# Prospectus

# BS Forensic Sciences Session 2025-26



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# **DUHS VISION**

To be a pre-eminent academic institution committed to changing and saving lives.

# **DUHS MISSION**

Providing outstanding patient centered education, training and clinical care informed by cutting edge research and innovation generating and disseminating new knowledge.



# MESSAGE BY THE VICE CHANCELLOR

PROF. DR. NAZLI HOSSAIN
Vice Chancellor
Dow University of Health Sciences

It is a great honor for me, as the Vice Chancellor of Dow University of Health Sciences (DUHS), to welcome you to one of Pakistan's most distinguished institutions of medical and health sciences education.

Since its establishment in 2004, DUHS has evolved from three constituent colleges into a dynamic and comprehensive university system encompassing over fifty constituent and affiliated institutions. Rooted in the proud legacy of Dow Medical College, founded in 1945, DUHS continues to uphold a tradition of excellence, service, and innovation in healthcare education.

Our allied health programs including Pharmacy, Medical Technology, Nursing, Physical Therapy, Biotechnology, Nutrition, Public Health, Radiology Technology, Psychology, and many more, play a vital role in shaping the future of healthcare. These programs are central to our mission of producing competent, compassionate, and skilled professionals who contribute to the well-being of communities locally and globally.

As we move forward, DUHS is committed to further strengthening its academic and research ecosystem through modern technologies, state-of-the-art healthcare facilities, and a culture of innovation. With the support of our dedicated faculty and the enthusiasm of our students, we are poised to advance toward new milestones in education, research, and patient care.

To our incoming students, I extend my heartfelt congratulations on joining this vibrant academic community. Your journey at DUHS will equip you with the knowledge, skills, and values needed to make meaningful contributions to healthcare in Pakistan and beyond.

I welcome you to DUHS, a university where tradition meets innovation and where every student is empowered to make a difference.

Good luck to each of you as you embark on this fulfilling path!

#### MESSAGE BY PROGRAM DIRECTOR BS- FORENSIC SCIENCE

It is with great pride that Dow University of Health Sciences (DUHS) introduces the Bachelor of Science in Forensic Science (BS-FSc.), the first comprehensive forensic science degree in Sindh. Designed to meet Pakistan's growing demand for skilled forensic professionals, this multidisciplinary program integrates biology, chemistry, digital forensics, and advanced forensic techniques, providing students with a strong scientific foundation for careers in forensic laboratories, law enforcement, and beyond.



At DUHS, students will gain hands-on experience through practical training,

from analyzing simulated crime scenes to presenting evidence in courtroom settings. Access to purpose-built crime scene facilities and state-of-the-art laboratories ensures an immersive learning environment, equipping graduates to examine, interpret, and present forensic evidence precisely and confidently.

Research is a cornerstone of the BS-FSc. program, where students engage in projects on DNA analysis, cybercrime, and AI-driven forensic tools, gaining exposure to advanced technologies in crime detection and evidence analysis. Collaborations with national and international experts will further enhance their research experience, fostering critical thinking and innovation.

For those pursuing further academic growth, the program lays a strong foundation for graduate studies or specialized professional paths, with dedicated advisors providing guidance throughout their educational journey.

Students will engage with forensic science societies and professional organizations in Pakistan and internationally, fostering academic excellence, innovation, and a strong community of future forensic professionals.

If you are passionate about solving complex problems and fascinated by the science behind criminal investigations, this program offers a unique and rewarding path. We look forward to welcoming you to DUHS and guiding you on this exciting journey in forensic science.

#### Best regards,

#### INTRODUCTION

The Bachelor of Science in Forensic Science program at Dow University of Health Sciences (DUHS) offers an innovative and multidisciplinary education, designed to meet the growing demand for skilled forensic experts in both national and international domains. This program integrates advanced scientific techniques with legal frameworks, preparing students to analyze crime scenes, interpret forensic evidence, and contribute to the judicial system. By combining theoretical knowledge with hands-on laboratory training, students develop expertise in fields such as DNA analysis, toxicology, fingerprint analysis, and digital forensics. With access to state-of-the-art facilities and guidance from experienced faculty, graduates of this program will be well-equipped to pursue careers in law enforcement agencies, forensic laboratories, and research institutions.

