's a transformative discipline that sits at the intersection of computer science, statistics, and domain-specific expertise. It empowers us to extract meaningful insights, make informed decisions, and solve complex problems across industries and sectors. Whether it's predicting stock market trends, personalizing healthcare treatments, or enhancing user experiences in the digital world, data-driven solutions are shaping our future.

Our 4-year undergraduate programme in Data Science is meticulously crafted to provide you with a comprehensive and hands-on education. You'll delve into the core principles of statistics, machine learning, data analysis, and data visualization, gaining a solid foundation in the technical aspects of the field. Simultaneously, you'll explore the ethical and societal implications of data science, ensuring you're not just a data expert but also an ethical and responsible practitioner.

What sets our programme apart is the emphasis on real-world application. You'll have the opportunity to work on industry-inspired projects, collaborate with faculty on cutting-edge research, and intern with leading companies to gain practical experience. Our faculty members are not only experts in their fields but are also deeply committed to your success, providing mentorship and guidance every step of the way.

As a Data Science student at Ziauddin University, you'll also benefit from a multidisciplinary approach. Data Science is not limited to a single domain; it spans fields as diverse as finance, healthcare, marketing, and environmental science. Our programme encourages you to explore these domains, developing domain-specific expertise that will set you apart in the job market.

We also recognize the importance of adaptability in a field that's constantly evolving. Our curriculum is designed to keep pace with the latest developments in Data Science, ensuring that you graduate with the most up-to-date knowledge and skills.

Whether you dream of becoming a data scientist, machine learning engineer, data analyst, or data-driven decision-maker, our Data Science programme will prepare you for success. The opportunities in this field are vast and diverse, and the skills you acquire will be in high demand across industries.

We invite you to explore our programme, meet our faculty, and envision the exciting possibilities that await you in the world of Data Science. Your journey starts here, and the future is yours to shape. Join us in unlocking the power of data to drive innovation, solve complex problems, and make a positive impact on

the world. Welcome to the Data Science programme at Ziauddin University.

### CAREER PROSPECTS

Students who pursue this degree will have the opportunity to gain expertise in various areas of the field, allowing them to pursue diverse career paths. Let's take a closer look at each focus area:

**1. Artificial Intelligence:** This specialisation equips students with a deep understanding of AI principles and techniques. Graduates will be able to contribute to the development of intelligent systems and applications by leveraging their knowledge of machine learning, data analysis, and problem-solving.

**2. Data Analytics:** Our Data Analytics programme equips students with essential skills to extract insights from data, make informed decisions, and drive business growth. With hands-on experience and a focus on ethical data use, graduates are prepared for rewarding careers in data science and business intelligence. Join us to unlock your potential in the world of data analytics.

**3. Quantitative Analysis:** Quantitative analysis involves the application of mathematical and statistical methods to understand and solve complex problems. It is used in finance, economics, and operations research to make data-driven decisions.

**4. Data Warehousing and Business Intelligence:** Data warehousing and business intelligence are pivotal components of modern data-driven decision-making. Data warehousing involves the storage and organization of vast datasets from various sources, enabling efficient data retrieval and analysis. Business intelligence leverages these data warehouses

to generate actionable insights, aiding organizations in making informed strategic decisions. Together, they empower businesses to gain a competitive edge by transforming raw data into valuable information for better performance and growth.

**5. Machine learning:** This specialisation delves into machine learning algorithms and models. Students will learn how to extract insights and make predictions from complex datasets. Graduates will be well-equipped for roles such as machine learning engineers, data scientists, or AI researchers.

**6. Robotics:** Students focusing on robotics will explore the field of designing, programming, and controlling intelligent robots and autonomous systems. This specialisation prepares graduates for careers in areas such as robotics engineering, automation, and artificial intelligence.

**7. Data Engineering:** Data engineering focuses on the design and construction of data pipelines and infrastructure to ensure the efficient collection, storage, and retrieval of data. Data engineers build the foundation upon which data scientists and analysts can work.

**8. Data Mining:** Data mining is the process of discovering patterns, correlations, or hidden information in large datasets. It is widely used in marketing, fraud detection, and customer segmentation to uncover valuable insights.

By offering these diverse specialisations, ZU's software engineering degree programme prepares students for a wide range of career opportunities. It allows them to explore their interests and develop expertise in specific areas of software engineering, making them well-rounded professionals in the field.

### ELIGIBILITY CRITERIA

At least 50% marks in Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics, certified by IBCC. OR At least 50% marks in Intermediate (HSSC) examination with pre-Medical/Commerce or equivalent

qualification, certified by IBCC.

Deficiency: Students with pre-medical/Commerce must have to pass deficiency courses of Mathematics of 06 credit hours in first two semesters.

S.No.	Programme	Eligibility	DAE	Pct. (%)
1	BS DATA SCIENCE	Inter (Computer, Pre Engineering, Pre Med) , A-level Physics, Chemistry, (Bio or Math's)	DAE Any	50%

### SCHEME OF STUDIES

SEMESTER I						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	NS-201	Linear Algebra	3	0	3+0	Calculus and Analytical Geometry
2	HS-101 or HS-102	Islamic Studies/Ethical Behavior	2	0	2+0	
3	CS-103	Discrete Structures	3	0	3+0	
4	HS-100	English Composition & Comprehension	3	0	3+0	
5	CS-107T	Introduction to Info. & Comm. Technologies (Theory)	2	0	2+1	
6	CS-107L	Introduction to Info. & Comm. Technologies (Labs)	0	1		
7	CS-104T	Programming Fundamentals (Theory)	3	0	3+1	
8	CS-104L	Programming Fundamentals (Labs)	0	1		
<b>Total</b>			<b>16</b>	<b>2</b>	<b>18</b>	

SUMMER I						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	NS-115	Basic Mathematics	6	0	NC	
<b>Total</b>					<b>NC</b>	

SEMESTER II						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	MT-101	Calculus and Analytical Geometry	3	0	3+0	
2	CS-113T	Introduction to Database System (Theory)	3	0	3+1	
3	CS-113L	Introduction to Database System (Labs)	0	1		
4	CS-112T	Object Oriented Programming (Theory)	3	0	3+1	Programming Fundamentals (Theory and Labs)
5	CS-112L	Object Oriented Programming (Labs)	0	1		
6	EE-100T	Digital Logic Design (Theory)	3	0	3+1	
7	EE-100L	Digital Logic Design (Labs)	0	1		
8	MS-102	Managerial Economics (University Elective-I)	3	0	3+0	
<b>Total</b>			<b>15</b>	<b>3</b>	<b>18</b>	

SEMESTER III						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-232T	Data Structures and Algorithms (Theory)	3	0	3+1	Programming Fundamentals (Theory and Labs)
2	CS-232L	Data Structures and Algorithms (Labs)	0	1		
3	CS-235T	Artificial Intelligence (Theory)	3	0	3+1	Object Oriented Programming (Theory and Labs)
4	CS-235L	Artificial Intelligence (Labs)	0	1		
5	CS-253T	Computer Communication and Networks (Theory)	3	0	3+1	
6	CS-253L	Computer Communication and Networks (Labs)	0	1		
7	CS-234T	Operating Systems (Theory)	3	0	3+1	
8	CS-234L	Operating Systems (Labs)	0	1		
9	MT-206	Probability and Statistics	3	0	3+0	
<b>Total</b>			<b>15</b>	<b>3</b>	<b>18</b>	

SUMMER II						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CV-211	Civics and Community Engagement	0	2	0+2	
<b>Total</b>			<b>0</b>	<b>2</b>	<b>2</b>	





SEMESTER IV						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-251	Automata Theory and Formal Languages (DS Elective-1)	3	0	3+0	
2	CS-256	Design & Analysis of Algorithms	3	0	3+0	Data Structures & Algorithms (Theory and Labs)
3	DS-243T	Introduction to Data Science (Theory)	2	0	2+1	Artificial Intelligence (Theory and Labs)
4	DS-243L	Introduction to Data Science (Labs)	0	1		
5	MT-217	Advance Statistics	3	0	3+0	Probability and Statistics
6	HS-211	Communication & Presentation Skills	3	0	3+0	English Composition & Comprehension
7	HS-203	Pakistan Studies	2	0	2+0	
<b>Total</b>			<b>14</b>	<b>3</b>	<b>17</b>	

SEMESTER V						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	DS-336T	Data Mining (Theory)	2	0	2+1	Advance Statistics, Introduction to Data Science (Theory and Lab)
2	DS-336L	Data Mining (Labs)	0	1		
3	DS-331T	Data Warehousing & Business Intel (Theory)	2	0	2+1	Introduction to Data Science (Theory and Lab)
4	DS-331L	Data Warehousing & Business Intel (Labs)	0	1		
5	CS-357T	Machine Learning (Theory) (DS Elective-2)	2	0	2+1	
6	CS-357L	Machine Learning (Labs) (DS Elective-2)	0	1		
7	CS-316T	Computer Organization & Assembly Language (Theory)	3	0	3+1	Digital Logic Design (Theory and Labs)
8	CS-316L	Computer Organization & Assembly Language (Labs)	0	1		
9	HS-331	Technical and Business Writing	3	0	3+0	Communication & Presentation Skills
<b>Total</b>			<b>12</b>	<b>4</b>	<b>16</b>	

SEMESTER VI						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	DS-312	Big Data Analytics (Theory)	2	0	2+1	Introduction to Data Science (Theory and Lab)
2	DS-352	Big Data Analytics (Labs)	0	1		
3	DS-362T	Data Visualization (Theory)	2	0	2+1	Advance Statistics, Data Warehousing & Business Intel (Theory and Lab)
4	DS-362L	Data Visualization (Labs)	0	1		
5	CS-304	Information Security	3	0	3+0	
6	CS-352	Digital Image Processing (DS Elective 3)	3	0	3+0	
7	CS-359T	Cloud Computing (DS Elective-4) (Theory)	2	0	2+1	
8	CS-359L	Cloud Computing (DS Elective-4) (Labs)	0	1		
<b>Total</b>			<b>12</b>	<b>3</b>	<b>15</b>	

SEMESTER VII						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	SE-401T	Introduction to Software Engineering (Theory)	2	0	2+1	
2	SE-401L	Introduction to Software Engineering (Labs)	0	1		
3	DS-451	Final Year Project –I	0	3	0+3	
4	MS-203	Human Resource Management (University Elective-II)	3	0	3+0	
5	MS-414	Entrepreneurship (University Elective-III)	3	0	3+0	
6	AH-416	Photography	1	1	1+1	
<b>Total</b>			<b>9</b>	<b>5</b>	<b>14</b>	

SEMESTER VIII						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-405T	Parallel & Distributed Computing (Theory)	2	0	2+1	
2	CS-405L	Parallel & Distributed Computing (Labs)	0	1		
3	DS-452	Final Year Project –II	0	3	0+3	
4	HS-207	Psychology (University Elective-IV)	3	0	3+0	
5	HS-332	Professional Practices	3	0	3+0	
<b>Total</b>			<b>8</b>	<b>4</b>	<b>12</b>	

Total Credit Hours = 130

Total Lab Credit Hours = 26

Total Theory Credit Hours = 104

## FEE STRUCTURE

Admission Fee	15,000
Security Deposit(refundable)	5,000
Total at the time of admission	20,000
Per Month Fees 04 Years	8,500

## DURATION OF PROGRAMME

BS DATA SCIENCE- 04 YEARS

## LOCATION

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600

## CONTACT INFORMATION

+92 (213) 664-4153, +92 (213) 668-4406

## BS CYBER SECURITY TECHNOLOGY

Digital world has evolved into a stage for creativity and a front line for cyber-attacks in a time when technology is moving forward at an unrelenting pace. We find ourselves in a never-ending struggle to safeguard the very foundations upon which our contemporary society is founded — our data, our privacy, and our vital infrastructure — even as we embrace the digital age with open arms. The ground-breaking field of BS Cyber Security Technology is positioned to influence how cybersecurity will develop in the future. It is born within this dynamic environment.

Imagine living in a future where our linked systems are resilient to even the most advanced attacks, where our private information is protected from prying eyes, and where our digital lives are unaffected by the continuous onslaught of cybercriminals. This vision is headed by the BS in Cyber Security Technology program, which equips a new generation of cyber guardians with the knowledge and abilities necessary to defend, create, and lead in the digital age.

We explore the deep workings of cybersecurity in this thrilling voyage, where algorithms and artificial intelligence collide with moral conundrums and legal frameworks. To address the human aspects of cybersecurity, we not only go into the depths of cryptography, penetration testing, and incident response, but also into the spheres of psychology, ethics, and policy. This is more than simply a program; it represents a fundamental shift in how we view and protect our digital environment.

We cordially invite you to join us on this transformative journey, where innovation meets security, code meets conscience, and the future meets the present. The goal of the BS Cyber Security Technology program is to create a safer, more robust digital world for future generations, not only to prepare for the issues of the future. Join us in redefining cybersecurity's laws and lead the BS Cyber Security Technology revolution.

### MISSION

"To prepare students for careers in the ever-evolving field of cybersecurity by providing a comprehensive and forward-thinking education. We are committed to fostering a community of learners who are dedicated to safeguarding digital assets, protecting privacy, and mitigating cyber threats. Cultivate ethical and responsible cybersecurity professionals who understand the importance of upholding privacy, integrity, and confidentiality in an interconnected world. Instill a commitment to continuous learning, ensuring that our graduates remain at the forefront of cybersecurity practices and are capable of addressing the challenges of the future."

### WHY BS CYBER SECURITY TECHNOLOGY

Cybersecurity technologists play a crucial role in protecting organizations, individuals, and society as a whole from a wide range of digital threats and attacks. Here are several reasons why choosing a career as a cybersecurity technologist is a valuable and important choice. Increasing Cyber Threats: With the growth of the digital world, cyber threats have become more sophisticated and pervasive. Cyberattacks can lead to data breaches, financial losses, reputation damage, and even national security risks. Cybersecurity technologists are needed to defend against these threats. Protecting Data and Privacy: In today's digital age, sensitive information and personal data are stored and transmitted online. Cybersecurity professionals work to safeguard this data and protect the privacy of individuals and organizations. The demand for cybersecurity professionals is consistently high and is expected to grow in the coming years. This means a strong job market with many opportunities for career growth and development.

### ELIGIBILITY CRITERIA

The eligibility/admission criteria for admission in BSc (Cyber Security Technology) program is

strictly as defined in NTC's Accreditation Manual, Clause 3.2.4.1.

The primary requirements for eligibility/admission are:

1. Intermediate with Pre-engineering or other equivalent qualifications such as DAE/A-level/ICS/B.Sc. (sports and Hafiz-e-Quran marks are not included) and
2. Entrance Test
3. Weightage:
  - a. 70% for academics (DAE/FSC etc.)
  - b. 30% for Entrance Test

### CAREER PROSPECTS

The career prospects for individuals with a background in cybersecurity technology are quite promising due to the increasing importance of cybersecurity in virtually every industry. Here are some career paths and opportunities for those with expertise in cybersecurity technology:

1. **Cybersecurity Analyst:**  
Analyzing security data and implementing measures to protect an organization's systems and networks from cyber threats.
2. **Penetration Tester/Ethical Hacker:**  
Identifying vulnerabilities in systems and networks by simulating cyberattacks to help organizations improve their security posture.
3. **Security Consultant:**  
Advising organizations on cybersecurity best practices, conducting risk assessments, and developing security strategies tailored to their specific needs.
4. **Security Architect:**  
Designing and implementing secure systems and networks, including infrastructure, applications, and cloud environments.
5. **Incident Responder:**  
Investigating security breaches and respond-

ing to cyber incidents to minimize damage and prevent future occurrences.

6. **Security Engineer:**  
Building and maintaining security systems, including firewalls, encryption protocols, and intrusion detection/prevention systems.
  7. **Cryptographer:**  
Developing cryptographic algorithms and protocols to secure data transmission and storage.
  8. **Security Operations Center (SOC) Analyst:**  
Monitoring and analyzing security events and incidents in real-time to detect and respond to threats.
  9. **Threat Intelligence Analyst:**  
Gathering and analyzing threat intelligence to identify emerging cyber threats and vulnerabilities.
  10. **Forensic Analyst:**  
Collecting and analyzing digital evidence to investigate cybercrimes and support legal proceedings.
- These are just a few examples, and the field of cybersecurity offers a wide range of career paths and opportunities for growth. With the increasing frequency and sophistication of cyber threats, the demand for cybersecurity professionals is expected to continue growing, making it a promising career choice for individuals with the right skills and expertise.



## SCHEME OF STUDIES

SEMESTER I						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	NS-201	Linear Algebra	3	0	3+0	Calculus and Analytical Geometry
2	HS-101 or HS-102	Islamic Studies/Ethical Behavior	2	0	2+0	
3	CS-103	Discrete Structures	3	0	3+0	
4	HS-100	English Composition & Comprehension	3	0	3+0	
5	CS-107T	Introduction to Info. & Comm. Technologies (Theory)	2	0	2+1	
6	CS-107L	Introduction to Info. & Comm. Technologies (Labs)	0	1		
7	CS-104T	Programming Fundamentals (Theory)	3	0	3+1	
8	CS-104L	Programming Fundamentals (Labs)	0	1		
<b>Total</b>			<b>16</b>	<b>2</b>	<b>18</b>	

SUMMER I						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	NS-115	Basic Mathematics	6	0	NC	
<b>Total</b>					NC	

SEMESTER II						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-112T	Object Oriented Programming (Theory) (Cyber Security) Foundation-I	2	0	2+2	Programming Fundamentals (Theory and Lab)
2	CS-112L	Object Oriented Programming (Lab) (Cyber Security) Foundation-I	0	2		
3	EE-100T	Digital Logic Design (Theory) (Cyber Security) Foundation-II	2	0	2+1	
4	EE-100L	Digital Logic Design (Lab) (Cyber Security) Foundation-II	0	1		
5	HS-114	Communication and Presentation Skills (Humanities and Social Sciences-IV)	3	0	3+0	English Composition & Comprehension
6	NS-109	Calculus And Analytical Geometry (Natural Sciences-I)	3	0	3+0	
7	CS-102T	Web Engineering (Theory) (Cyber Security) Foundation-III	1	0	1+2	
8	CS-102L	Web Engineering (Lab) (Cyber Security) Foundation-III	0	2		
<b>Total</b>			<b>11</b>	<b>5</b>	<b>16</b>	

SEMESTER III						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CS-211T	Data Structures and Algorithms (Theory) (Cyber Security) Foundation-IV	2	0	2+1	Programming Fundamentals (Theory and Lab)
2	CS-211L	Data Structures and Algorithms (Lab) (Cyber Security) Foundation-IV	0	1		
3	CS-203T	Computer Communication Networks (Theory) (Cyber Security) Foundation-V	2	0	2+2	
4	CS-203L	Computer Communication Networks (Lab) (Cyber Security) Foundation-V	0	2		
5	CS-234T	Operating Systems (Theory) (Cyber Security) Breadth -III	2	0	2+1	Data Structures & Algorithms (Theory and Lab)
6	CS-234L	Operating Systems (Lab) (Cyber Security) Breadth -III	0	1		
7	CB-231T	Introduction to Cyber Security (Theory) (Cyber Security) Breadth-II	2	0	2+1	
8	CB-231L	Introduction to Cyber Security (Lab) (Cyber Security) Breadth-II	0	1		
9	NS-206	Probability and Statistics (Natural Sciences-IV)	3	0	3+0	
10	CS-235T	Artificial Intelligence (Theory) (Cyber Security) Breadth -V	1	0	1+1	Object Oriented Programming (Theory and Lab)
11	CS-235L	Artificial Intelligence (Lab) (Cyber Security) Breadth -V	0	1		
<b>Total</b>			<b>12</b>	<b>6</b>	<b>18</b>	

SUMMER II						
S. No.	Course Code	Course Title	Th	Lab	Cr. Hr.	Pre-requisite
1	CV-211	Civics and Community Engagement	0	2	0+2	
<b>Total</b>			<b>0</b>	<b>2</b>	<b>2</b>	

SEMESTER IV						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	HS-103	<b>Pakistan Studies (Humanities and Social Sciences-III)</b>	2	0	2+0	
2	CS-214T	Computer Organization & Assembly Language (Theory)	2	0	2+1	Digital Logic Design (Theory and Lab)
3	CS-214L	Computer Organization & Assembly Language (Lab)	0	1		
4	CB-232T	Systems And Network Administration (Theory) (Cyber Security) Breadth -IV	1	0	1+2	Computer Communication Networks (Theory & Lab)
5	CB-232L	Systems And Network Administration (Lab) (Cyber Security) Breadth -IV	0	2		
6	CS-215T	Information Security (Theory) (Cyber Security) Foundation-VI	2	0	2+1	Computer Communication Networks (Theory & Lab)
7	CS-215L	Information Security (Lab) (Cyber Security) Foundation-VI	0	1		
8	CS-213T	<b>Introduction to Database System (Theory) (Cyber Security) Foundation-V</b>	2	0	1+2	<b>Data Structures &amp; Algorithms (Theory and Lab)</b>
9	CS-213L	<b>Introduction to Database System (Lab) (Cyber Security) Foundation-V</b>	0	1		
10	AH-416	<b>Photography</b>	1	1	1+1	
<b>Total</b>			<b>10</b>	<b>6</b>	<b>16</b>	

SEMESTER V						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	MS-303	Human Resource Management (University Elective-II)	3	0	3+0	
2	CS-355T	Machine Learning (Theory) (Depth Elective-1)	1	0	2+1	Artificial Intelligence (Theory & Lab)
3	CS-355L	Machine Learning (Lab) (Depth Elective-1)	0	2		
4	CS-351T	Block Chain Technology and Application (Theory) (Depth Elective-II)	2	0	2+2	
5	CS-351L	Block Chain Technology and Application (Lab) (Depth Elective-II)	0	2		
6	CB-353T	<b>IT Security Audit and Evaluation (Lab) (Cyber Security) Depth -IV</b>	2	0	2+1	<b>Information Security (Theory &amp; Lab)</b>
7	CB-353L	<b>IT Security Audit and Evaluation (Lab) (Cyber Security) Depth -IV</b>	0	1		
8	HS-231	<b>Technical and Business Writing (Humanities and Social Sciences-V)</b>	2	0	2+0	<b>Communication &amp; Presentation Skills</b>
9	HS-304	Professional Practices (Humanities and Social Sciences-VI)	2	0	2+0	
<b>Total</b>			<b>12</b>	<b>5</b>	<b>17</b>	

SEMESTER VI						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	CB-361	Final Year Project-I	0	3	0+3	
2	MS-300	Information Technology Project Management (Management Elective-II)	2	0	2+0	
3	CB-352T	Error Correction and Coding Techniques (Theory) (Depth Elective-III)	1	0	1+1	Object Oriented Programming (Theory and Lab)
4	CB-352L	Error Correction and Coding Techniques (Lab) (Depth Elective-III)	0	1		
5	CB-331T	Incident Response and Digital Forensics (Theory) (Information Security) Breadth -VI	2	0	2+1	Information Security (Theory & Lab)
6	CB-331L	Incident Response and Digital Forensics (Lab) (Information Security) Breadth -VI	0	1		
7	BM-300T	Bioinformatics (Theory) (IDTE-I)	1	0	1+1	
8	BM-300L	Bioinformatics (Lab) (IDTE-I)	0	1		
9	CB-452T	<b>Cloud Computing and IoT (Theory) (Depth Elective-V)</b>	2	0	2+1	
10	CB-452L	<b>Cloud Computing and IoT (Lab) (Depth Elective-V)</b>	0	1		
11	HS-207	<b>Psychology (University Elective-1)</b>	3	0	3+0	
<b>Total</b>			<b>11</b>	<b>7</b>	<b>18</b>	

SEMESTER VII						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	CB-462	Final Year Project-II	0	3	0+3	
2	NS-401	Health, Safety and the Environment (Humanities and Social Sciences-VII)	1	0	1+0	
3	CB-451T	Cryptography (Theory) (Depth Elective-IV)	2	0	2+1	
4	CB-451L	Cryptography (Lab) (Depth Elective-IV)	0	1		
5	MS-414	<b>Human Resource Management (university Elective III)</b>	3	0	3+0	
6	CB-457T	Ethical Hacking and Penetration Testing (Theory) (Cyber Security Depth - VII)	2	0	2+1	Information Security (Theory & Lab)
7	CB-457L	Ethical Hacking and Penetration Testing (Lab) (Cyber Security Depth - VII)	0	1		
8	EE-464	Renewable Energy (IDTE-II)	2	0	2+0	
9	MS-304	<b>Entrepreneurship (Management Elective-1)</b>	3	0	3+0	
<b>Total</b>			<b>13</b>	<b>5</b>	<b>18</b>	



SEMESTER VIII						
S. No.	Course Code	Course Title	Th.	Lab	Cr. Hr.	Pre-requisite
1	CB-464	Supervise Industrial Training (Compulsory)	0	16	0+16	
<b>Total</b>			<b>0</b>	<b>16</b>	<b>16</b>	

Total Credit Hours = 139

Total Lab Credit Hours=54 (38.84%)

Total Theory Credit Hours = 85 (61.15%)

### FEE STRUCTURE

Admission Fee	15,000
Security Deposit(refundable)	5,000
Total at the time of admission	20,000
Per Month Fees 04 Years	8,500



## COLLEGE OF MANAGEMENT AND APPLIED SCIENCES

“Graduation reminds me of everyone who has touched my life. The gift of knowledge and acknowledgments given by Ziauddin University are truly appreciated. It was a very proud moment for me, as it took me four years to achieve this goal. The Bachelor of Management Technology & Information Science programme allows students to excel in management with the add-on skills of technology to cater to the new business paradigms.

I cannot express enough gratitude to all my faculty members for how much they have taught me over the years. They are fantastic instructors who teach us using creative images and a variety of teaching methodologies. Their dedication to helping other students try to follow in their footsteps is exceptionally admirable. I simply cannot overstate how humbled I am to have met and learned from all the teachers.”

Shahbaz Rasool  
BS M&T



# DEPARTMENT OF BUSINESS ADMINISTRATION

## BACHELOR OF BUSINESS ADMINISTRATION (BBA)

### MISSION

To nurture individuals by imparting quality education, developing critical thinking, and ethical considerations to creatively address local and global challenges of the industry and society.

### PROGRAMME EDUCATIONAL OBJECTIVES

**PEO1:** To produce graduates with strong foundations in core business areas to develop managerial and leadership qualities.

**PEO2:** To produce graduates with the ability to think critically and creatively, analyze problems, and use the latest technology to solve business issues.

**PEO3:** To produce graduates with excellent communication skills to share business ideas.

**PEO4:** To produce graduates with an understanding of social and ethical issues concerning society and the business community.

### PROGRAMME LEARNING OUTCOMES

ZUFESTM BBA programme prepares students to attain the educational objectives by ensuring that students demonstrate achievement of the following learning outcomes

### PROGRAMME LEARNING OUTCOMES (PLOS)

**1. Core Business Knowledge:** Students will be able to describe knowledge of business discipline to address business challenges locally and globally. [PEO 1]

**2. Critical Thinking Skills:** Students will be able to analyze business issues critically. [PEO 2]

**3. Problem-Solving Skills:** Students will be able to apply problem-solving skills through different tools in different business situations [PEO 2]

**4. Creativity Skills:** Students will be able to develop innovative business solutions through the application of different tools [PEO2]

**5. Communication Skills:** Students will be able to effectively communicate with oral and written proficiency for both local and global audiences. [PEO 3]

**6. Teamwork Skills:** Students will be able to work effectively within teams [PEO 1]

**7. CSR Awareness:** Students will be able to have an awareness of the social issues [PEO 4]

**8. Ethical Consideration:** Students will be able to apply ethical considerations in business decision-making. [PEO 4]

### ELIGIBILITY CRITERIA

Intermediate with minimum 40%

### CREDIT HOUR DISTRIBUTION OF THE COURSES

The Department of Management Technology & Information Science follows NBEAC/HEC guidelines for the distribution of credit hours between core and elective courses. Any changes to the curriculum is only made after a thorough deliberation in the Board of Studies (BOS) meetings, which external experts also attend. The programme comprises 130 credit hours.

Table 1: Structure of Bachelor's Degree programme (With Single Major)

ZU POLICY		BBA Curriculum
Nomenclature of the Degree Programmes	4 years	4 years
Credit Hours (Minimum)	120	130
Credit Hours (Maximum)	As per HEC guidelines/accreditation council	
General Education Courses	30 credit hours (minimum) Refer to Table-7	37 Credit Hours
Major Courses	72 credit hours (minimum)	72 Credit Hours
Interdisciplinary/Allied Courses	12 credit hours (minimum)	12 Credit Hours
Field Experience/Internship	3 credit hours	3 Credit Hours
Capstone Project	3 credit hours	6 Credit Hours

Table 7: List of Courses in General Education Cluster

General Education Cluster	As per UGP	
	Credit Hours	Credit Hours
Arts and Humanities	2	3
Natural Sciences	3 (2+1)	6
Social Sciences	2	3
Functional English	3	3
Expository Writing	3	3
Quantitative Reasoning	6	6
Islamic Studies (OR) Religious Education/Ethics in lieu of Islamic Studies only for non-Muslim students	2	2
Ideology and Constitution of Pakistan	2	2
Applications of Information and Communication Technologies (ICT)	3 (2+1)	3
Entrepreneurship	2	3
Civics and Community Engagement	2	3
Total	30	37



## BBA (4 YEARS) SEMESTER-WISE BREAK UP

Semester – I	
Title	Credit Hour
Logic and Critical Thinking	3+0
Functional English	3+0
Applications of Information and Communication Technologies	2+0
Applications of Information and Communication Technologies - Lab	0+1
Basic Mathematics & Calculus	3+0
Fundamentals of Accounting	3+0
<b>Total</b>	<b>14+1</b>
Semester – II	
Ideology & Constitution of Pakistan	2+0
Business Statistics	3+0
Principle of Management	3+0
Principle of Marketing	3+0
Micro Economics	3+0
Islamic Studies	2+0
<b>Total</b>	<b>16</b>
Semester – III	
Expository Writing	3+0
Macro Economics	3+0
Foreign Language	3+0
Financial Accounting	3+0
Marketing Management	3+0
Introduction to Sustainable Development Goals (SDGs)	3+0
<b>Total</b>	<b>18</b>

Semester – IV	
Business Law & Taxation	3+0
Statistical Inference	3+0
Consumer Behavior	3+0
Introduction to Business Finance	3+0
Economy of Pakistan	3+0
<b>Total</b>	<b>15</b>
Semester – V	
Financial Institutions & Markets	3+0
Business Communication	3+0
Organizational Behavior	3+0
Digital Business	3+0
Cost & Managerial Accounting	3+0
<b>Total</b>	<b>15</b>
Summer	
Social Internship-I (Community Engagement Work)	<b>3</b>
Semester – VI	
Business Ethics	3+0
Business Research Methods	3+0
Human Resource Management	3+0
Financial Management	3+0
Introduction to Supply Chain Management	3+0
<b>Total</b>	<b>15</b>
Semester – VII	
Introduction to Business Analytics	3+0
Entrepreneurship	3+0
Elective I	3+0
Elective II	3+0
Capstone	0+3
<b>Total</b>	<b>15</b>
Summer	
Internship-II	<b>3</b>



Semester – VIII	
Project Management	3+0
Islamic Banking and Finance	3+0
Elective III	3+0
Elective IV	3+0
Capstone	0+3
<b>Total</b>	<b>15</b>
<b>Total Credit Hours</b>	<b>130</b>

## BBA – 2 YEARS (AFTER 14 YEARS)

### ELIGIBILITY CRITERIA

14 YEARS BUSINESS/MANAGEMENT DEGREE/ADP/ADC

### SCHEME OF STUDIES

Semester – I		
Financial Institutions & Markets	3+0	Major
Business Communication	3+0	Major
Organizational Behavior	3+0	Major
Digital Business	3+0	Allied Course
Cost & Managerial Accounting	3+0	Major
<b>Total</b>	<b>15</b>	
Summer		
Social Internship-I (Community Engagement Work)	3	Civic and Community Engagement
Semester – II		
Business Ethics	3+0	Major
Business Research Methods	3+0	Major
Human Resource Management	3+0	Major
Financial Management	3+0	Major
Introduction to Supply Chain Management	3+0	Major
<b>Total</b>	<b>15</b>	

Semester – III		
Introduction to Business Analytics	3+0	Major
Entrepreneurship	3+0	Entrepreneurship
Elective I	3+0	Major
Elective II	3+0	Major
Capstone I	3+0	Capstone
<b>Total</b>	<b>15</b>	
Summer		
Internship-II	3	
Semester – IV		
Project Management	3+0	Major
Islamic Banking and Finance	3+0	Major
Elective III	3+0	Major
Elective IV	3+0	Major
Capstone II	3+0	Capstone
<b>Total</b>	<b>15</b>	
<b>Total Credit Hours</b>	<b>66</b>	



## SPECIALIZATIONS

1. Finance
2. Marketing
3. Human Resource Management
4. Supply Chain Management
5. Entrepreneurship
6. HealthCare Management
7. Business Analytics

## SPECIALIZATION COURSES

Finance	
Corporate Finance	3+0
Financial Economics	3+0
Credit Management	3+0
Taxation Management	3+0
Practice & Laws of Banking	3+0
Consumer Banking	3+0
Seminar in Finance	3+0
Risk Management	3+0
Auditing	3+0
Islamic Financial System	3+0
Credit Analysis & Investment Banking	3+0
Investment & Portfolio Management	3+0
Public Finance	3+0
Treasury & Funds Management	3+0
Green Finance	3+0
Managerial Finance	3+0
International Financial Management	3+0
Financial Reporting Analysis	3+0

Marketing	
Sales Management	3+0
Retail Marketing	3+0
Cyber Marketing	3+0
Brand Management	3+0
Marketing Research	3+0
Export Marketing	3+0
Agriculture Marketing	3+0
Seminar In Marketing	3+0
Tourism Marketing	3+0
Services Marketing	3+0
International Marketing	3+0
Advertising Management	3+0
Trade Marketing	3+0
International Trade & Documentation	3+0
Marketing Analytics	3+0
Green Marketing	3+0
Behavioral Marketing	3+0
HRM	
Labor Laws in Pakistan	3+0
Employee Performance Management	3+0
International HRM	3+0
HR Development	3+0
Cases and Exercise in Personnel Management	3+0
Organizational Development	3+0
Essential of Training & Development	3+0
Industrial Relations	3+0
Compensation & Benefit	3+0
Human Resource Information System	3+0
HR & People Analytics	3+0



<b>Supply Chain Management (SCM)</b>	
Strategic SCM	3+0
Sourcing and Logistics Management	3+0
Operational Planning in Supply Chain	3+0
Sustainable Supply Chain Management	3+0
Supply Chain Modeling	3+0
Total Quality Management	3+0
Inventory Management	3+0
Demand Forecasting	3+0
Operational Planning in Supply Chain	3+0
Strategic Operation Management	3+0
Strategic Procurement in Supply Chain	3+0
Supply Chain Strategy, Design and Compliance	3+0
Supply Chain Mapping	3+0
Enterprise Resource Planning	3+0
<b>Entrepreneurship</b>	
Cases in Entrepreneurship	3+0
Managing Entrepreneurial Firms	3+0
Organizations & Leading Change	3+0
Economics of Location & Transportation	3+0
Social Responsibility & Entrepreneurship	3+0
Developing New Products and Services	3+0
Entrepreneurial Strategy in Emerging Markets	3+0
Innovation & Entrepreneurship	3+0
International Business	3+0
Corporate Entrepreneurship	3+0
Technology Entrepreneurship	3+0
Business Growth	3+0
Entrepreneurial Marketing	3+0

<b>Healthcare Management</b>	
Leadership in Healthcare	3+0
Change Management in Healthcare	3+0
Personal Management in Healthcare	3+0
Managerial Finance for Healthcare	3+0
Credit Management for Healthcare	3+0
Taxation Management for Healthcare	3+0
Risk Management for Healthcare	3+0
Sales Management for Healthcare	3+0
Brand Management for Healthcare	3+0
Marketing Research for Healthcare	3+0
Services Marketing for Healthcare	3+0
Advertising Management for Healthcare	3+0
Distribution Channels for Healthcare	3+0
Digital Marketing for Healthcare	3+0
Labor Laws in Pakistan for Healthcare	3+0
Employee Performance Management for Healthcare	3+0
HR Development for Healthcare	3+0
Industrial Relations for Healthcare	3+0
Organizational Development for Healthcare	3+0
Reward Management for Healthcare	3+0
Training & Development for Healthcare	3+0
Supply Chain Management for Healthcare	3+0
Marketing of Health Services for Healthcare	3+0
Inventory Management for Healthcare	3+0
<b>Business Analytics</b>	
Programming Fundamentals	2+1
Data Structures & Business Applications	2+1
Fundamentals of Business Intelligence & Analytics	2+1
Legal and Ethical Issues in Business Analytics	3+0
Database Systems	2+1
Business Data and Text Mining	2+1
Machine Learning for Business Analytics	2+1
Decision Science for Business	2+1
Predictive Analytics	2+1

## LOCATION

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600

## MASTER OF BUSINESS ADMINISTRATION (MBA)

### INTRODUCTION

Ziauddin University is a well-known Chartered University. Ziauddin University is now offering Master of Business Administration (MBA) at both North Nazimabad and Clifton Campuses. The Master of Business Administration (MBA) programme is one of the professional programmes that is planned for individuals who want to mix business theory, practical knowledge and professional skills in preparation for careers as business leaders. The curriculum used is integrated with experiential learning by applying the newest management tools and techniques. Case studies and project work are among the pedagogies used for the delivery of the curriculum content. Students have a choice to do a Research Thesis or undertake a Capstone Project, a real-life project in their specialised area with a related company. It is a diverse course that has various areas of specialisation, including:

1. Healthcare Management
2. Finance
3. Human Resources Management
4. Marketing
5. Supply Chain Management
6. Entrepreneurship

### MISSION

- To provide relevant and contemporary knowledge and skills for career building across sectors in the society.
- To sensitise students of the challenges of the global, social, environmental and ethical dimensions.

### PROGRAMME EDUCATIONAL OBJECTIVES

**PEO1:** Students will establish themselves as effective professionals by solving real problems through the use of management science knowledge and with attention to teamwork, effective communication, critical thinking and problem-solving skills.

**PEO2:** Students will develop professional skills that prepare them for current and future employment and for life-long learning in advanced areas of management and related fields.

**PEO3:** Students will demonstrate their ability to adapt to a rapidly changing environment by having learned and applied new skills and competencies.

**PEO4:** Students will be provided with an educational foundation that prepares them for excellence, leadership roles along diverse career paths with encouragement to professional ethics and active participation needed for a successful career.

### PROGRAMME LEARNING OUTCOMES

**PLO1:** Apply knowledge of management theories and practices to solve business problems.

**PLO2:** Foster analytical and critical thinking abilities for data driven decision making.

**PLO3:** Ability to develop value-based leadership ability.

**PLO4:** Ability to understand, analyze and communicate global, economic, legal and ethical aspects of a business.

**PLO5:** Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

### FACILITIES/RESOURCES

Computer Labs/Library facility is available

### CAREER PROSPECTS

Completing an MBA Programme, the graduate demonstrates themselves as an effective professional by solving real problems through the use of management science knowledge and with attention to teamwork, effective communication, critical thinking and problem-solving skills and prepare themselves for current and future employment and for life-long learning in advanced areas of management and related fields.