DUHS's commitment to academic excellence ensures that the BS Forensic Science program is aligned with modern advancements and industry standards. The curriculum emphasizes critical thinking, ethical practices, and professional integrity, fostering a strong foundation for lifelong learning and career growth. Through internships and collaborative projects, students gain real-world experience, enhancing their problem-solving skills and adaptability in high-pressure environments. This program not only addresses the region's need for forensic professionals but also positions DUHS as a leader in forensic education and research.

#### SCOPE OF FORENSIC SCIENCE IN PAKISTAN

The importance of forensics in Pakistan cannot be overstated. Pakistan's criminal figures are quite concerning. The lack of expert inquiry is one of the key issues.

Forensic science is one of the most important professions required in Pakistan to address the rising rate of criminal activity. The scope of forensic science in Pakistan is vast. Forensic science is a branch of science in which scientific methods and procedures are employed to analyze or investigate a specific subject according to legality and the law to provide adequate justice. Forensic science serves a critical function in any country where crime is prevalent.

Forensic scientists are concerned with the preservation and analysis of scientific evidence gathered at a crime scene for investigations. Experts in forensic science arrive at the crime scene as soon as possible to collect scientific evidence, which they subsequently evaluate in forensic labs. Basic Medical Sciences, Genetics/Molecular Biology, Law/Criminology, Chemistry, Information Technology, and Physics are all closely related to forensic science. Although it has a strong link to law and inquiry, it is essentially a type of applied medical science. A forensic expert must be well-versed in local criminal legislation. In many criminal cases, police, inquiry, and law enforcement authorities are unable to proceed without the assistance of forensic scientists.

Forensic scientists are in high demand nowadays. Primarily, this is a critical field of study.

More importantly, specialists are needed. The scope of forensic science in Pakistan is growing steadily. Universities and colleges are looking for scholars. Similarly, so is the industry.

There are a huge number of job opportunities for forensic science in Pakistan. Many investigation departments and agencies are running that recruit a large number of employees every year. A forensic science degree holder can easily apply as an investigation officer, laboratory technician, consultant, writer, criminal psychologist, public prosecutor, criminal lawyer, crime reporter, instructor in training institutes, NGO activist, etc. Forensic science is one of the highest-paying jobs in almost every country in the world.

#### PROGRAM DESCRIPTION OF BS FORENSIC SCIENCE

#### 1.1 DEGREE NAME

Graduates of the program will be awarded the **Bachelor of Forensic Science (BS-FSc.)** degree upon the successful completion of the comprehensive **four-year program.** 

#### 1.2 ADMISSION REQUIREMENT.

- HSSC Pre-Medical or equivalent examination (e.g. A-Level, 12th grade etc) duly certified by IBCC with minimum 60% marks.
- Candidate's PRC & Domicile of Sindh

#### 1.3 SEAT ALLOCATION.

• The BS Forensic Science program offers a total of **25 Seats** filled on merit.

#### 1.4 CAMPUS/DEPARTMENT FOR COURSE DELIVERY.

• Department of Forensic Medicine and Toxicology/DIMC

#### 1.5 PROGRAM EDUCATION OBJECTIVES (PEOs)

- 1. To provide a structured teaching and learning experience that combines strong theoretical foundations, practical training, and research-based investigations to address contemporary issues in forensic science.
- 2. To develop a knowledge and skill base aligned with employment opportunities in forensic science, related disciplines, and broader scientific fields, fostering adaptability across various career pathways.
- 3. To promote critical, analytical, and lateral thinking while cultivating an honest and rational approach to investigative science within forensic and legal contexts.
- 4. To instill professional ethics, respect for human rights, and an understanding of forensic science's role within the legal framework of government inquiries and criminal prosecutions.
- 5. To enable students to plan, execute, and critically evaluate forensic casework and laboratory investigations, emphasizing the significance of evidential results and advanced forensic techniques.
- 6. To inspire intellectual independence, teamwork, responsibility, and originality, equipping graduates to adapt to evolving technologies and to lead interdisciplinary collaborations in forensic science.
- 7. To prepare graduates to effectively communicate their scientific work, both orally and in writing, to diverse audiences, including legal professionals and the scientific community.
- 8. To support Pakistan's forensic science sector through innovative research, enhanced practices, and addressing challenges while preparing graduates to contribute to global advancements in the field.