### SCHEME OF STUDY SEMESTER WISE STRUCTURE

MBA (1.5 Years)		
Course Code	Course Title	Credit Hours
<b>Semester – 1</b>		
RES-510	Applied Business Research	3
MAN-510	Strategic Management	3
	Specialization I	3
	<b>Semester Credit Hours</b>	<b>9</b>
<b>Semester – 2</b>		
FIN-520	Strategic Finance	3
	Specialization II	3
RES-521	Research Project / Research Thesis I/Elective I	3
	<b>Semester Credit Hours</b>	<b>9</b>
<b>Semester – 3</b>		
MKT-530	Strategic Marketing	3
	Specialisation III	3
	Specialisation IV	3
RES-532	Research Project / Research Thesis-II/ Elective II	3
	<b>Semester Credit Hours</b>	<b>12</b>
	<b>Total Credit Hours</b>	<b>30</b>





## MASTER OF BUSINESS ADMINISTRATION (MBA) – 2.5 YEARS

MBA- 2.5 Years		
Course Code	Course Title	Credit Hours
<b>Semester – 1</b>		
MAN-510	Theory & Practice of Management	3
ECO-510	Business Economics	3
ACC-510	Financial Accounting	3
QAT-521	Statistical Inference	3
	<b>Semester Credit Hours</b>	<b>12</b>
<b>Semester – 2</b>		
COM-520	Business Communication	3
FIN-520	Financial Management	3
ACC-511	Cost & Managerial Accounting	3
QAT-510	Quantitative Tools for Managers	3
	<b>Semester Credit Hours</b>	<b>12</b>
<b>Semester – 3</b>		
RES-630	Applied Business Research	3
ENT-640	Entrepreneurship	3
MAN-521	Strategic Management	3
MKT-520	Marketing Management	3
	<b>Semester Credit Hours</b>	<b>12</b>
<b>Semester – 4</b>		
FIN-631	Strategic Finance	3
MKT-631	Strategic Marketing	3
	Specialisation I	3
RES-641	Research Project / Research Thesis I/Elective 1	3
	<b>Semester Credit Hours</b>	<b>12</b>
<b>Semester – 5</b>		
	Specialisation II	3
	Specialisation III	3

Finance		
FIN-521	Corporate Finance	3+0
FIN-522	Financial Economics	3+0
FIN-523	Credit Management	3+0
FIN-524	Taxation Management	3+0
FIN-525	Practice & Laws of Banking	3+0
FIN-526	Consumer Banking	3+0
FIN-527	Seminar in Finance	3+0
FIN-528	Risk Management	3+0
FIN-529	Auditing	3+0
FIN-530	Performance Management	3+0
FIN-531	Credit Analysis & Investment Banking	3+0
FIN-532	Investment & Portfolio Management	3+0
FIN-533	Public Finance	3+0
FIN-534	Treasury & Funds Management	3+0
FIN-535	Green Finance	3+0
FIN-536	Managerial Finance	3+0
FIN-537	International Financial Management	3+0
FIN-538	Corporate Governance	3+0
FIN-539	Financial Statement Analysis	3+0
FIN-540	Issue in FinTech	3+0
Marketing		
MKT -521	Sales Management	3+0
MKT -522	Retail Marketing	3+0
MKT -523	Cyber Marketing	3+0
MKT -524	Brand Management	3+0
MKT -525	Marketing Research	3+0
MKT -526	Export Marketing	3+0
MKT -527	Agriculture Marketing	3+0
MKT -528	Seminar In Marketing	3+0
MKT -529	Tourism Marketing	3+0
MKT-531	Services Marketing	3+0
MKT-532	International Marketing	3+0
MKT-533	Advertising Management	3+0
MKT-534	Trade Marketing	3+0
MKT-535	Marketing of Financial Product	3+0
MKT-536	Distribution Channels	3+0
MKT-537	Digital Marketing	3+0
MKT-538	Marketing Analytics	3+0
Human Resource Management		
HRM-521	Labor Laws in Pakistan	3+0
HRM-522	Employee Performance Management	3+0
HRM-523	International HRM	3+0
HRM-524	HR Development	3+0
HRM-525	Cases and Exercise in Personnel/HRM	3+0
HRM-526	Organisational Development	3+0
HRM-527	Essential of Training & Development	3+0
HRM-528	Industrial Relations	3+0
HRM-529	Reward Management	3+0
SCM		
SCM-521	Strategic SCM	3+0
SCM-522	Sourcing and Logistics Management	3+0
SCM-523	Operational Planning in Supply Chain	3+0
SCM-524	Sustainable Supply Chain Management	3+0
SCM-524	Supply Chain Modeling	3+0
SCM-525	Total Quality Management	3+0
SCM-526	Inventory Management	3+0
SCM-527	Demand Forecasting	3+0

SCM-528	Operational Planning in Supply Chain	3+0
SCM-529	Strategic Operation Management	3+0
SCM-530	Strategic Procurement in Supply Chain	3+0
SCM-531	Supply Chain Strategy, Design and Compliance	3+0
SCM-532	Supply Chain Mapping	3+0
SCM-533	Enterprise Resource Planning	3+0
SCM-534	Public Procurement	3+0

Healthcare Management		
HCM-510	Leadership in Healthcare	3+0
HCM-511	Change Management in Healthcare	3+0
HCM-512	Personal Management in Healthcare	3+0
HCM-513	Managerial Finance for Healthcare	3+0
HCM-514	Credit Management for Healthcare	3+0
HCM-515	Taxation Management for Healthcare	3+0
HCM-516	Risk Management for Healthcare	3+0
HCM-517	Sales Management for Healthcare	3+0
HCM-518	Brand Management for Healthcare	3+0
HCM-519	Marketing Research for Healthcare	3+0
HCM-520	Services Marketing for Healthcare	3+0
HCM-521	Advertising Management for Healthcare	3+0
HCM-522	Distribution Channels for Healthcare	3+0
HCM-523	Digital Marketing for Healthcare	3+0
HCM-524	Labor Laws in Pakistan for Healthcare	3+0
HCM-525	Employee Performance Management for Healthcare	3+0
HCM-526	HR Development for Healthcare	3+0
HCM-527	Industrial Relations for Healthcare	3+0
HCM-528	Organisational Development for Healthcare	3+0
HCM-529	Reward Management for Healthcare	3+0
HCM-530	Training & Development for Healthcare	3+0
HCM-531	Supply Chain Management for Healthcare	3+0
HCM-532	Marketing of Health Services for Healthcare	3+0
HCM-533	Inventory Management for Healthcare	3+0
Entrepreneurship		
ENT-601	Advanced Cases in Entrepreneurship	3+0
ENT-602	Advanced Managing Entrepreneurial Firms	3+0
ENT-603	Advanced Organisations & Leading Change	3+0
ENT-604	Advanced Economics of Location & Transportation	3+0

### ELIGIBILITY CRITERIA:

16 years of education with a minimum CGPA of 2.0

\*MBA-1.5 for 4 years business and management degree

\*\*MBA 2.5 Years for non-business and management education

### LENGTH OF DEGREE PROGRAMME

MBA (minimum): 1.5

MBA (maximum): 4 years

### FEE STRUCTURE FOR NORTH

Admission Fee (Only once)	Rs. 15,000
Security Deposit (only once and refundable)	Rs. 5,000
Student Activity Fee (per semester)	Rs. 2,000
Semester Registration Fee (per Semester)	Rs. 8,000
Examination Fee (2000 per course)	Rs. 6,000
First Semester Tuition Fee (3 Courses), 13000 per course	Rs. 39,000
<b>Total</b>	<b>Rs.75,000</b>

### FEE STRUCTURE FOR CLIFTON

Admission Fee (Only once)	Rs. 20,000
Security Deposit (only once and refundable)	Rs. 5,000
Student Activity Fee (per semester)	Rs. 2,000
Semester Registration Fee (per Semester)	Rs. 8,000
Examination Fee (2000 per course)	Rs. 6,000
First Semester Tuition Fee (3 Courses), 20,000 per course	Rs. 60,000
<b>Total</b>	<b>Rs.101,000</b>

### LOCATIONS

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600  
4B, Shahrah-e-Ghalib, Block-6, Scheme 5, Clifton, Karachi.



## DEPARTMENT OF MANAGEMENT SCIENCES

### MISSION

To produce quality graduates to add value as a critical component of corporate strategy and planning and lead economic development of Technology & Information Science sector through effective Research and Development, Entrepreneurship and lifelong learning.

### INTRODUCTION

The Department of Management, Technology and Information Science at ZUFESTM, Ziauddin University focuses on Management in practice, industry-led entrepreneurial orientation and skill-based professional grooming of the students. The field of management science involves the use of analytical methods to make decisions about local and global business problems. The Department of Management, Technology and Information Science equips

students with all the tools required to cope with constantly rising business needs. The Department is equipped with experienced faculty with corporate experience and degrees from reputed Pakistani and foreign universities.

### CAREER PROSPECTS

- Banks
- Business Advisory Services
- Houses of Business
- Educational Establishments
- Export Businesses
- Monetary Institutions
- Industrial Residences
- International Businesses
- Marketing Businesses
- Entrepreneur and family businesses

## BS MANAGEMENT & TECHNOLOGY (BSM&T) EVENING PROGRAMME

### SCOPE AND OPPORTUNITIES

This Programme offers a unique combination of courses from Business Management and Information Technology to develop the skills that ensure a sustainable Digital future. The graduates are prepared to oversee complex projects and manage individuals to work with ever changing environment and be on the cutting edge of advancement and the longer term of work. The Programme concentrates on database systems, data visualization tools and techniques, statistical modeling, data mining, optimization, simulation, and their applications in business disciplines such as accounting, finance, human resources, insurance, management, and marketing. The emphasis is placed throughout the programme on developing all-rounded communication & soft skills, analytical & reasoning skills, ethical decision making and problem-solving capabilities. Graduates in Management & Technology go on to become chief technology officers, project managers, business development executives/managers, product managers, marketing managers, analytics managers, business analysts, technical programme managers, senior product managers, technical product managers and Financial Analysts.

### MISSION OF THE PROGRAMME

The Programme aims to produce graduates who are intellectually and morally capable to add value to the industry and society by supervising new and complex projects using various technologies that facilitate individuals to work with ever changing environment at a large scale and provide the sustainable solutions through professional, research and entrepreneurial skills.

### DURATION OF DEGREE PROGRAMME

BS Management & Technology Duration  
(Minimum): 4 years Duration  
(Maximum): 7 years

### ELIGIBILITY CRITERIA

The criteria for students seeking admission is as follow:

- Intermediate or equivalent examination.
- Minimum score for eligibility is 50% in the ZU Admissions Test.

Note: Candidates who have completed 12 years of education and obtained degrees other than Matriculation (SSC) or Intermediate (HSSC) are required to obtain an equivalence certificate from the Inter Board Committee of Chairman (IBCC).

### FEE STRUCTURE

Admission Fee	15,000
Security Deposit(refundable)	5,000
Total at the time of admission	20,000
Per Month Fees 04 Years	8,500

### THE CREDIT HOUR DISTRIBUTION OF THE COURSES

The Department of Management Technology & Information Sciences follows HEC guidelines for distribution of credit hours between core and elective courses. The Programme comprises of 132 credit hours.

### PROGRAMME EDUCATIONAL OBJECTIVES

Consistent with the department's Vision and Mission, the Programme Educational Objectives of the study Programme BS Management & Technology are to educate individuals with interdisciplinary and practical knowledge who:

- PEO-1:** Will demonstrate in- depth knowledge of Business Management and Information Technology
- PEO-2:** Will have ability to understand, diagnose, communicate and provide solutions to business and technical problems
- PEO-3:** Serve the society with their innovative ideas to manage various technologies maintaining the ethical standards
- PEO-4:** Will promote continuous development of professional and technical know-how in decision making process.



## SCHEME OF STUDY

Semester – I		
Code	Title	Credit Hour
CSE-110	Discrete Structures	3+0
ENG-110	Functional English	3+0
CSE-111T	Computer Fundamentals & Programming	2+0
CSE-111L	Computer Fundamentals & Programming-LAB	0+1
MGT-110	Principle of Management	3+0
NAS-121	Basic Mathematics & Calculus	3+0
<b>Total</b>		<b>14+1</b>
Semester – II		
CIV-121	Pakistan Studies	3+0
MKT-120	Principle of Marketing	3+0
ECO-120	Micro Economics	3+0
ACC-230	Financial Accounting	3+0
LAW-230	Business Law	3+0
<b>Total</b>		<b>15+0</b>
Semester – III		
ENG-121	Communication & Presentation Skills	3+0
ECO-231	Macro Economics	3+0
QAN-241	Statistical Inference	3+0
FIN-240	Introduction to Business Finance	3+0
CSE-122T	Object Oriented Programming	2+0
CSE-122L	Object Oriented Programming-LAB	0+1
<b>Total</b>		<b>14+1</b>
Semester – IV		
CIV-110	Islamic Studies	3+0
MKT-231	Marketing Management	3+0
ACC-361	Cost & Managerial Accounting	3+0
SSC-351	Organizational Behavior	3+0
CSE-244T	Database Management System	2+0
CSE-244L	Database Management System-LAB	0+1
<b>Total</b>		<b>14+1</b>
Summer – I		
	Internship Report-Social Work/Community Work	3+0
Semester - v		
BTM-351	Management Information System	3+0
FIN-362	Financial Management	3+0
BTM-350	Digital Business	3+0
CSE-233T	Data Structures	2+0
CSE-233L	Data Structure-LAB	0+1
	Web Development	3+0
<b>Total</b>		<b>14+1</b>
Semester – VI		
SSC-230	Sociology	3+0
MGT-361	Human Resource Management	3+0
SCM-360	Introduction to Supply Chain Management	3+0
ENT-470	Entrepreneurship	3+0
BTM-483	Business Intelligence & Analytics	3+0
<b>Total</b>		<b>15</b>
Summer – II		
	Internship Report-Industry	3+0

Semester – VII		
RES-360	Research Methodology	3+0
	Technopreneurship	3+0
	Elective I	3+0
	Elective II	3+0
ECO-472	Managerial Economics	3+0
RES-471	Capstone Project - I	3+0
<b>Total</b>		<b>18</b>
Semester – VIII		
CSE-356T	Artificial Intelligence in Business	2+0
CSE-356L	Artificial Intelligence in Business-LAB	0+1
MGT-482	Information Technology Project Management	3+0
MGT-483	Total Quality Management	3+0
	Elective III	3+0
	Elective IV	3+0
RES-482	Capstone Project - II	3+0
<b>Total</b>		<b>18</b>

	FinTech	
FIT 501	Introduction to Fintech	3+0
FIT 502	Blockchain Technology for Business	3+0
FIT 503	Programming for Finance	3+0
FIT 504	Financing New Ventures	3+0
FIT 505	Financial Data Analytics	3+0
FIT 506	Investment Analytics	3+0
FIT 507	Financial Risk Analytics and Derivatives	3+0
FIT 508	Python for Finance	3+0
Digital Marketing		
DIM 501	Digital Skills Develop – ( Graphic Design)	3+0
DIM 502	Digital Branding	3+0
DIM 503	Digital Skills Develop – (copywriting)	3+0
DIM 504	Digital Sales Management	3+0
DIM 505	Social Media Marketing	3+0
DIM 506	Applied Ethics in Contemporary Digital Tech.	3+0
DIM 507	E-commerce or E-business	3+0
DIM 508	Agile Project Management in Marketing	3+0
DIM 509	Integrated Marketing Communications	3+0
DIM 510	Search Engine Market. & Analytics	3+0
DIM 511	CRM in Digital Environment	3+0
Supply Chain Analytics		
SCA 501	Inventory Management & Warehouse	3+0
SCA 502	AI, Blockchain and Supply Chain Management (Industry 4.0)	3+0
SCA 503	Data Science for Business (Python/SQL)	3+0
SCA 504	Production and Operations Management	3+0
SCA 505	Logistic and Shipping Management	3+0
SCA 506	Six Sigma and Quality Analytics	3+0



SCA 507	Contract Management	3+0
SCA 508	Supply Chain Analytics	3+0
SCA 509	Strategic Supply Chain Management	3+0
SCA 510	Supply Chain Digitization	3+0
SCA 511	Vendor Management	3+0
<b>Project Management</b>		
POM 501	Operations Research	3+0
POM 502	Quality Management Tools	3+0
POM 503	Software Project Management	3+0
POM 504	Project Scheduling, Planning and Time Management	3+0
POM 505	Governance, Monitoring and Evaluation of Development Projects	3+0
POM 506	Project Program Portfolio Management	3+0
POM 507	Project Finance	3+0
POM 508	Project Risk Management	3+0
POM 509	Construction Project Management	3+0
POM 510	Project Cost and Finance Management	3+0
POM 511	Project Human Resource & Communication Management	3+0
POM 512	Project Procurement & Contract Management	3+0
POM 513	Management	3+0
POM 514	Innovation and Technology Management	3+0
POM 515	Project Supply Chain Management	3+0
<b>Technopreneurship</b>		
TEC 501	Finance for Technopreneur	3+0
TEC 502	Digital Marketing for Entrepreneurs	3+0
TEC 503	E-Commerce	3+0
TEC 504	Small Business	3+0
TEC 505	Technology and Innovation	3+0
TEC 506	Web programming for Entrepreneurs	3+0
TEC 507	Managing People for Entrepreneurs	3+0
TEC 508	SCM for Entrepreneurs	3+0
<b>HR Analytics</b>		
HRA 501	Industry Relations in Digital era	3+0
HRA 502	Leadership & Motivation Techniques in Digital era	3+0
HRA 503	Compensation Management in Digital era	3+0
HRA 504	Performance Appraisal in Digital era	3+0
HRA 505	Leadership Readiness in Digital era	3+0
HRA 506	Training & Development in Digital era	3+0

## BS ACCOUNTING AND FINANCE

### SCOPE AND OPPORTUNITIES

BS Accounting and Finance is a 4-years programme covering intensive Accounting and Finance Syllabi. The programme combines strong accounting and finance conceptual framework along with soft and business skills needed to excel in these areas. This Programme also improves technical and interpersonal skills of the students. Syllabus coverage of the courses allows the students to attain the BS (Hons) degree and attempt ACCA (UK) papers within 4 years. At the end of this period, a candidate may become a graduate and a professional qualification holder. ACCA exempts the first 9 papers of the BS (Hons) Accounting and Finance Programme graduates. To complete the ACCA qualification, graduates must pass the last 5 papers of ACCA. This programme has two semesters every year and a total of 8 semesters.

### MISSION OF THE BS (ACCOUNTING AND FINANCE) PROGRAMME

- To be recognized as one of the leading undergrad business programmes that nurtures individuals by imparting quality education to investigate the local and global challenges of the industry and society.
- To develop future business leaders who have an outlook on environmental, social and governance issues for both the local and

global market.

### PROGRAMME EDUCATIONAL OBJECTIVES

**PEO1:** To produce graduates with strong foundations in accounting and finance to develop managerial qualities.

**PEO2:** To produce graduates with the ability to think creatively and critically, analyze problems quantitatively and use information technology to solve business issues.

**PEO3:** To produce graduates with understanding of social and ethical issues that concern the whole business community.

**PEO4:** To produce graduates with good communication skills, personality, legal knowledge and understanding of local and global issues that concern the whole business community.

### CAREER PROSPECTS

Graduates of this Programme can expect promising careers in the following roles and fields:

- Pursue a career in Accounting/Finance/Auditing/Taxation
- Pursue professional studies like MBA/CA/ACCA/CIMA/CFA
- Freelancing

### FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	12,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	15 * 3000
Examination Fees 1st Semester	6,000
Tuition /Semester Credit hours Fee	45,000
Miscellaneous Charges	
<b>Total Fee at the time of admission</b>	<b>75,000</b>
<b>TUITION FEE</b>	<b>58,000</b>

## SCHEME OF STUDY - SEMESTER WISE STRUCTURE

Course Code	Course Title	Credit Hours
<b>Semester - 1</b>		
ENG-110	Functional English	3+0
NAS-110	Computer Concepts & Applications	2+1
CIV-110 / CIV-111	Islamic Studies / Moral Ethics	3+0
NAS-111	Basic Mathematics & Calculus	3+0
ACC-110	Introduction to Financial Accounting	3+0
	<b>Semester Credit Hours</b>	<b>15</b>
<b>Semester - 2</b>		
MAN-120	Principles of Management	3+0
ECO-120	Micro Economics	3+0
ENG-120	Communication & Presentation Skills	3+0
CIV-120	Pakistan Studies	3+0
ACC-121	Financial Accounting	3+0
	<b>Semester Credit Hours</b>	<b>15</b>
<b>Semester - 3</b>		
NAS-232	Business Statistics	3+0
ECO-231	Macroeconomics	3+0
MKT-230	Principles of Marketing	3+0
FIN-230	Introduction to Business Finance	3+0
SSC-230	Sociology	3+0
ACC-232	Accounting & Financial Information Systems	3+0
	<b>Semester Credit Hours</b>	<b>18</b>
<b>Semester - 4</b>		
FIN-241	Introduction to Financial System	3+0
LAW-240	Business & Labor Law	3+0
ECO-242	Economy of Pakistan	3+0
MAN-241	Organizational Behavior	3+0
NAS-243	Statistical Inference	3+0
ACC-243	Cost & Managerial Accounting	3+0
	<b>Semester Credit Hours</b>	<b>18</b>
<b>Semester - 5</b>		
ACC-354	Corporate Accounting & Reporting	3+0
FIN-352	Financial Institutions & Markets	3+0
COM-350	Business Communication	3+0
MKT-351	Business Intelligence & Analytics	3+0
LAW-351	Company Law	3+0
HRM-350	Human Resource Management	3+0
	<b>Semester Credit Hours</b>	<b>18</b>
<b>Semester - 6</b>		
ACC-365	Audit & Assurance	3+0
RES-360	Business Research Methods	3+0
FIN-363	Financial Management	3+0
ACC-366	Financial Reporting Analysis	3+0
ACC-367	Performance Management	3+0
LAW-362	Business Taxation	3+0
	<b>Semester Credit Hours</b>	<b>18</b>
<b>Semester - 7</b>		
FIN-474	Corporate Finance	3+0
XXX	University Elective	3+0
XXX	Accounting Elective-I	3+0
XXX	Finance Elective-I	3+0
RES-471	Final Project	3+0
	<b>Semester Credit Hours</b>	<b>15</b>

## LIST OF ELECTIVES

### SPECIALIZATION COURSES - FINANCE

<b>Finance</b>		
FIN-486	Corporate Finance	3+0
FIN-487	Financial Economics	3+0
FIN-488	Credit Management	3+0
FIN-489	Taxation Management	3+0
FIN-490	Practice & Laws of Banking	3+0
FIN-491	Consumer Banking	3+0
FIN-492	Seminar in Finance	3+0
FIN-493	Risk Management	3+0
FIN-494	Auditing	3+0
FIN-495	Islamic Financial System	3+0
FIN-496	Credit Analysis & Investment Banking	3+0
FIN-497	Investment & Portfolio Management	3+0
FIN-498	Public Finance	3+0
FIN-499	Treasury & Funds Management	3+0
FIN-451	Green Finance	3+0
FIN-452	Managerial Finance	3+0
FIN-453	International Financial Management	3+0
FIN-454	Investment Banking	3+0
FIN-455	Financial Risk Management	3+0
FIN-456	Advanced Corporate Finance	3+0
FIN-457	Financial Econometrics	3+0
FIN-458	Branch Banking	3+0
FIN-459	Marketing of Financial Services	3+0
FIN-460	Strategic Financial Management	3+0
FIN-461	Contemporary Issues in Finance	3+0
FIN-462	Regulations & Financial Markets	3+0
FIN-463	Sharia Compliant Financial Markets & Institutions	3+0
FIN-464	Contract Management	3+0
FIN-465	Alternative Finance	3+0
FIN-466	Digital Currency	3+0
FIN-467	International Banking	3+0
FIN-468	Behavioral Finance	3+0
FIN-469	Empirical Research in Finance	3+0
FIN-470	Mergers & Acquisitions	3+0

### SPECIALIZATION COURSES - ACCOUNTING

ACC-470	Financial Statement Analysis	3+0
ACC-471	Advanced Managerial Accounting	3+0
ACC-472	Accounting Theory	3+0
ACC-473	Advanced Auditing	3+0
ACC-474	Advance Financial Reporting	3+0
ACC-475	Essential Software in Accounting	3+0
ACC-476	Tax Management & Optimization	3+0
ACC-477	HR Accounting	3+0
ACC-478	Responsible Accounting	3+0
ACC-479	ESG Accounting	3+0
ACC-480	Enterprise Resource Planning	3+0
ACC-481	Advance Financial Accounting	3+0
ACC-482	Digital Accounting	3+0



## BS BUSINESS ANALYTICS

### SCOPE AND OPPORTUNITIES

The BS (Business Analytics) Programme is planned for individuals who want to develop analytical skills by mixing business theory, data analytics skills, practical knowledge, and professional skills in preparation for careers as business leaders. The BS Business Analytics is a dynamic degree Programme aimed to provide strong analytical and critical thinking abilities to students who wish to explore the power of data analysis to facilitate decision-making processes in organizations and solve business problems. The Programme prepares the next generation of managers with the expertise to manage and analyse data to solve organizations' pressing challenges in management, HRM, finance, operations, and marketing.

### MISSION OF THE BS (BUSINESS ANALYTICS) PROGRAMME

- To be recognized as one of the leading undergrad businesses & analytics programmes that nurture individuals by imparting quality education to investigate the industry's and society's local and global challenges.
- To develop future business analysts with strong analytical and critical thinking abilities to make business decisions for local and global markets.

### FEE STRUCTURE

Admission Processing Fees	2500
Admission Fees	12,000
Security Deposit (refundable)	5,000
Student Activity Fee (Per Semester)	2,000
Semester Reg. Fee (per semester)	5,000
First Semester Credit Hours Fee	15 * 3000
Examination Fees 1st Semester	6,000
Tuition /Semester Credit hours Fee	45,000
Miscellaneous Charges	
<b>Total Fee at the time of admission</b>	<b>75,000</b>
<b>TUITION FEE</b>	<b>58,000</b>

### PROGRAMME EDUCATIONAL OBJECTIVES

**PEO1:** To produce graduates with expertise to manage and analyse data for solving the challenges faced by the organization in management, HRM, finance, operations, and marketing to develop managerial qualities.

**PEO2:** To produce graduates who can creatively and critically analyse and evaluate problems quantitatively, and use information technology to solve business issues.

**PEO3:** To produce graduates who understand social and ethical issues concerning the business community.

**PEO4:** To produce graduates with strong decision-making skills for creating and managing innovations, new business development, and identifying high-growth potential entity

### DURATION OF DEGREE PROGRAMME

BS (Business Analytics) (Minimum): 4 years  
BS (Business Analytics) (Maximum): 7 years

### ELIGIBILITY CRITERIA

- Intermediate or equivalent.
- Candidates who have completed 12 years of education and obtained degrees other than Matriculation (SSC) and Intermediate (HSC) are required to obtain an equivalence certificate from the Inter Board Committee of Chairman (IBCC).

### CREDIT HOUR DISTRIBUTION COURSES

The Department of Management Technology & Information Science follows HEC guidelines for distributing credit hours between core courses and general education courses. Any changes to the curriculum are only made after a thorough deliberation in the Board of Studies (BOS) meetings, which external experts also attend. The Programme comprises 132 credit hours.

### CAREER OPPORTUNITIES

In the rapidly growing field of big data and analytics, there is a high demand for skilled professionals who can leverage analytics to translate unstructured data into valuable business insights. The BS BA degree provides diverse career opportunities for graduates, including business analysts, operations analysts, people analysts, financial analysts, and market or consumer analysts.

### SCHEME OF STUDY - SEMESTER WISE STRUCTURE

BS (Business Analytics)		
Course Number	Course Title	Credit Hours
<b>Semester - 1</b>		
1	Functional English	3
2	Principle of Management	3
3	IT in Business	2+1
4	Islamic Studies/Ethics	3
5	Basic Mathematics & Calculus	3
<b>Semester Credit Hours</b>		<b>15</b>
<b>Semester - 2</b>		
6	Fundamentals of Accounting	3
7	Micro-Economics	3
8	Principles of Marketing	3
9	Communication & Presentation Skills	3
10	Pakistan Studies	3
<b>Semester Credit Hours</b>		<b>15</b>
<b>Semester - 3</b>		
11	Business Statistics	3
12	Macro Economics	3
13	Business Communication	3
14	Marketing Management	3
15	Sociology	3
16	Programming Fundamentals	2+1
<b>Semester Credit Hours</b>		<b>18</b>
<b>Semester - 4</b>		
17	Business Finance	3
18	Data Structures & Business Applications	2+1
19	Economy of Pakistan	3
20	Consumer Behavior	3
21	Statistical Inference	3
22	Cost & Managerial Accounting	3
<b>Semester Credit Hours</b>		<b>18</b>
<b>Semester - 5</b>		
23	Financial Institutions & Markets	3
24	Quantitative Skills	3
25	Organizational Behavior	3
26	Digital Business	3
27	Fundamentals of Business Intelligence & Analytics	2+1
28	Logic and Critical Thinking	3
<b>Semester Credit Hours</b>		<b>18</b>
<b>Semester - 6</b>		
29	Legal and ethical Issues in Business Analytics	3
30	Business Research Methods	3
31	Human Resource Management	3
32	Financial Management	3
33	Database Systems	2+1
34	Entrepreneurship	3
<b>Semester Credit Hours</b>		<b>18</b>
<b>Semester - 7</b>		
35	Leadership	3
36	University Elective	3
37	Machine Learning for Business Analytics	2+1
38	Business Data and Text Mining	2+1
39	Final Year Project - I	0+3
<b>Semester Credit Hours</b>		<b>15</b>
<b>Semester - 8</b>		
40	Project Management	3
41	University Elective	3
42	Decision Science for Business	2+1
43	Predictive Analytics	2+1
44	Final Year Project - II	0+3
<b>Semester Credit Hours</b>		<b>15</b>

## MS MANAGEMENT SCIENCES

### INTRODUCTION

Ziauddin University is a well-known Chartered University. Ziauddin University is now offering MS (Management Sciences) at North Nazimabad Campuses. The MS (Management Sciences) programme is one of the research programmes that is planned for individuals who want to mix business theory, practical knowledge, and professional skills in preparation for careers as faculty and management leaders. The curriculum used is integrated with experiential learning by applying the newest management tools and techniques. Research, Case studies, and project work are among the pedagogies used for delivery of the curriculum content. Students have a choice to do a Research Thesis or two courses or two IRS. It is a diverse course that has various areas of specialisation, including:

1. Finance
2. Human Resources Management
3. Marketing

### MISSION

- To provide relevant and contemporary research and management knowledge and skills for career building in academia and the corporate world.
- To sensitise students of the challenges of the global, social, environmental, and ethical dimensions.

### PROGRAMME EDUCATIONAL OBJECTIVES

**PEO1:** Students will establish themselves as effective professionals by solving real problems through the use of management science research knowledge and with attention to teamwork, effective communication, critical thinking and problem-solving skills.

**PEO2:** Students will develop professional skills that prepare them for current and future employment and for life-long learning in advanced areas of management and related fields.

**PEO3:** Students will demonstrate their ability to adapt to a rapidly changing environment by having learnt and applied new skills and competencies.

**PEO4:** Students will be provided with an educational foundation that prepares them for excellence, leadership roles along diverse career paths with encouragement to professional ethics and active participation needed for a successful career.

### PROGRAMME LEARNING OUTCOMES

**PLO1:** Apply knowledge of management research to solve management problems.

**PLO2:** Apply knowledge of core management subjects like Finance, HRM, Marketing to solve business problems.

**PLO3:** Foster analytical and critical thinking abilities for data-driven decision making.

**PLO4:** Ability to develop value-based leadership ability.

**PLO5:** Ability to understand, analyze and communicate global, economic, legal and ethical aspects of a business.

**PLO6:** Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

### FACILITIES/RESOURCES

Computer Labs and updated physical and online library is available

### CAREER PROSPECT

Completing an MS (MS) Programme, the graduate demonstrates themselves as an effective researcher and professional by solving real problems through the use of management science knowledge and with attention to teamwork, effective communication, critical thinking and problem-solving skills and preparing themselves for current and future employment and for life-long learning in advanced areas of management and related fields. After completing MS (MS), students can pursue PhD (Management Sciences) locally and internationally.

## SCHEME OF STUDY TOTAL CREDIT HOURS: 30 SEMESTER WISE STRUCTURE

MS (Management Sciences) (1.5 Years)		
Course Code	Course Title	Credit Hours
<b>Semester – 1</b>		
MSM-510	Research Methods & Techniques	3
MSM-511	Seminar in Management	3
	Specialisation I	3
	<b>Semester Credit Hours</b>	<b>9</b>
<b>Semester – 2</b>		
MSM-512	Quantitative Tools for Research	3
MSM-513	Seminar in Finance	3
	Specialisation II	3
	Research Project / Research Thesis I/Elective I/IRS	3
	<b>Semester Credit Hours</b>	<b>12</b>
<b>Semester – 3</b>		
MSM-514	Seminar in Marketing	3
	Specialisation III	3
	Research Project / Research Thesis-II/ Elective II/IRS	3
	<b>Semester Credit Hours</b>	<b>9</b>
	<b>Total Credit Hours</b>	<b>30</b>

The programme structure (Scheme of Studies) and list of courses for MS (Management Sciences) are given below.

Course Description	No. of Courses	Credit Hours
Core Courses	5	15
Area of Specialisation	3	9
Thesis/IRS/Elective Courses		6
<b>Total Credit Hours</b>		<b>30</b>

List of Core Courses		
MSM-510	Research Methods & Techniques	3
MSM-511	Seminar in Management	3
MSM-512	Quantitative Tools for Research	3
MSM-513	Seminar in Finance	3
MSM-514	Seminar in Marketing	3



Finance		
FIN-601	Advanced Corporate Finance	3+0
FIN-602	Advanced Financial Economics	3+0
FIN-603	Advanced Credit Management	3+0
FIN-604	Advanced Taxation Management	3+0
FIN-605	Advanced Practice & Laws of Banking	3+0
FIN-606	Advanced Consumer Banking	3+0
FIN-607	Advanced Seminar in Finance	3+0
FIN-608	Advanced Risk Management	3+0
FIN-609	Advanced Auditing	3+0
FIN-610	Advanced Performance Management	3+0
FIN-611	Advanced Credit Analysis & Investment Banking	3+0
FIN-612	Advanced Investment & Portfolio Management	3+0
FIN-613	Advanced Public Finance	3+0
FIN-614	Advanced Treasury & Funds Management	3+0
FIN-615	Advanced Green Finance	3+0
FIN-616	Advanced Managerial Finance	3+0
FIN-617	Advanced International Financial Management	3+0
FIN-618	Advanced Corporate Governance	3+0
FIN-619	Advanced Financial Statement Analysis	3+0
FIN-620	Advanced Issue in FinTech	3+0
Marketing		
MKT-601	Advanced Sales Management	3+0
MKT-602	Advanced Retail Marketing	3+0
MKT-603	Advanced Cyber Marketing	3+0
MKT-604	Advanced Brand Management	3+0
MKT-605	Advanced Marketing Research	3+0
MKT-606	Advanced Export Marketing	3+0
MKT-607	Advanced Agriculture Marketing	3+0
MKT-608	Advanced Seminar In Marketing	3+0
MKT-609	Advanced Tourism Marketing	3+0
MKT-610	Advanced Services Marketing	3+0
MKT-611	Advanced International Marketing	3+0
MKT-612	Advanced Advertising Management	3+0
MKT-613	Advanced Trade Marketing	3+0
MKT-614	Advanced Marketing of Financial Product	3+0
MKT-615	Advanced Distribution Channels	3+0
MKT-616	Advanced Digital Marketing	3+0
MKT-617	Advanced Marketing Analytics	3+0
Human Resource Management		
HRM-601	Advanced Labor Laws in Pakistan	3+0
HRM-602	Advanced Employee Performance Management	3+0
HRM-603	Advanced International HRM	3+0
HRM-604	Advanced HR Development	3+0
HRM-605	Advanced Cases and Exercise in Personnel/HRM	3+0
HRM-606	Advanced Organisational Development	3+0
HRM-607	Advanced Essential of Training & Development	3+0
HRM-608	Advanced Industrial Relations	3+0
HRM-609	Advanced Reward Management	3+0

## FEE STRUCTURE

Admission (Once at the time of admission)	Rs. 15,000/-
Security Deposit (Refundable)	Rs. 5,000/-
Student Activity	Rs. 2,000/-
Semester Fees (Per Semester)	Rs. 8,000/-
Tuition Fee (3 Courses)	Rs. 39,000/-
Examination Fee (for three courses)	Rs. 6,000/-
<b>Total</b>	<b>Rs. 75,000/-</b>

## LOCATIONS

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600  
4B, Shahrah-e-Ghalib, Block-6, Scheme 5, Clifton, Karachi.

## CONTACT INFORMATION

+92 (213) 664-4153, +92 (213) 668-4406



## PhD MANAGEMENT SCIENCES

### INTRODUCTION

PhD programme enables graduates to develop advanced skills in designing and conducting research. Such skills are highly applicable to various careers in academia, business, government and non-profit organizations. A doctoral degree programme in management sciences imparts several skills that can be applied as part of an independent researcher, corporate manager, independently as a consultant, or even working in the public policy field. There is an increasing emphasis in Pakistan to improve management sciences education to manage businesses in finance, Human Resources Management, Marketing, Technology Management and related domains. Although many universities offer PhD in Management Sciences but Ziauddin University has the competitive advantage of having a strong foundation of health and engineering disciplines for interdisciplinary topics that can support and facilitate a broad range of specializations pertaining to management sciences.

### ADMISSION/ELIGIBILITY CRITERIA

(Ziauddin University, Postgraduate Policy, Section 25.2, Page no. 14. Policy is also given below)

PhD programme Admission

i. At least 18 years of education in the relevant discipline, Minimum CGPA 3.0/4.00 or 60% marks from HEC recognized institute (preferably the undergraduate and postgraduate degrees should be HEC attested or having HEC Equivalence certificate in case of foreign university education).

ii. Passed

(a) Graduate Record Examination (GRE) subject test with 60% or equivalent administered by Education Testing service, or

(b) A Graduate Admission Test (GAT) with 60% marks administered by HEC authorized Testing Council, or

(c) As per HEC guidelines, an equivalent test developed by the university or by another university for admissions to graduate programmes with 70% marks.

iii. An interview with faculty/Departmental Admission committee (that should be notified through Registrar office).

25.3 In case of any other scale of marking in

pre-requisite transcript /degree for MS / M Phil / PhD programmes, HEC conversion formula should be consumed to determine the equivalent CGPA. 25.4 If more than one marking scales are mentioned on pre-requisite degree / transcript for MS / MPhil / PhD programmes, CGPA will be considered for admission eligibility of candidate in the specific programme.