#### 1.6 CAREER PROSPECTS/OPPORTUNITY OF BS-FSC.

A graduate of Bachelor of Forensic Science is prepared for careers in:

- 1. **Crime Scene Investigation (CSI):** Roles in crime scene documentation, evidence collection, and forensic analysis for government and private agencies.
- 2. Law Enforcement and Security Agencies: Opportunities in Military Police, Armed Forces, and Police Training Colleges for forensic support in criminal investigations and training.
- 3. **Forensic Science Education:** Academic roles in colleges and universities, including teaching and curriculum development.
- 4. National Database and Registration Authority (NADRA): Roles in biometric verification, identity management, and fraud detection.
- 5. **Investigation Departments:** Positions in organizations such as FIA, NAB, and Cyber Security Units, specializing in digital forensics, financial crime investigations, and counter-terrorism.
- 6. **Judicial Support:** Research, analysis, and presentation of forensic evidence in courts, supporting legal teams and case evaluations.
- 7. **Specialized Forensic Laboratories:** Employment in chemical analysis, ballistics, toxicology, DNA molecular laboratories, and forensic pathology labs.
- 8. **Healthcare and Pharmaceutical Industry:** Roles in toxicology, drug testing, and analysis for regulatory compliance and research.
- 9. **Private Forensic Consulting:** Establishing independent forensic consulting firms for investigative and legal support services.
- 10. **International Organizations:** Opportunities with Interpol, UN agencies, and global forensic institutes in crime investigation and policy development.
- 11. **Tech-Forensics:** Careers in digital forensics, cybersecurity, and data recovery with tech companies and law enforcement.
- 12. **Environmental and Wildlife Forensics:** Roles in analyzing environmental crimes, wildlife trafficking, and ecological investigations.

# FEE STRUCTURE

#### **Session 2025-26**

Fee Type	Amount in PKR
Admission Fee – (at the time of admission)	PKR 45,000/-
Tuition Fee – (per annum)	PKR 200,000/-
Student Activity Charges – (per annum)	PKR 10,000/-
Library Fee Charges – (per annum)	PKR 10,000/-
Documents Verification Charges – (at the time of admission)	PKR 2,500/-
Without Transport	PKR 267,000/-
Transport Fee – (Optional) – (per annum)	PKR 43,000/-
With Transport	PKR 310,500/-

• Above amounts are excluding govt. taxes. Taxes apply as per Govt. & FBR rules.

# RULES FOR THE PAYMENT OF FEE

Fee for 2<sup>nd</sup>, 3<sup>rd</sup> & 4<sup>th</sup> year tuition fee (of the respective categories) will have to be paid within the specified time.

Late fee for succeeding years will be charged if fee is not paid within the provided deadline as per rates below:

Fee of all categories will be increased by 10% every year.

# AFTER FOUR MONTHS OF NON-PAYMENT, THE SEAT IS LIABLE TO BE CANCELLED AND STUDENT WILL NOT BE ALLOWED TO APPEAR IN ANY EXAMINATION.

- Fee deposited is refundable as per the Refund policy guidelines of the DUHS.
- Taxes will be applied as per the FBR/SBR rules.
- Hostel and Transport fee will charge as per calendar year (i.e., Jan. to Dec.).
- Amounts stated in the fee vouchers are excluded of all Bank Charges.
- The Fee Structure may be revised by the university at any time during the course of the study, due to unavoidable circumstances.

All BS Program students are required to submit an **undertaking** affirming that they will not waste their allotted seat.

If a student withdraws from the program or fails to join after securing admission, a **SEAT WASTAGE PENALTY EQUIVALENT TO ONE YEAR'S TUITION FEE** shall be imposed.

#### 1.7 CURRICULUM STRUCTURE

The **BS Forensic Science program at DUHS** is a comprehensive **four-year degree** spanning **eight semesters**. The program consists of **46 courses totaling 120 credit hours**, integrating advanced theoretical knowledge across various life science disciplines. It emphasizes a strong forensic focus through extensive hands-on practical exercises, equipping students with the skills required for real-world forensic investigations and analysis.