### MISSION

- To produce competent PhD scholars in multiple disciplines of management.
- To serve the nation by promoting critical thinking about concepts and ideas that are central to the well-being of all
- To arrive at claims based on reasoning and to develop ideas that are relevant to the Academia, Industry and Policy making institutions and society at the large.

### PROGRAMME EDUCATIONAL OUTCOMES:

**PEO1:** To produce graduates for responsible and impactful research.

**PEO2:** To produce graduates up-to-date Knowledge through research to meet local and global needs of the academia, industry and policy making institutions and society.

**PEO3:** To produce graduates with scientific, critical, innovative thinking, and practical skills that will help generate novel ideas and solutions for basic & applied real-world management problems

**PEO4:** To produce graduates with proficiencies in the quantitative and qualitative problem-solving skills

### PROGRAMME LEARNING OUTCOMES:

**PLO1:** Demonstrate an in-depth knowledge of business and management sciences research. (PEO 1, PEO2, PEO 3).

**PLO2:** Ability to systematically review, analyse, and interpret the scientific literature and innovations in the areas of management sciences. (PEO1, PEO 2, PEO 3, PEO4)

**PLO3:** Ability to conduct high-quality basic & applied research and effectively disseminate the research outputs in international research journals of repute, conferences, seminars, patents, research proposals, and other scientific

venues. (PEO1, PEO 2, PEO 3, PEO4)

**PLO4:** Contribute to original research to broaden the boundary of knowledge through dissertations. (PEO2, PEO 3, PEO4)

### CAREER PROSPECTS

PhD (MS) graduates can join academia as well as government and private organizations.

### FACILITIES/RESOURCES

Computer Lab and Library facilities are available.

### SCHEME OF THE STUDY

Semester	Code	Title	Cr. Hrs
Semester 1	RES-710	Advanced Research Methodology	3+0
	RES-711	Advanced Quantitative Research	3+0
	RES-712/ECO-710	Advanced Qualitative Research or Advanced Econometrics for Finance	3+0
Semester 2		Elective I	3+0
	IRS-720	Independent Research Study I	3+0
	IRS-721	Independent Research Study II	3+0
<b>Total</b>			<b>18</b>

PhD Dissertation 30 Credit Hours

Semester	Code	Title	Pre-Req	Cr. hrs
Semester 3	PRD810	Research Proposal		6+0
Semester 4	PRD811	PhD Dissertation I	PRD810	6+0
Semester 5	PRD822	PhD Dissertation II	PRD811	6+0
Semester 6	PRD823	PhD Dissertation III	PRD822	12+0
<b>Credit Hours</b>				<b>30</b>
<b>Total Credit Hours (Course Work + Dissertation) (18+30)</b>				<b>48</b>



## LIST OF ELECTIVES

Sr. #	Code	Title	Cr. Hrs
1	MAN-730	Philosophies of Leadership	3+0
2	MAN-731	Advance International Business Management	3+0
3	MAN-732	Classical and Contemporary Management	3+0
4	MAN-733	Advance Leadership and Change Management	3+0
5	MAN-734	Crisis Management	3+0
6	MAN-735	Seminar on Contemporary Business and Management Issues	3+0
7	MAN-736	Leadership: Theoretical and Practical Perspective	3+0
8	MAN-737	Seminars on Leadership/Management	3+0
9	HRM-730	Strategic Organizational Development	3+0
10	HRM-731	Advance International Human Resource Management	3+0
11	HRM-732	Seminar on Organizational Environment	3+0
12	HRM-733	Competitive Human Resource Strategies in Developing Countries	3+0
13	ENT-730	Advance Entrepreneurship	3+0
14	FIN-730	Advance International Financial Management	3+0
15	FIN-731	Econometric Issues	3+0
16	FIN-732	Dynamic Asset Pricing Theory	3+0
17	FIN-733	Advanced Behavioral Finance	3+0
18	FIN-734	Corporate Governance	3+0
19	FIN-735	Advanced Issues in Fintech	3+0
20	FIN-736	Advanced Islamic Banking & Finance	3+0
21	FIN-737	Advanced Corporate Finance	3+0
22	FIN-738	Seminar on Global Financial Market	3+0
23	MKT-730	Cross Cultural Consumer Research	3+0
24	MKT-731	Advance E-Marketing	3+0
25	MKT-732	Advanced Consumer Behavior	3+0
26	MKT-733	Advanced Brand Management	3+0
27	MKT-734	Advanced Distribution Channels	3+0
28	TEC-730	Statistics with Technology Applications	3+0
29	TEC-731	Technology Policy & Strategy	3+0
30	TEC-732	Principles of Technology Innovation Management	3+0
31	TEC-733	Advance Business Intelligence & Analytics	3+0
32	TEC-734	IT Project Management	3+0
33	TEC-735	Artificial Intelligence & Machine Learning	3+0
34	TEC-736	Emerging Trends in Technologies	3+0
35	TEC-737	Technopreneurship	3+0

## FEE STRUCTURE FOR NORTH

Admission Fee (Only once)	Rs. 20,000
Security Deposit (only once and refundable)	Rs. 5,000
Semester Fee (per Semester)	Rs. 5,000
Examination Fee (per course)	Rs. 2,000
Tuition Fee (Per Course)	Rs. 13,000
Comprehensive Examination Fee (Per Attempt)	Rs. 5,000
Supervision Fee (Per Semester)	Rs. 18,000
PhD Dissertation Evaluation Fee (Per Submission)	USD 600
GEC Evaluation Fees (Per Evaluation)	Rs. 8,000
Viva Voce Exams Fee (Per Attempt)	Rs. 20,000

## LOCATION

F-103, Block-B North Nazimabad Town, Karachi, Sindh 74600

## CONTACT INFORMATION

+92 (213) 664-4153, +92 (213) 668-4406



## FACULTY MEMBERS

### DEAN

ENGR. PROF. DR. FAHAD AZIM, PE  
MBA, PH.D., MSC, BE

### PROFESSORS

ENGR. PROF. DR. ABDUL AZIZ ANSARI  
PH.D. (STRUCTURAL ENGINEERING), ME  
(STRUCTURAL ENGINEERING), BS (CIVIL  
ENGINEERING)

ENGR. DR. SHEIKH MUHAMMAD MUNAF  
PRINCIPAL & PROFESSOR, COLLEGE OF  
COMPUTING AND SOFTWARE ENGINEERING  
PH.D. (ARTIFICIAL INTELLIGENCE AND  
COMPUTER VISION), MS  
(TELECOMMUNICATION), BS (ELECTRONIC  
ENG)

DR. SAAD JAWAID KHAN  
PRINCIPAL & PROFESSOR, COLLEGE OF  
ENGINEERING & TECHNOLOGY  
PH.D. (BIOMECHANICS), ME (BIOMEDICAL  
ENGINEERING), BE (BIOMEDICAL  
ENGINEERING)

### ASSOCIATE PROFESSORS

ENGR. DR. SAMIA TARIQ  
PH.D.(CIVIL ENGINEERING), MSC (BUILDING  
ENGINEERING), BSC (BUILDING &  
ARCHITECTURAL ENGINEERING)

DR. M. YOUSUF IRFAN ZIA  
PH.D. (ELECTRICAL, TELECOMMUNICATION  
ENGINEERING), MS (COMPUTER  
ENGINEERING), BS (ELECTRONIC  
ENGINEERING)

DR. SAIF ULLAH,  
PRINCIPAL & ASSOCIATE PROFESSOR,  
COLLEGE OF MANAGEMENT AND APPLIED  
SCIENCES  
PHD (FINANCE)

### ASSISTANT PROFESSORS

DR. FARIHA IBRAHIM  
PH.D. (BIOTECHNOLOGY), MS  
(MICROBIOLOGY), BS (MICROBIOLOGY)

DR. SYEDA BUSHRA ZAFAR  
PH.D. (BIOTECHNOLOGY) , M.SC.  
(BIOTECHNOLOGY), B.SC. (PHYSIOLOGY)

ENGR. MEHWISH FAIZ  
PH.D. (IN PROGRESS), ME (ELECTRONICS  
ENGINEERING), BS (BIOMEDICAL  
ENGINEERING)

DR. HIRA ZAHID  
PH.D. (IN PROGRESS), ME (ELECTRONICS  
ENGINEERING), , BS (BIOMEDICAL  
ENGINEERING)

DR. ALI ASGHAR  
PH.D. (IN PROGRESS), ME (BIOMEDICAL  
ENGINEERING), , BE (BIOMEDICAL  
ENGINEERING)

MUSHTAQUE ALI  
PH.D. IN PROGRESS, M.ARCH, MUET, B. ARCH,  
CEAD

ENGR. REHAN ADIL  
MS (CONTROLS AND AUTOMATION) , BS  
(ELECTRONIC ENGINEERING)

AR. JAMZADI LALARUKH  
M. ARCH., B. ARCH.

DR. MUHAMMAD ALI AHMAD  
PHD (MARKETING), AIRLANGA UNIVERSITY,  
INDONESIA, MS (MARKETING), BZU MULTAN

DR. MUHAMMAD AZAM  
PHD (HRM) FROM SZABIST, MS (HRM) FROM  
SZABIST

### SENIOR LECTURERS

MS. SANIA ZAFAR  
MBA (HUMAN RESOURCE), BBA (MARKETING)  
PHD(MARKETING) IN PROGRESS

ENGR. SUMAIRA ISMAIL  
ME

ENGR. ASHFAQUE AHMED  
PH.D. (ENERGY SYSTEMS ENGINEERING) , ME  
(ELECTRICAL ENGINEERING), BE (ELECTRICAL  
ENGINEERING)

### LECTURERS

ENGR. OWAIS MEMON  
ME (ELECTRICAL ENGINEERING), BE  
(ELECTRICAL ENGINEERING)

ENGR. KASHIF RAFIQUE MEMON  
MS (CONSTRUCTION MANAGEMENT), BE (CIVIL  
ENGINEERING)

ENGR. AMAD ALI  
ME (ELECTRICAL ENGINEERING) , BE  
(ELECTRICAL ENGINEERING)

ENGR. SABEEN MANZOOR  
MS (STRUCTURAL ENGINEERING), NEDUET,  
KARACHI, PAKISTAN BS (CIVIL ENGINEERING),  
NEDUET, KARACHI, PAKISTAN

DR. YASIR JAMAL  
PHD (MARKETING) FROM MAJU,  
MS(MARKETING)

NOMAN TARIQ  
PHD SCHOLAR (FINANCE), M.COM (FINANCE)

MADIHA KANWAL  
MBA(FINANCE), MA ECONOMICS

### STUDIO ARCHITECT

AZIZULLAH KHAN  
ARCHITECTURE & ENVIRONMENTAL DESIGN  
**LAB ENGINEERS**

ENGR. TAHA MUSHTAQ SHAIKH  
MBA (HEALTHCARE MANAGEMENT), BE  
(BIOMEDICAL ENGINEERING)

ENGR. MUZAMMIL NAYYAR  
MS (ELECTRICAL ENGINEERING), BS  
(ELECTRICAL ENGINEERING)

ENGR. SANA REHAN  
ME (BIOMEDICAL ENGINEERING), BE  
(BIOMEDICAL ENGINEERING)

ENGR. SHAHBAZ AHMED  
MS (CYBER SECURITY), BS (ELECTRICAL  
ENGINEERING)

ENGR. SYED HASSAN SARWAR  
MS (IN PROGRESS), BE (BIOMEDICAL  
ENGINEERING)

ENGR. SYED MUDASSIR AHMED  
BS (ELECTRICAL ENGINEERING)

ENGR. MUHAMMAD ARSALAAN  
BS (ELECTRICAL ENGINEERING)

### LAB ENGINEERS

MUHAMMAD ANUS

### NCBC (LAB)

SYEDA IQRA HASSAN



## DEPARTMENT OF CONTINUING PROFESSIONAL EDUCATION

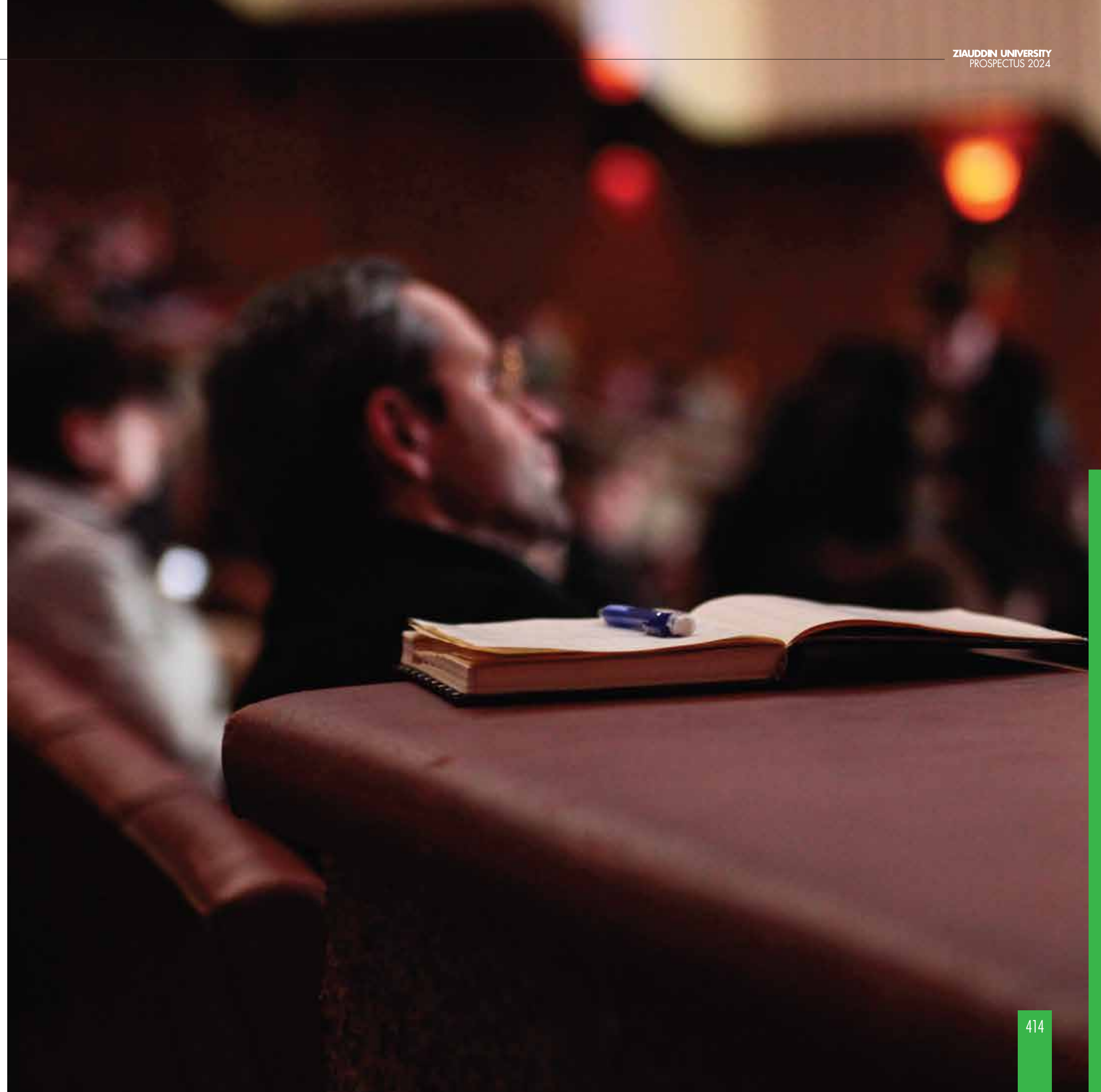
The Ziauddin University department of Continuing Professional Education is committed to serving through programmes of excellence in education, patient care, research and other public service initiatives, which advance the health of the general public. Continuing professional education provides opportunities for the healthcare professionals to continue learning, utilising adult learning principles and available technology.

Major responsibilities of the Programme are:

- To identify the educational needs and interests of professionals.
- To provide learning opportunities for new knowledge and skills.
- To partner with other healthcare facilities and educational institutions to promote public health.
- To strive to heighten the health professional's awareness of the need for compassion in patient care and the dignity of human life.

The DCPE provides assistance in planning, developing and providing activities to physicians, nurses and other allied health care personnel in ZU. The courses would be offered to healthcare providers at the local, national and regional levels in full compliance with University policies.

To maximise learning opportunities, a wide range of activities are offered which include, formal courses, seminars, workshops, video conferences/distance learning, journal clubs, grand rounds and teaching conferences, and innovative technologies such as web-based learning activities for personal skill development in medical procedures and teaching competence. All activities are conducted in compliance with the essentials of the PMDC and Accreditation Council for Continuing Medical Education and the rules and regulations of the Ziauddin University.



## THE DIRECTORATE OF EDUCATIONAL DEVELOPMENT (DED)

The Directorate of Educational Development (DED) is committed to elevating the quality of academic activities across all Higher Education Professions at ZU. With a vision to achieve both national and international recognition through innovation, leadership, and research, DED's scope of work includes:

**Curriculum Review:** Provide suggestions to faculty about their undergraduate and post-graduate curricula, ensuring they are aligned with adult learning principles.

**Faculty Capacity Building:** Empowering faculty across all disciplines of ZU—including the Faculty of Health Sciences (FHS), Faculty of Allied Health Sciences (FAHS), Faculty of Pharmacy (FOP), Faculty of Nursing & Midwifery (FONAM), Faculty of Eastern Medicine and Natural Sciences (FEMNS), Faculty of Law, Politics & Governance (FOLPG), Faculty of Engineering, Science, Technology & Management (FESTM), and, Faculty of Liberal Arts & Human Sciences (FLAHS)—with the latest and innovative, student-centred teaching, learning, and assessment techniques.

**Interdisciplinary Collaboration:** Consulting with various faculties and disciplines to address educational challenges, thereby enhancing student learning outcomes.

These DED efforts are part of its academic contributions carried out in close collaboration with Deans, Principals, Associate Deans, Department Chairs, Programme Directors, and curriculum and assessment committees.

Our primary focus is on educational methodologies fostering a student-centred learning environment that delivers high-quality education.

To further support faculty development, DED is running a Certificate Course in Health Professions Education (CHPE) programme and has launched a Master of Health Professions Education (MHPE) programme this year. These initiatives aim to equip educators with the skills needed to excel in their teaching roles.

To align with global standards, DED has integrated crucial themes such as Patient Safety and Medical Ethics into the medical, dental, nursing, and physical rehabilitation curricula. Additionally, to maintain programme quality and identify areas for improvement, DED has conducted a comprehensive self-assessment institutional survey of undergraduate medical and dental programmes, adopting the basic and quality standards set by the World Federation of Medical Education (WFME).

Faculty development remains a cornerstone of DED's mission. Through regular inter-professional workshops and faculty development courses offered on multiple platforms, we aim to enhance the teaching skills of higher education teachers across all faculties at ZU. These programmes are designed to help faculty apply advanced teaching methods that enrich the student learning experience in a supportive educational environment.





## DEPARTMENT OF RESEARCH

### VISION

To be recognised as the icon of innovative, cutting-edge basic applied and translational research.

### MISSION

Advancing research as an umbrella for developing the University's reputation as the most renowned private sector academic research-based institution. Cutting-edge clinical and translational research—bringing medical innovation to patient care and industry. Promotion of independent research projects in all fields of degree-based programs with a drive for lifelong learning through creativity, innovative research and commercialization.

### INTRODUCTION

Research excellence in all fields of study is central to the mission of Ziauddin University and a pinnacle priority, as the key element to the success of the University's academic profile. Education at ZU would not be complete without its vital research community for promotion of Research at undergraduate and Postgraduate level. The Health Sciences Research Program encompasses several faculties and departments across ZU campuses that contribute to a rich atmosphere. A wide range of research and clinical facilities for student learning and innovation are present on different campuses with extensive interaction between the basic science and clinical faculty. The Faculty of Health Sciences including the Colleges of Medicine, Dentistry, Public Health and Molecular Medicine offer unparalleled opportunities for interdisciplinary cooperation in health sciences education and research. The expertise of many Health Sciences faculty covers a broad spectrum of disciplines that includes both basic science wet-lab research and clinical research in human health and disease, with a provision of several tertiary care hospitals and clinics. All are in the continued pursuit of ever-greater accomplishments in research through our commitment to innova-

tion, excellence, and quality. We share new knowledge for educating and inspiring tomorrow's leaders as university education is all about the generation of new knowledge through research.

### ACADEMIC SUPPORT:

- Undergraduates at FHS are trained in laboratories and supported for Capstone projects.
- Post graduate students of MS, MDS, M.Phil., Ph.D. and faculty research projects at Ziauddin University are facilitated from inception till report writing.
- Research Committees at ZU: Guidance and Examination Committee (GEC/RC)  
Ethical Research Committee (ERC)  
Clinical Research Committee (CRC)

### MULTIDISCIPLINARY RESEARCH LABORATORIES (MDRL)

The Department of Research maintains active research laboratories as commercial facilities that are exploring existing questions, spanning from the most basic to the most Translational aspects of Health Sciences research. The state-of-the-art research and diagnostic facility (MDRL 1, 2 and 3) is available at Ziauddin University with the provision of advanced instrumentation and provision of following facilities:

- Molecular Biology Unit
- Cell Culture Facility
- Tissue Processing and Sectioning Facility
- Imaging Facility with High-Resolution Microscopy
- Immunohistochemistry and Immunocytochemistry Facility
- Power Lab
- Proteomics Lab
- Microbial Genomics Lab
- Animal House Facility



#### MDRL-1

- Molecular Biology
- Cell Culture

#### MDRL-2

- Cell Biology & Histology
- Microbial Genomics
- Bioinformatics
- Proteomics

#### MDRL-3

- Diagnostic Molecular Genetics Lab

#### MDRL-4

- Animal House

#### CELL CULTURE FACILITY

Equipment Available

- Class II Biohazard Safety Cabinet
- Live Cell Imaging Microscope
- Automated Cell Counter
- Centrifuge Machine
- CO2 Incubator
- Water Bath
- Fridge
- Liquid Nitrogen Tank
- Consumables

#### Molecular Biology Lab

Equipment Available

- Real Time PCR
- Thermal Cyclers
- Gel Electrophoresis Unit
- Gel Documentation System
- Refrigerated Centrifuge
- Analytical Balance
- Fridge
- -80°C Freezer
- Vortex machine
- pH meter
- Multiscan sky Spectrophotometer

#### Cell Biology & Histology Lab

Equipment Available

- Nikon Ts2R-FL Inverted Microscope
- Dissecting Microscope
- Compound microscopes
- Fume hood
- Hot air oven
- Cold plate
- Hot plate
- Water bath
- Microtome

#### Frozen Section Lab

Equipment Available

- Nikon ECLIPs Ei Microscope
- Cryostat Machine
- Computer

#### Bioinformatics & Computational Biology Lab

Equipment Available

- Amber20
- Autodockvira
- Chimera116
- Cuda1143
- Growmacs20214
- MGLTools157
- NAMD20211211
- openmpi412

#### Microbial Genomics Lab

Equipment Available

- Class II Biohazard Safety Cabinet
- Thermal Shaking Incubator
- Microscope
- Cold storage facility

#### CORE FACILITY SERVICES

Ziauddin University is offering core lab services at an affordable cost to the researchers. This includes RNA isolation, DNA isolation, cDNA synthesis, Gene expression, Gene polymorphism studies, Reverse Transcription, Primer Designing, PCR, RFLP, Gel Electrophoresis, Gel Imaging, Nucleic Acid Sequence Analysis, ELISA, HPLC, Routine and Specialized Histological Techniques along with high-resolution microscopy and advanced imaging technology. Core personnel continue to stay abreast of technological advances. It is encouraged to contact research scientists to arrange for a consultation or to provide feedback. Faculty is available to develop projects of all caliber, standard or custom assay design, and any other specialized application needs

#### SERVICES LAB

1. Haematology lab
2. Cytopathology & Histopathology lab
3. Clinical Microbiology Lab
4. Molecular Genetics Lab
5. Chemical Pathology Lab

#### INTERNSHIP PROGRAM

To promote science and technology capacity building, Ziauddin University as its intellectual and corporate social responsibility proudly runs the internship program for the indigenous and external students. This program is targeted at students intending to pursue a career in research or higher learning by imparting knowledge and skills to inculcate analytical skills, critical thinking, wisdom and confidence in them. Our highly skilled faculty is engaged in training of scholars in the emerging fields of molecular medicine and genetics, molecular oncology, cell biology and histology, diabetology, proteomics, stem cell culture, bioinformatics and microbial genomics. It is meant to provide scholars the best opportunity to develop skills that promote their success during their graduate and post-graduate training and development of tools for conducting independent research in biomedical sciences.

#### WORKSHOPS/SEMINARS ORGANIZED IN 2023-24

The Department of Research is routinely organizing workshops to promote the professional development of the faculty and student with capacity building in research, enhanced productivity and improved university ranking.

- Fundamentals of Molecular Biology
- Research Methodology
- Molecular Biology Techniques
- Fundamentals of Cell Culture Techniques
- Advanced Histological Techniques
- Care & Use of Small Lab Animals
- Feasibility for ELISA

#### INTERNATIONAL AND NATIONAL COLLABORATIONS

The Research Department's overarching aim in supporting international research collaboration is to maximize ZU's contribution to and benefits from international and national research collaborations and partnerships.

- Institute for Molecular and Cellular Regulation, Gunma University (IMCR), Japan.
- International Medical University, Kuala Lumpur, Malaysia
- Al-Faisal University Riyadh, Kingdom of Saudi Arabia
- Chapman University School of Pharmacy, USA.
- University of Ottawa, Canada.
- Suny Upstate Medical Centre, Syracuse, New York, USA
- State University of New York at Stony Brook.
- Nassau University Medical Centre, USA.
- University of Wisconsin School of Medicine and Public Health Milwaukee, WI 53215, USA.
- Department of Oncology and Metabolism, Sheffield University, United Kingdom.
- Dr. Panjwani Centre for Molecular Medicine and Drug Research (PCMD), ICCBS, UoK, Pakistan.
- HEJ Research Institute of Chemistry, ICCBS, UoK, Pakistan.
- Center for Bioequivalence Studies and Clinical Research (CBSCR), ICCBS, UoK, Pakistan.
- National Center for Proteomics, UoK, Pakistan.
- Jamil-ur-Rehman Center for Genome Research, ICCBS, UoK, Pakistan



- Dow University of Health Sciences (DUHS)
- Agha Khan University

#### THE PAKISTAN JOURNAL OF MEDICINE AND DENTISTRY (PJMD)

It is an open-access, peer-reviewed, and quarterly scientific publication launched in 2012, with a scope that covers all areas of Biomedicine and Dentistry. It is indexed in HEC, PMDC, DOAJ, Dimensions, CrossRef, COPE, ICMJE, IMEMR, and PASTIC. It is certified under the International License Creative Commons Attribution-Noncommercial-No Derivatives 4.0. PJMD has successfully published 13 volumes and 48 issues up to 2024. We have applied for indexing in Web of Science (Clarivate), which is currently in progress. The journal has a reputation for originality and quality, with a fair and transparent review process dedicated to the swift publication of original research work.

#### PH.D. RESEARCH FACULTY (FHS)

Faculty of Health Sciences has a rich Ph.D. faculty to promote research for undergraduate as well as postgraduate students of the constituent Colleges along with the contribution in the faculty development research projects.

Some of the Ph.D. faculty members names are

highlighted below:

- Prof. Dr. Pirzada Qasim Raza Siddiqui
- Prof. Dr. Talat Mirza
- Prof. Dr. Shamim Mushtaq
- Prof. Dr. Qudsia Hassan
- Prof. Dr. Zahida Memon
- Prof. Dr. Saeeda Baig
- Prof. Dr. Qamar Jamal
- Prof. Dr. Bushra Wasim
- Prof. Dr. Arif Hussain
- Prof. Dr. Talat Yasmeen
- Prof. Dr. Fouzia Shaikh
- Prof. Dr. Imran Moheet
- Prof. Dr. Faisal Afridi
- Prof. Dr. Sofia Amjad
- Dr. Shah Kamal
- Dr. Shumaila Usman
- Dr. Ambrina Khatoon
- Dr. Abdul Hameed
- Dr. Rehan Imad
- Dr. Aisha Ishaque
- Dr. Nuzhat Akram
- Dr. Tahmeena Tabish

## FACULTY & STAFF MEMBERS

#### Prof. Dr. Talat Mirza

Meritorious Professor  
Executive Director Research-FHS

#### Dr. Shumaila Usman

Head of Research Stream- Stem Cell and Regenerative Medicine  
Associate Professor

#### Dr. Ambrina Khatoon

Head of Research Stream – Genomic Sciences  
Associate Professor

#### Dr. Abdul Hameed

Head of Research Stream - Molecular Endocrinology and Metabolic Disorders  
Associate Professor

#### Dr. Rehan Imad

Head of Research Stream - Medical Sciences and Molecular Pathology  
Assistant Professor

#### Dr. Aisha Ishaque

Assistant Professor

#### Mr. Moazzam Ali Shahid

Senior Research Officer

#### Ms. Saba Farooq

Manager Research

#### Ms. Fariha Anum

Biostatistician

#### Ms. Majida Shabbir

Managing Editor (PJMD)

#### Ms. Tayyaba Rasool

Assistant Editor (PJMD)

#### Mr. Muhammad Tayyab

Lab Technician (MDRL 01)

#### Mr. Aamir Khalil

Lab Technician (MDRL 02)

## QUALITY ENHANCEMENT CELL

Ziauddin University has consistently led the way in embracing and implementing exemplary educational practices. The Quality Enhancement Cell (QEC) of Ziauddin University is firmly committed to ensure that all constituent colleges maintain the highest academic standards prescribed by accrediting bodies. Moreover, they are dedicated to continually enhancing the learning experiences of students.

The mission of the QEC at Ziauddin University is to propel the advancement of learning community by guaranteeing a perpetual enhancement in the quality of academic programmes. This is achieved through rigorous accountability, meticulous policy review, systematic documentation, and comprehensive curriculum analysis. The ultimate goal is to identify and promote the adoption of best practices in the field of education.

At Ziauddin University, quality assurance is deeply ingrained in the principles of continuous improvement and actively involves all stakeholders. The QEC has cultivated a culture that recognizes the paramount importance of quality and quality assurance in the approval, monitoring, and periodic review of academic programmes. The evaluation of academic programmes follows the HEC guidelines for self-assessment, ensuring thorough and standardized assessments. To ensure a proactive approach, an explicit follow-up procedure is in place to assess the actions taken by each programme subsequent to the self-assessment process. Furthermore, the university conducts internal audits of academic and administrative departments to ensure compliance with the rigorous Quality Assurance Framework established by accrediting bodies.

The QEC takes the lead in spearheading the Institutional Performance Evaluation of Ziauddin University by the HEC. They bear the responsibility of meeting the HEC's stringent quality assurance requirements and providing the necessary data.

To remain at the forefront of advancements in the higher education sector and ensure continuous quality improvement, the dedicated staff of the QEC actively participates in national events organized by the HEC and other esteemed higher educational institutions in Pakistan. By

engaging with a wider education community, the QEC fosters an environment of collaboration and learning, thus contributing to the growth and development of the higher education landscape in Pakistan.

### Accreditations

The Quality Enhancement Cell (QEC) at Ziauddin University plays a pivotal role in ensuring that all programmes offered by the university receive accreditation from the respective professional councils. This accreditation process is crucial as it not only certifies the quality of education but also enables students to obtain recognized degrees and licences to practice in their chosen fields.

Accreditation by the relevant professional councils serves as a validation of the university's commitment to maintaining high academic standards and providing students with a quality education that aligns with industry requirements. It also ensures that the degrees awarded by Ziauddin University hold weight and recognition within their respective industries and professions.

### Student Feedbacks

Ziauddin University places a significant emphasis on the voices of its students, recognizing their invaluable role in shaping the quality of programmes. Quality Enhancement Cell facilitates student to record their feedback. For this, a comprehensive Campus Management System has been implemented that allows students to provide feedback and suggestions online.

The Campus Management System serves as a vital platform for conducting various assessments, including online student course evaluations, teacher evaluation surveys, and faculty course review reports. Through these surveys and evaluations, students have the opportunity to express their thoughts and opinions about their educational experiences. The feedback gathered is meticulously analyzed, and improvements are promptly initiated based on the valuable insights provided by the students.

In addition to real-time feedback mechanisms, Ziauddin University also values the perspectives of its graduates, alumni, and employers.

Graduating students are encouraged to participate in surveys that assess the effectiveness of the programmes they have completed. Alumni surveys help in understanding the long-term impact of the university's education on their careers and personal growth. Employer surveys provide valuable insights into job readiness and skills of our graduates in the professional world.

The integration of these feedback mechanisms into educational processes of ZU demonstrates our commitment to continuous improvement. At Ziauddin University, the student voice is not only heard but actively used to shape the future of our programs, ensuring that we provide the highest quality education that meets the needs of our students and the demands of the job market.

### Pakistan Qualification Register

The QEC offers invaluable services to Ziauddin University graduates by coordinating and managing the comprehensive data entry of all degree programmes into the esteemed Pakistan Qualification Register (PQR). The PQR, an online service provided by the HEC, guarantees the quality and international recognition of degrees/qualifications. It also facilitates seamless credit transfers, offers online degree attestation, and opens doors to national and international scholarships.

### International Rankings

The Quality Enhancement Cell (QEC) of Ziauddin University plays a pivotal role in the University's pursuit of international recognition through various International Rankings. ZU

actively engages in various international rankings. These rankings have emerged as important benchmarks, setting standards for institutional practices and reflecting institutional performance on a global scale.

Through the dedicated efforts of its Quality Enhancement Cell (QEC), Ziauddin University has achieved notable recognition in prestigious international rankings, including the Times Impact Ranking, Green Metrics, and QS International Ranking. In the UI Green Metric International Ranking, Ziauddin University secured a 297th position as one of the world's most sustainable university. In QS Ranking ZU secured 143rd position in Southern Asia.

The QEC diligently gathers and provides the necessary data and information to the respective ranking organizations. Ensuring that Ziauddin University's achievement and contributions are accurately reflected. This includes quantitative data such as ranking positions, scores, and year-to-year improvements. By participating in these rankings, Ziauddin University aims to showcase its commitment to sustainability, societal impact, and academic excellence.

In essence, Ziauddin University's unwavering dedication to excellence in higher education is exemplified through the tireless efforts of its Quality Enhancement Cell. This commitment to quality assurance and continuous improvement positions the university as a beacon of academic excellence in Pakistan and beyond.



## INTERNATIONAL RANKINGS



- Ranked 501-550 in Asia
- Ranked 143 in Southern Asia
- Ranked 29th in Pakistan.
- Ranked 7th in Sindh.
- Ranked 3rd Private Sector Universities in Karachi.

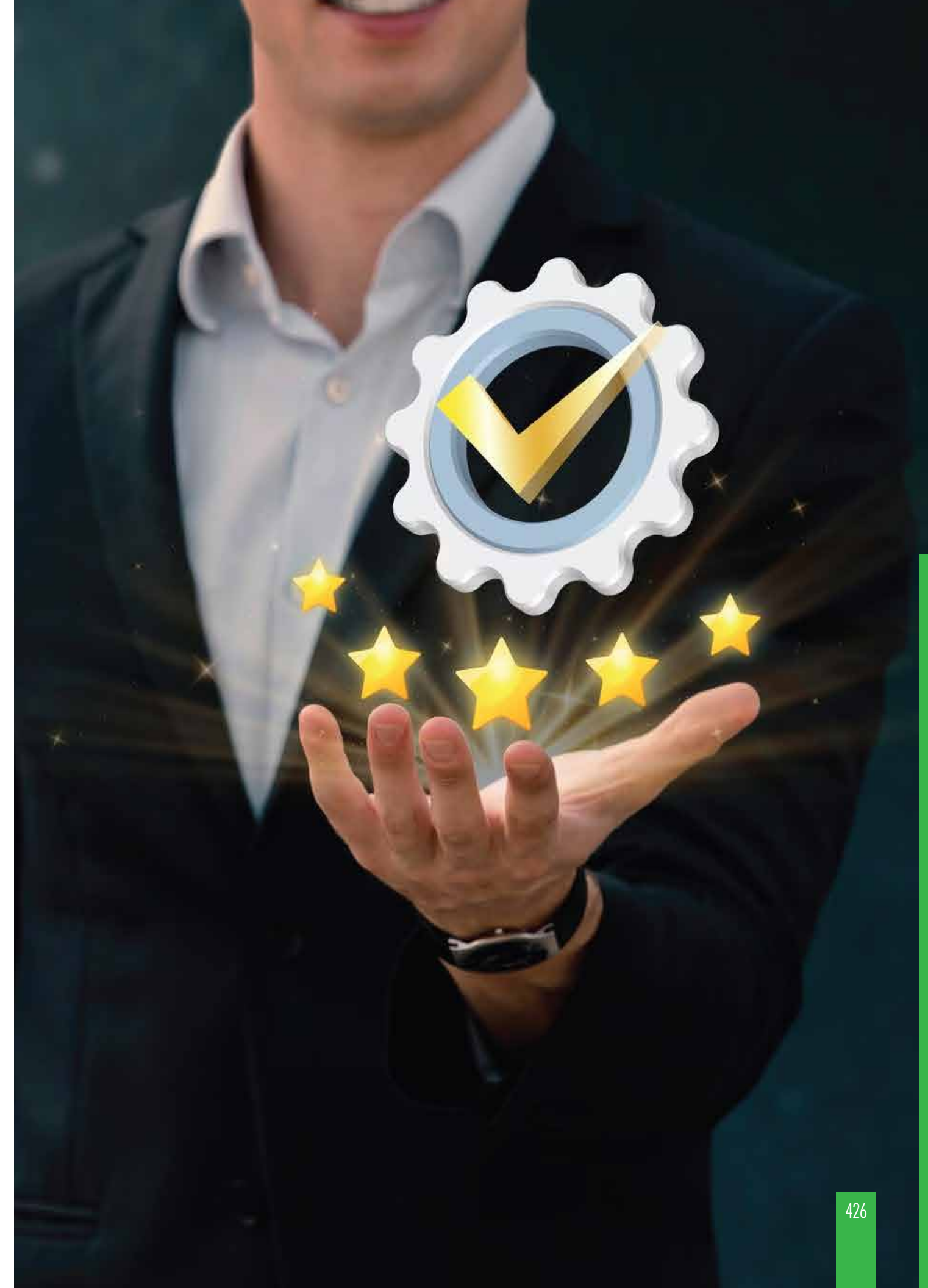
QS Asia University Rankings | 2024



- Top 4th in Sindh with other Private Sector Universities.
- Ranked 201-300 in the World in SDG-3 Good Health & Well-being and SDG 5 Gender Equality.
- Top 4th in Sindh with other Private Sector Universities in SDG 4 Quality Education and SDG 17 Partnership for the Goals.



- Ranked 297th Most Sustainable University in the World
- Ranked 154th Most Sustainable University in the Asia.
- Top 9th Most Sustainable University in Pakistan out of 68 Universities.
- Top 5h Private Sector Universities in Pakistan.
- Among Top 1 Private Sector University in Sindh.





## OFFICE OF RESEARCH, INNOVATION & COMMERCIALISATION

The Office of Research, Innovation and Commercialisation (ORIC) at Ziauddin University, is the centralised umbrella Directorate for research, innovation, commercialization and external collaborations. It strives to support high-quality applied research by developing linkages between Industry, Academia, Government and the Community. ORIC oversees activities related to research, publication conferences, workshops, international collaborations, industry affiliations and sustainability initiatives operational at the Ziauddin University, Karachi.

ORIC was established at the University in 2015 based on proposed guidelines of the Higher Education Commission (HEC), Islamabad for all Universities/DAIs of Pakistan, and is fully recognised and registered with HEC. The ORIC was officially notified by the HEC in October 2020. ORIC at Ziauddin University was established with an aim to provide strategic vision and operational support to the University's innovation & entrepreneurship ecosystem. From 2022 to 2023, Ziauddin University achieved remarkable milestones that solidified its standing in the academic community. The university was ranked as the 8th best in Pakistan and secured a position in the prestigious X Category. Among private universities in the country, Ziauddin ranked 2nd overall and earned the distinction of being the top private university in Sindh. Additionally, it was recognised as the best general university in Sindh, further cementing its reputation for excellence.

ORIC also aims to act as a catalyst for the transformation of knowledge towards innovation and its subsequent commercialisation leading to a positive impact on the welfare and well-being of our nation. In this regard, it provides end-to-end services for all matters about research & development and innovation.





## RESEARCH EXCELLENCE

The Office of Research Innovation and Commercialisation (ORIC) is dedicated to fostering a culture of research excellence at Ziauddin University. We actively support and empower students, academia, industry, and clinicians in their research efforts, ensuring that their work drives meaningful advancements in education, clinical practice, and societal impact.

**Research Assistance in Topic Selection:** ORIC offers expert assistance to faculty, clinicians, and students through collaborative brainstorming sessions, helping identify research topics that align with current faculty/researchers/clinicians needs. Choosing the right research topic is foundational to any research journey. This ensures our research contributes meaningfully to the advancement of knowledge and practice.

**Digital Transformation in Research:** In today's fast-paced world, ORIC is at the forefront of embracing digital transformation in research. We provide access to cutting-edge virtual platforms and tools that enable seamless collaboration on research projects, regardless of geographical location. This digital-first approach ensures efficient knowledge sharing and innovation, creating a dynamic and inclusive research environment that adapts to the needs of the modern academic community.

**Capacity Building:** ORIC is dedicated to the continuous professional development of our community, including both students and

researchers. We organise comprehensive research workshops that cover essential skills such as advanced research methodologies, data analysis, scientific writing, and lab-based techniques. These workshops support participants at every career stage, ensuring they remain at the forefront of their respective fields.

**Joint Projects and Collaborative Opportunities:** ORIC facilitates joint research projects with leading institutions both within Pakistan and internationally. These collaborations offer faculty, clinicians, and students the opportunity to engage in cutting-edge research, broaden their academic and clinical horizons, and establish global relationships that drive innovation and excellence.

**Research Grant Success:** ORIC takes pride in the achievements of our faculty and students who have successfully secured research grants. These success stories reflect the dedication and hard work of our researchers and demonstrate the long-term benefits of engaging with ORIC. By showcasing these accomplishments, we aim to inspire and motivate our academic community to pursue their research ambitions, knowing that ORIC provides the necessary support to turn ideas into funded projects.

**Research Opportunities and Funding Support:** ORIC provides faculty and students with access to open grants and research projects that align with their academic interests and clinical expertise, enabling them to contribute to significant

advancements in their fields. We offer comprehensive support in identifying and applying for research funding and grants, guiding researchers through the entire process—from grant writing to final submission. These opportunities and resources are essential for the professional growth of our community and ensure that our researchers have the financial support needed to bring their projects to life, contributing to the university's overall research output.

**Interdisciplinary Research Opportunities:** ORIC actively encourages interdisciplinary research that exceeds traditional academic boundaries, bringing together students and faculty from diverse fields to address complex challenges. By leveraging the unique perspectives of various disciplines, we aim to create innovative solutions with a far-reaching impact on society. These opportunities not only enrich the academic experience but also prepare our community to tackle real-world problems with a holistic approach.

**Development of Interdisciplinary Research Centres:** ORIC supports the establishment of interdisciplinary research centres that bring together experts from different fields to develop innova-

tive solutions to complex societal and clinical challenges. These centres are a testament to our dedication to fostering collaboration, innovation, and impactful research.

**Research Mentorship and Guidance:** ORIC provides a robust mentorship program where experienced faculty guide their peers and students through the research process. This includes insights on research design, data analysis, academic publishing, and more, providing the support necessary for successful research endeavours.

**Ethical Research Practices:** ORIC provides ongoing training and support to ensure that all research complies with ethical guidelines and regulations, fostering an environment of integrity and ethical responsibility.

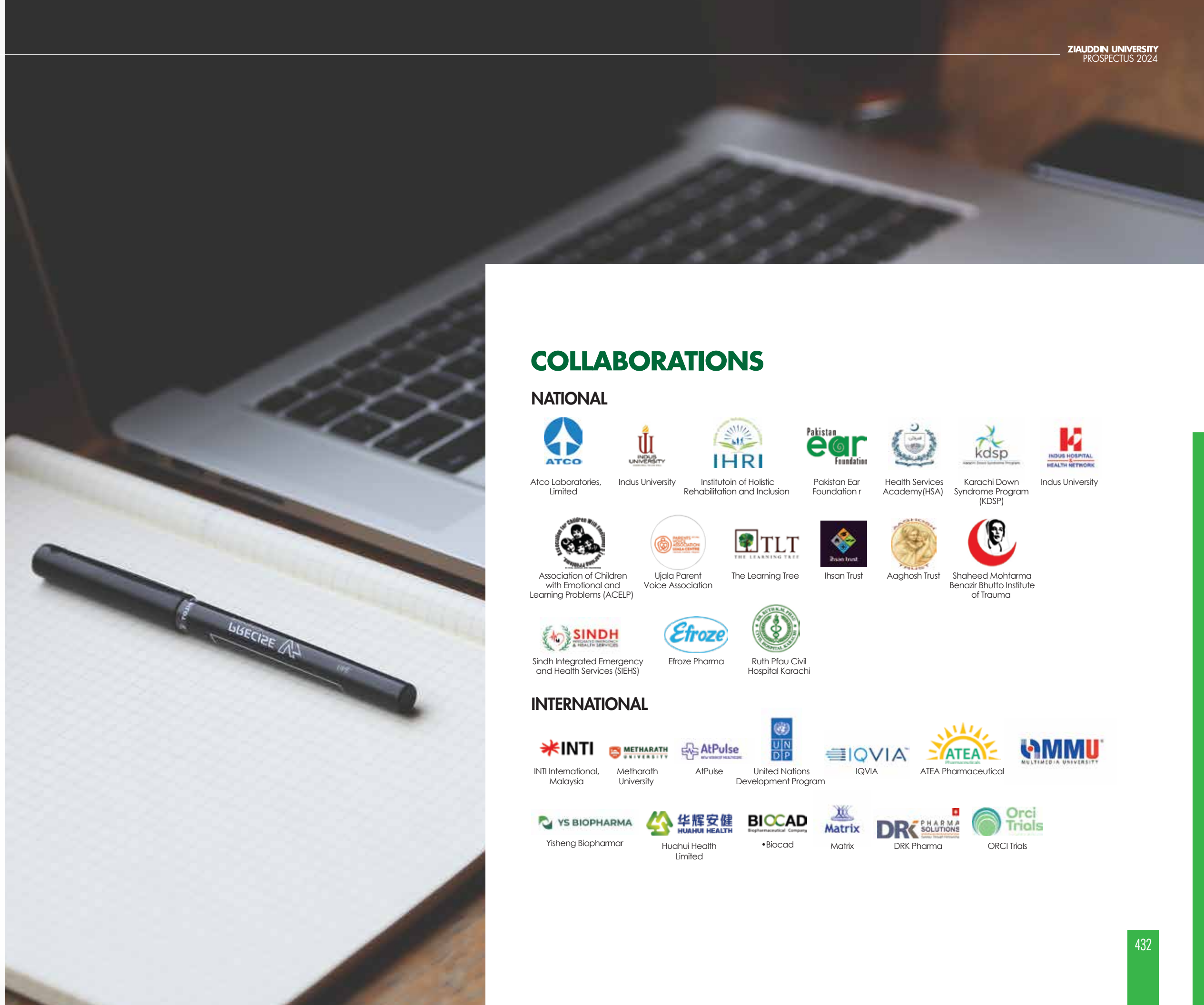
**Commitment to Research Excellence:** ORIC is at the heart of Ziauddin University's commitment to research excellence. Ziauddin University upholds the highest standards of ethics in research, and we actively promote innovative, high-quality research that contributes to the generation of new knowledge, clinical advancements, and societal impact.





## NATIONAL AND INTERNATIONAL LINKAGES

Ziauddin University is committed to forging partnerships with other universities, organizations, and corporations to further its mission of providing quality education to its students. The university has established strong relationships with leading universities and organizations around the world, including the University of Oxford, NHS, London, Monash University, Edinburgh University, and McMaster University. These partnerships allow Ziauddin University to expand its global reach and access new resources. Through these partnerships, the university can collaborate on research projects, share expertise, and access new technologies and resources. Additionally, these partnerships help Ziauddin University to attract students from abroad and provide them with a world-class education. Ziauddin University is also actively engaging in partnerships with local and international corporations. These partnerships allow the university to gain access to cutting-edge technologies and resources, and to provide students with opportunities for internships, jobs, and other career pathways. In addition to forging partnerships, Ziauddin University is actively involved in community service and other initiatives to benefit its students and the local and global community. By leveraging existing partnerships and forging new ones, Ziauddin University can make a positive impact on the world.



## COLLABORATIONS

### NATIONAL



### INTERNATIONAL

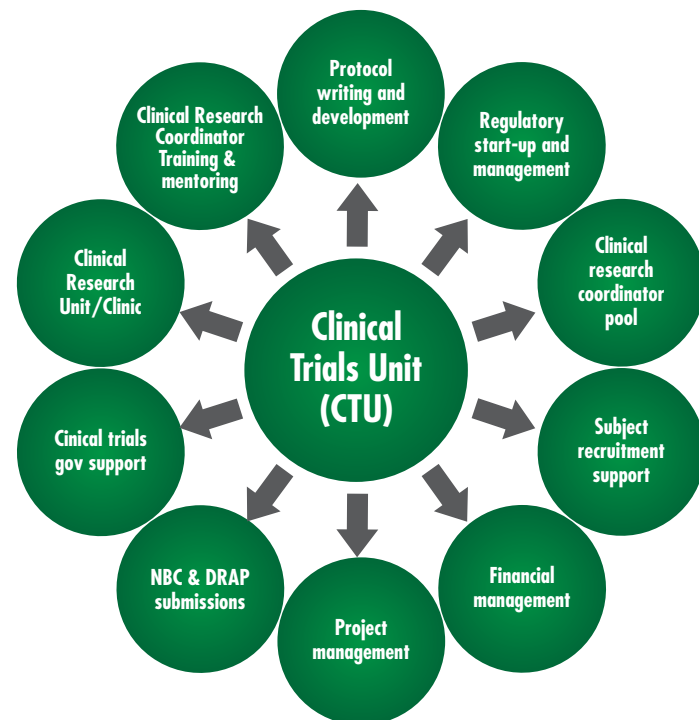




## CLINICAL TRIAL UNIT

The Ziauddin Clinical Trial Unit is dedicated to conducting high-quality clinical trials across various therapeutic areas, adhering to international regulatory standards, and collaborating with researchers, clinicians, and industry partners. It serves as a dynamic hub where healthcare professionals, researchers, and industry experts collaborate to address crucial medical challenges and drive medical advancements. Equipped with cutting-edge infrastructure, dedicated facilities, and advanced technology, the CTU provides an optimal environment for rigorous trial execution and reliable clinical data generation. Upholding ethical guidelines, regulatory compliance, and participant safety is paramount, fostering trust among participants, sponsors, and the wider medical community. Through this prospectus, the CTU invites researchers, sponsors, and industry partners to collaborate and leverage its resources, offering comprehensive services throughout the clinical trial lifecycle. With a vision to contribute to scientific discoveries, enhance patient care, and shape the future of medical research and

innovation, the Ziauddin Clinical Trial Unit aims to be at the forefront of clinical research. The Clinical Trial Unit at Ziauddin was established in 2022 and holds recognition from the Drug Regulatory Authority of Pakistan (DRAP). This recognition by DRAP highlights the unit's compliance with regulatory standards and its commitment to conducting clinical trials in accordance with national guidelines. As an officially recognized clinical trial unit, Ziauddin is well-positioned to contribute to the advancement of medical research and innovation in Pakistan. By adhering to DRAP regulations, the unit ensures that all trials conducted within its facilities follow the necessary ethical and safety guidelines, thereby maintaining the integrity of the research process and protecting the well-being of trial participants. The Clinical Trial Unit at Ziauddin aims to conduct high-quality clinical trials, develop innovative therapies, contribute to evidence-based medicine, enhance patient care, and foster a culture of research and innovation among healthcare professionals.



## ONGOING CLINICAL TRIALS

Sr. No	Trial Title	Principal Investigator	Co-Principal Investigator
1.	A Phase 3 Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of Bemnifosbuvir in High-Risk Outpatients with COVID-19	Dr. Nida Hussain	Dr. Ashok Kumar
2.	A Double-Blind, Randomized Clinical Study of the Efficacy and Safety of BCD-178 and Perjeta® as Neoadjuvant Therapy of HER2-Positive Breast Cancer	Dr. Adnan Abdul Jabbar	N/A
3.	A Phase III, Randomized, Comparator Controlled, Double-Blind, Multicenter Study to Evaluate the Immunogenicity, Safety and Lot to Lot Consistency of Three Lots of a PIKA Rabies Vaccine (Vero cell) for human use, freeze-dried in Healthy Adults using a Post Exposure Prophylaxis Schedule	Dr. Osama Rehman Khalid	Dr. Fatima Jehangir
4.	A Phase 2, Open-Label Study to Assess the Safety and Efficacy of Bemnifosbuvir (BEM) and Ruzasvir (RZR) in Subjects with Chronic Hepatitis C Virus (HCV) Infection	Dr. Zaigham Abbas	N/A
5.	A multicenter, open-label, randomized, phase III clinical trial to evaluate efficacy and safety of XXX versus imatinib at 600 or 800 mg daily in adult patients with Philadelphia chromosome positive (Ph+) chronic myeloid leukemia (CML) in the chronic phase (CP) resistant to imatinib at daily doses of 400 or 600 mg	Dr. Amna Qamar Us Zaman	Dr. Reena Kumari
6.	Evaluating the use of an FDA cleared, novel vaginal speculum for gynecologic procedures	Dr. Rubina Hussain	Dr. Fatima Jehangir



## CLINICAL STUDIES

Sr. No	Trial Title	Principal Investigator	Co-Principal Investigator
1.	Enabling ISARIC Clinical Characterization Protocol (CCP) rollout in LMICs ISARIC funded by University of Oxford/Wellcome Trust	Dr. Madiha Hashmi	N/A
2.	The Mega Randomized Registry Trial Comparing Conservative vs. Liberal Oxygenation Targets (Mega-ROX) funded by MRINZ	Dr. Madiha Hashmi	N/A
3.	Randomized Evaluation of COVID-19 Therapy ISRCTN: ISRCTN50189673 EU Clinical Trials Register: EudraCT 2020-001113-21 Clinical Trials.gov: NCT04381936 RECOVERY) funded by University of Oxford	Dr. Madiha Hashmi	N/A
4.	Medical Masks versus N95 respirators to prevent 2019 Novel Coronavirus Disease (COVID-19 N95 Vs MM) funded by McMaster University	Dr. Madiha Hashmi	N/A
5.	Randomized, Embedded, Multifactorial Adaptive Platform trial for Community Acquired Pneumonia including COVID 19 (REMAP CAP+ Pandemic) in Pakistan (REMAP-CAP) funded by Monash University	Dr. Madiha Hashmi	N/A
6.	Oxygen requirements and approaches to respiratory support in patients with COVID-19 in low-and middle-income countries (O2CoV2) funded by WHO	Dr. Madiha Hashmi	N/A
7.	Clinically-Oriented Antimicrobial Resistance Surveillance Network for Healthcare-associated (ACORN-HAI) funded by National University of Singapore / Wellcome Trust	Dr. Osama Rehman Khalid	N/A
8.	Genetics of Mortality in Critical Care (GenOMICC) funded by University of Edinburgh	Dr. Madiha Hashmi	N/A

## UNIVERSITY POLICIES

### REFUND POLICIES

Refund of fee will be according to the following rules.

#### Condition:

\*Withdraw before commencement of classes  
Refund of full tuition fee

\*Within 45 days of commencement of classes  
Refund of Half tuition fee

\*After 45 days of commencement of classes  
No refund.

### STUDENT COUNSELLING

Counselling is provided by a professional counselor and staff member. This counseling is designed to assist student in resolving personal problems that are interfering with their academic progress and success. Such problems might include difficulty in adjusting to college, family concerns and/or low self-esteem

### CODE OF CONDUCT

Student are expected to observe generally accepted standard of conduct the University reserve the right to exclude any student whose conduct is injurious to the University.

### FINANCIAL POLICY

Student seeking admissions to Ziauddin University are expected to pay the fees approved by the Governing body of the University. Admission fee is submitted only once at the time of

admission to the first year. For subsequent year, students are required to pay only the tuition fee. For local student, all fees are paid in Pakistani currency, and for overseas student all fees are paid in US dollars. Parents/guardian are advised to ensure that fee for each academic year is paid within the due date. The University reserves the right to cancel admission if the fee is not paid within the due date. Students who repeat the year due to failure or otherwise are required to pay the tuition fee for the year/s being repeated.

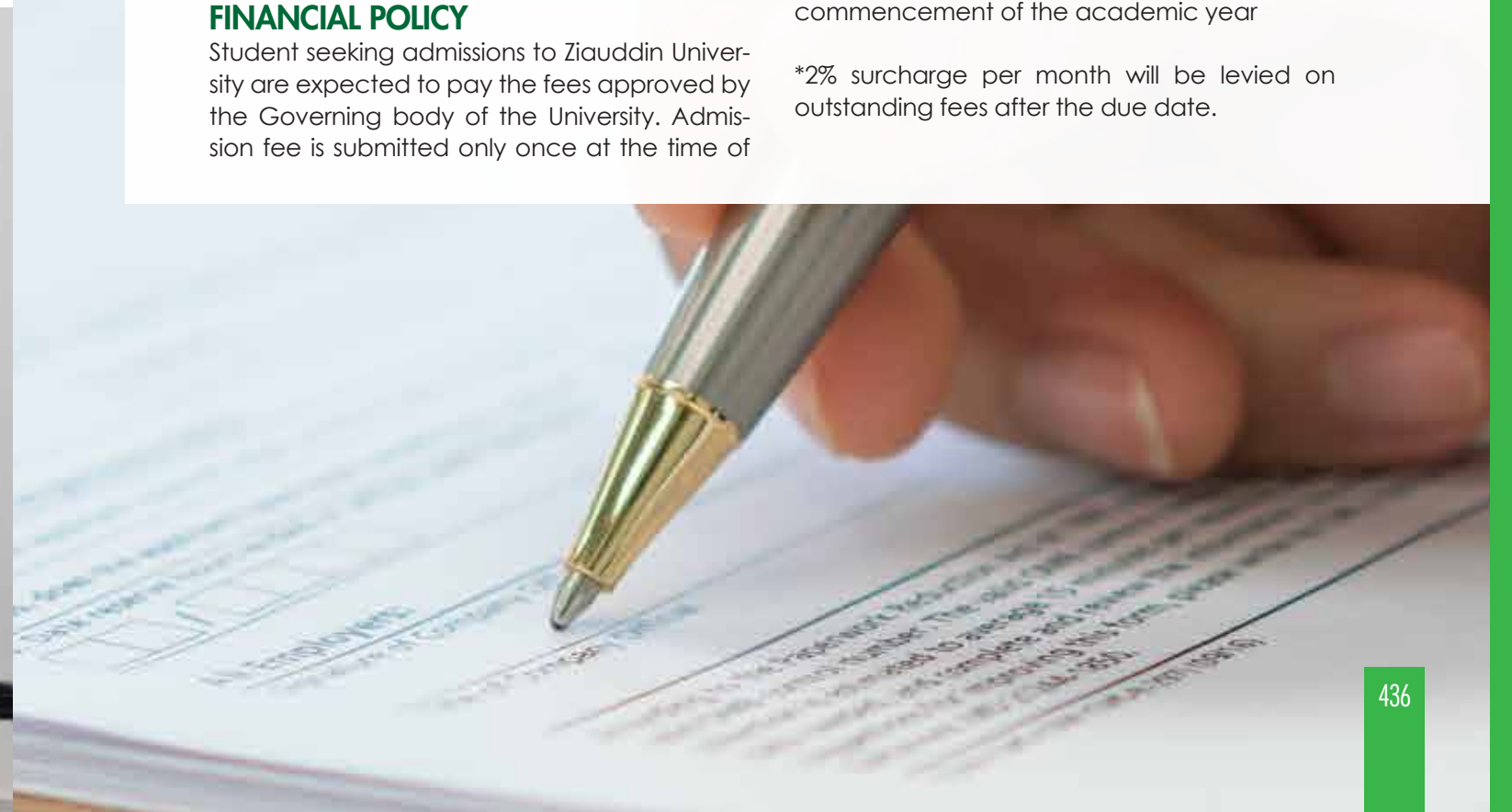
The University does not handle cash or personal cheques. Fees must be paid in the form of pay order payable to Ziauddin University. Late fee charges will be levied as per university policy after due date

### FINANCIAL AID

The University provides this facility to limited number of candidates based on merit and individual needs. Each case is treated on individual basis and decisions are made by the financial aid Committee.

\*ALL dues needs to be paid within 2 weeks of commencement of the academic year

\*2% surcharge per month will be levied on outstanding fees after the due date.





# EXTRA CURRICULAR ACTIVITIES





## DEPARTMENT OF STUDENT AFFAIRS

### INTRODUCTION

At higher education institutions, the holistic development of students encompasses not only their academic pursuits but also their mental growth and physical well-being. Recognizing this responsibility, universities establish dedicated departments known as Student Affairs to organize and manage various student activities. The Student Affairs department plays a pivotal role in planning events and workshops that are not only enjoyable but also highly beneficial for students, equipping them with the necessary skills to face challenges in the practical world.

In today's professional landscape, certain skills such as public speaking and critical thinking have become indispensable in numerous job roles. The Student Affairs department facilitates the development of these skills by encouraging students to participate in co-curricular and extracurricular activities. These activities provide a platform for students to enhance their communication abilities, hone their analytical thinking, and cultivate their overall personality.

At Ziauddin University, the Student Affairs department goes above and beyond in promoting student growth and development. A diverse range of extracurricular activities, professional workshops, and seminars are conducted to facilitate students' capacity building, grooming, and confidence building. These initiatives are specifically designed to empower students with the skills and knowledge required for their personal and professional success.

Moreover, the Student Affairs department at Ziauddin University is committed to providing a comprehensive and enriching educational experience beyond the classroom. By organizing a wide array of extracurricular activities, professional workshops, seminars, and offering career guidance, the department aims to foster well-rounded individuals who are prepared to thrive in the dynamic world outside academia.



### OBJECTIVES

Student affairs aims to support and empower student societies at Ziauddin University. This involves assisting them in organizing events that align with their constitution and objectives, providing necessary resources and guidance.

Student affairs actively seeks out and values student opinions on various matters of concern. This includes creating channels for feedback, conducting surveys, and engaging in dialogue with students to understand their perspectives.

Advising the administration Student affairs serves as a bridge between the student body and the university administration. They provide advice and recommendations to the administration on matters that impact students, ensuring that student voices are considered in decision-making processes.

Student affairs focus on establishing and maintaining strong communication and relations between students and the administration. They act as a liaison, facilitating effective dialogue, and addressing concerns or issues raised by students.

Student affairs plays a role in providing feedback and suggesting amendments to

university policies. They work towards creating a better atmosphere for students by advocating for policies that promote student well-being, academic success, and overall satisfaction.

Student affairs is responsible for assisting students with their queries, problems, and concerns. They provide guidance, resources, and support to help students navigate academic, personal, or administrative challenges.

Student affairs promotes and ensures accountability within the student societies. They establish guidelines and expectations for society's activities, monitor their functioning, and take appropriate action, if any issues arise.

Student affairs arranges frequent extracurricular activities for students. These activities enhance the overall student experience, promote engagement, and provide opportunities for personal growth, skill development, and social interaction outside the academic setting.

Overall, the objectives of student affairs at Ziauddin University revolves around supporting students, advocating for their interests, facilitating their engagement and growth, and fostering a positive and enriching university experience.



## STUDENT LIFE

### INTRODUCTION

The Department of Student Life at Ziauddin University holds the responsibility of ensuring peaceful and productive daily interactions among all students. They are entrusted with various tasks that contribute to creating a conducive learning and living environment for students.

One of their key roles is the establishment and administration of student councils. These councils serve as representative bodies that voice the concerns and interests of students. They provide a platform for students to engage in decision-making processes, collaborate on initiatives, and contribute to the improvement of campus life.

The Department of Student Life also holds the authority to judge infractions and enforce disciplinary measures when necessary. They maintain oversight over student conduct and ensure that rules and regulations are followed, fostering a safe and respectful environment for everyone.

Engaging with various institutes is another responsibility undertaken by the Department of Student Life. They negotiate and interact with external organizations, institutes, and sponsors to create partnerships and opportunities that benefit students. This includes arranging internships, workshops, guest lectures, and other collaborative ventures that enrich students' educational journeys.

At Ziauddin University, campus involvement is highly encouraged and valued. The Department of Student Life recognizes that active participation in extracurricular and literary societies has a significant impact on personal growth. These societies provide students with a platform to explore their interests, enhance their talents, and develop valuable skills. With a wide range of more than eight student societies on campus, students have ample opportunities to find a place in one or more of these societies, further enriching their university experience.

### STUDENT SOCIETIES AT ZIAUDDIN UNIVERSITY

#### WELFARE AID FOR ILL AND DEPRIVED

The Welfare Aid for Ill and Deprived is a student-based non-profit organization at Ziauddin



din University. It was established based on the recognition that many patients were unable to afford necessary medical care, leading to a decline in their overall well-being. The primary objective of this society is to provide financial support to underprivileged patients at the KDLB campus of Ziauddin Hospital. Over time, the society has expanded its services to include patients in other healthcare institutions such as Civil Hospital, Jinnah Postgraduate Medical Centre (JPMC), and Ziauddin North Campus.

The society undertakes various activities to raise funds and awareness for its cause. The activities are:

#### 1. Movie Night

Movie Night Under the Stars: An Unforgettable Evening

On the evening of 31st May 2024, the BDS Student Council in collaboration with Office of Student Affairs at Clifton Campus organized a magical movie night under the stars, bringing the campus community together for a memorable experience. The event featured the beloved Bollywood movie "Jab We Met," creating a perfect ambiance for a night of fun and relaxation. Generously sponsored by Kernel Popcorn, Yalla Shawarma, and Texi Tech, the event was a resounding success.

Attendees were treated to an array of delightful snacks including refreshing slushies, freshly popped popcorn, sugary candy floss, and delicious shawarmas. The aroma of these treats filled the air, adding to the festive atmosphere.

After the movie, the night continued with an exciting karaoke session. The combination of a heartwarming movie, delicious food, and lively karaoke made for an unforgettable night, fostering a sense of community and joy among the students.

#### 2. Beach Party

On May 16, 2024, Student Council Pharmacy organized the Annual Beach Picnic at Turtle Beach. After the tiresome studies, this event was the perfect getaway and a refresher to mind. The event consisted of Breakfast and Lunch by the council, as well as a dancing and singing setup, where students let themselves free and enjoyed the afternoon to the fullest. All in all, it gave students a well-deserved break from studies, promoting relaxation, recreation, and memory-making with fellow students.

#### 3. Postural Awareness Session

ZCPT Student Council, in assistance with Office of Student Affairs conducted Postural Awareness Program on August 8th 2024 from 11am onwards. Students of Rehabilitation Sciences alongside with Dr. Nabeel khuwaja, prepared and presented a session, that aims to enhance understanding of preventive measures and promote health and wellness among the workforce. The session was conducted at Ocean Network Express; we appreciate their management for providing a platform to have this great interactive session and also to Dr Nabeel khuwaja for taking some time to make this session valuable and interactive.

#### 4. Panel Talk

Panel Talk "Exploring the Depths of Dentistry" organized by the BDS Student Council in collaboration with Office of Student Affairs happened on Tuesday, 28th May 2024. The Panelists for the talk were: Dr Madiha Aftab, Dr. Shaharyar Usman and Dr. Aneeka Anwar.

Our wonderful Moderators for the evening were, Mehar Lodhi (President BDS Student Council and Dua Siddiqui (Vice President BDS Student Council). Highlights for the Panel Discussion were, Opening Your Practice: Tips and strategies for new dentists, Specializing Abroad: Insights into pursuing



specializations internationally, Challenges Faced: Personal experiences and overcoming obstacles in the field and Research Opportunities: Exploring the vast research prospects in dentistry.

This event was a remarkable success, and helped clear a lot of confusions of the dental community at Ziauddin University. A special thank you for everyone's contributions and participation!

### 5. Plantation and Clean Drive

On the morning of 14th August, Students of ZCPT and ZCOT in collaboration with the Office of Student Affairs, went for a Plantation and Clean Drive. Students planted more than 100 plants at Beach View Park, Karachi. And also picked up the garbage not only from the park but also from the Sea View Beach. The message behind this initiative was to showcase that every part of this country is like our home. And it is our duty as citizens to make this country greener and cleaner.





## OFFICE OF STUDENT AFFAIRS

The Office of Student Affairs at Ziauddin University is dedicated to creating a vibrant and diverse experience for every student across all campuses. It plays a crucial role in skill development, student leadership cultivation, talent nurturing, and community engagement. The Office offers numerous opportunities for students to pursue their passions, talents, and skills beyond academics through participation in curricular, co-curricular, and community-oriented activities. OSA proactively adapts to student-centric needs and evolving trends.

Developing a student's sense of belonging during their time at the university is an essential component in enhancing diligence, persistence, and success, while increasing their campus involvement and sense of ownership. Committed to promoting a culture of mutual respect and tolerance for diversity, the Office of Student Affairs serves as a comprehensive resource for addressing all student needs and enquiries.

## OSA PROGRAMMES AND BODIES

### Continuous Medical Education (CME)

The Office of Student Affairs (OSA) facilitates Continuous Medical Education (CME) activities aimed at sustaining, improving, and enhancing the knowledge, skills, professional performance, and networks that medical professionals rely on to care for patients, the general public, and the medical community. OSA assists departments in conducting and executing these CME activities and plays a key role in assessing and evaluating their quality and effectiveness. The OSA ensures that these

activities are devoid of commercial bias and remain independent of commercial interests.

### Continuing Professional Education (CPE)

At Ziauddin University, we offer Continuing Professional Education (CPE) under Office of Student Affairs designed to extend learning beyond traditional academic settings. Our approach involves ongoing, purposeful education aimed at expanding knowledge and skills, typically after formal education is completed. This commitment to lifelong learning helps individuals stay current in their fields, adapt to industry changes, and enhance their professional capabilities. While formal schooling may end, the process of learning never stops. Today, it's all about continually acquiring new skills. We provide customized CPE programs to meet the diverse needs of students and professionals, including educational leaders, managers, administrative staff, medical professionals, curriculum planners, media professionals, engineers, teachers, and other practitioners. Our vision is to guide educational institutions toward a future of innovation and growth.

## STUDENT BODIES

### STUDENT COUNCILS

There is a designated Student Council for each department at the university. The council acts as a liaison between the students and the administration, acting as an advocate for the students' needs and offering suggestions for improving campus life. Campus activities, whether cocurricular or extracurricular, are then executed through the councils.

Current active councils on campus are;



## STUDENT SOCIETIES

Student Affairs at Ziauddin University always encourages students to showcase and be confident in their talents, while at the same time promote students to learn and experience new things along with their studies. We offer a variety of student societies that focus on different fields. Some of these societies assist students in obtaining relevant experience and skills through various internship programs, while others allow students to pursue

their interests and talents in addition to their academic pursuits.

- SPEC – Spiritual Physical Emotional Comfort
- IGA – Interest Group Allied
- PSS – Public Speaking Society
- PAS – Performing Arts Society
- WELFARE AID
- VFHAT – Volunteer Force Against Hepatitis Transmission





## DEPARTMENT OF SPORTS

### OVERVIEW

The vision of the Ziauddin University sports department is to have a positive impact on the students through programmes that endorse sports leadership, wellness, teamwork and ethics.

These activities have a profound effect on the physical fitness and mental health of the students. In this regard, ZU Sports Department provides full encouragement and a conducive environment for sports activities and programmes intended to teach the youth how to communicate, coordinate and maintain discipline.

### OBJECTIVES

- Manages facilities (ZU Mini Sports Complex and ZU Health and Fitness Centre), its costs, renovation, hiring, equipment, etc. and ensures a productive work environment, maintaining an inventory of all equipment and supplies.
- Makes sure every ZU Department receives an adequate supply of sports equipment.
- Manages uniform ordering, and issuing of equipment and stock.
- Prepares and maintains an annual sports calendar of all departments.
- Enforces sports-related policies and procedures, and follows sports formats linked to major competitions.
- Provides and manages all sports facilities in the Clifton and North Nazimabad departments.





### ALL PAKISTAN HEC WOMEN'S BADMINTON CHAMPIONSHIP 2024

It's fantastic to hear about Ziauddin University's success at the All-Pakistan HEC Women's Badminton Championship 2024! Congratulations to the team for their remarkable display of skill and determination their dedication and perseverance are truly commendable, reflecting the spirit of sportsmanship and teamwork. Absolutely, such achievements indeed serve as a source of inspiration for the entire community and instill confidence in tackling future challenges. The success of Ziauddin University's Women's Badminton team reflects not only the talent of the athletes but also the dedication of their coaches and the unwavering support of their



### AZADI SPORTS GALA SEASON 2: A THRILLING SUCCESS!

The Ziauddin University Sports Department organized a spectacular sports event from August 19th to 28th, 2024, across three campuses. The gala saw an impressive participation of over 400 athletes from 10 different colleges and departments.

The athletes had an absolute blast, and the competition was fierce! Here are the highlights:

- Nursing Department emerged as the overall champions, winning the General Trophy, with victories in Futsal (men's) and Table Tennis



(men's). They were also runners-up in Throwball (girls') and Cricket (men's).

- Other winners included:
  - ZUFESTM: Cricket (boys')
  - ZCPT: Cricket (girls') and Badminton (boys')
  - Pharmacy: Throwball (girls') and Table Tennis (girls')
  - M.T: Badminton (girls')
  - Nursing: Futsal (boys') and Table Tennis (boys')

Congratulations to all the winners and participants for making Azadi Sports Gala Season 2 an unforgettable experience!



### IOBM SPORTS BLITZ 2024

The Ziauddin University Sports Department demonstrated exceptional performance across various sports disciplines, marking a series of notable achievements. The attainment of championship titles, the establishment of new records, and the demonstration of outstanding skills and strategic acumen underscored our commitment to athletic excellence.

In the domain of Snooker (Boys), our team's victory and the establishment of a new record for the highest break exemplified our mastery of the game and ability to excel under pressure.

In Badminton (Girls & Boys), our triumph in the girls singles championship and our representation in the singles finals highlighted the team's prowess and adaptability on the court, showcasing remarkable skills and effective communication.

Furthermore, in Throwball (Girls), our team delivered an exceptional performance, culminating in the establishment of a new record for the highest points scored, which reflected our dedication and proficiency in



### ZU SPORTS DEPARTMENT ORGANIZES SUCCESSFUL SPORTS DAY FOR MBBS STUDENTS

ZU Sports Department hosted a thrilling Sports Day on May 20-21, 2024, for MBBS students at the Ziauddin University Clifton Campus Sports Area. The two-day event featured a diverse



the sport.

Lastly, in Chess, our team's strategic thinking and problem-solving abilities rendered us formidable opponents, demonstrating our proficiency on the board.

The accomplishments of the ZU Sports Department serve as a source of pride for the university community, inspiring others to pursue excellence in sports. We are committed to maintaining this remarkable trajectory and continuing to shine in our athletic endeavors.



range of games, including Futsal, Throwball, Table Tennis, Foosball, Chess, Card games & Ludo. The event aimed to promote physical activity, teamwork, and healthy competition among students. The Sports Department's efforts were evident in the seamless organization and execution of the event.





## INTERNATIONAL INTERSCHOOL ROWING REGATTA 2024

Ziauddin University Sports Department successfully participated at the International Interschool Rowing Regatta hosted by the Karachi Boat Club in January and February 2024. Led by Captain Taha Anwar Ali (2nd Year MBBS), made their debut after months of rigorous training and fierce competition, the team clinched 5 bronze medals in both on-water and indoor relay events for the girls, while the guys secured 2 bronze medals in on-water and indoor events respectively. We extend our heartfelt congratulations to our athletes for this remarkable accomplishment and look forward to their continued success in the year ahead.



## ZCPT TRIANGULAR CRICKET SERIES 2024

ZCPT Triangular Cricket Series 2024," organised by the Ziauddin University Sports Department on May 4th, 2024, reflects exemplary sportsmanship and skill. The tournament brought together all three ZCPT campuses to showcase their cricketing prowess. With each campus displaying commendable performances in batting, bowling, and fielding, the matches were a testament to dedication and teamwork. Ultimately, the ZCPT Link Road Campus emerged victorious, securing the championship title, while the Clifton Campus demonstrated exceptional skills and attained the runner-up position. This tournament underscored the spirit of competition and camaraderie within the ZCPT community, marking it as a resounding success in the annals of sporting events.



## ZU BOYS & GIRLS BADMINTON CHAMPIONSHIP 2024 PICS

The ZU Sports Department organised a thrilling ZU Boys & Girls Badminton Championship 2024, which concluded with great success. The event saw enthusiastic participation from boys and girls from 12 different departments, showcasing their skills and talent in the sport. In the boys' category, Mohammad Hamza emerged as the winner, while Mohammad Saad Khan was the runner-up, with both titles going to the Department of ZUFESTM. In the girls' category, Mariyum Hayaat from Clinical Physiology clinched the winner's title, while Fabiha from M.T was the runner-up. The championship was a marvellous event throughout, with exciting matches and a lively atmosphere. The efforts of ZU Sports Department were evident in the seamless organisation and execution of the event.



## FOR FURTHER DETAILS CONTACT:

**Sports Department:** (Ext: 2270)

Deputy Director Sports

Shaheen Fatima - 03002200685

Sports Manager

Zubair Ishaque - 03212102489

Assistant Sports Coordinator

Mohammad Khan - 03002121407