Categories	No. of Courses	Credit Hours
General Education Courses	13	32
Disciplinary/ Major	26	69
Interdisciplinary/ Minor	05	13
Research Projects	02	06
Electives	XX	XX
Total	46	120

> Total Number of Credit Hours: 120

> Duration: 04 Years

➤ Number of Semesters: 08

> Semester Duration: 16-18 Weeks

> Number of Courses per Semester: 05-06

# 1.9 SCHEME OF STUDY BS-FSC.

#### BS-FSc. 1st Year

1 <sup>st</sup> Year, 1 <sup>st</sup> Semester				1 <sup>st</sup> Year, 2 <sup>nd</sup> Semester		
Course Code	Subject	Cr. Hr.	Course Code	Subject	Cr. Hr.	
ENG 101	English I (Functional English)*	3	ENG 102	English II (Expository writing)*	3	
MTH 101	Quantitative Reasoning Mathematics and Statistics -I*	3	PST 102	Pakistan Studies*	2	
PHL 101	Philosophy*/	2	CHE 102	Principles of Chemistry* Organic and Inorganic	3	
ICT 101	Application of Information andCommunication Technology*	3	MTH 102	Quantitative Reasoning Mathematics and Statistics -II*	3	
ICP 101	Ideology and Constitution of Pakistan*	2	CCE 102	Civic and Community Engagement*	2	
ISL 101/ ETH 101	Islamiyat / Ethics *	2	ENT 102	Entrepreneurship*	2	
	Semester Cr. Hr.	<b>15</b>		Semester Cr. Hr.	<b>15</b>	

# BS-FSc. 2<sup>nd</sup> Year

2 <sup>nd</sup> Year, 3 <sup>rd</sup> Semester			2 <sup>nd</sup> year, 4 <sup>th</sup> Semester			
Course Code	Subject	Cr. Hr.	Course Code	Subject	Cr. Hr.	
PSY 201	Psychology	2	FPA 202	Forensic Pathology**	3	
FOS 201	Principles of Forensic Sciences**	2	IMU 202	Immunology **	3	
FTX 201	Forensic Toxicology**	3	FSR 202	Forensic Serology **	1	
FSC 201	Forensic Science in Courtroom **	1	MBL 202	Molecular Biology **	3	
ANA 201	Human Anatomy**	2	GEN 202	Human Genetics**	3	
PHS 201	Human Physiology**	3	BBE 202	Biosafety and Bioethics**	2	
PHA 201	Basic Pharmacology**	3	AIF 202	AI in Forensic Science**	1	
	Semester Cr. Hr.	16		Semester Cr. Hr.	16	

# BS-FSc. 3<sup>rd</sup> Year

3 <sup>rd</sup> Year, 5 <sup>st</sup> Semester				3 <sup>rd</sup> Year, 6 <sup>th</sup> Semester			
Course Code	Subject	Cr. Hr.	Course Code	Subject	Cr. Hr.		
FDN 301	Forensic DNA Typing**	3	FFT 302	Fundamental Forensic Techniques**	3		
MBL 301	Techniques in Molecular Biology **	4	FTE 302	Forensic analysis of Trace Evidence**	3		
RM 301	Research Methodology **	3	FPH 302	Forensic Photography ***	2		
STA 301	Introduction to biostatistics	3	FPS 302	Forensic Psychology***	3		
MIF 301	Microbial Forensics **	3	QDE 302	Forensic Analysis of Writing/Questioned Document Examination***	2		
	Semester Cr. Hr.	16		Semester Cr. Hr.	13		

# BS-FSc. 4th Year

4 <sup>th</sup> Year, 7 <sup>th</sup> Semester			4 <sup>th</sup> Year, 8 <sup>th</sup> Semester		
Course code	Subject	Cr. Hr.	Course	Subject	Cr. Hr.
FDE 401	Digital Evidence Analysis/ Cybercrime**	4	BIO 402	Bioinformatics**	3
BAL 401	Principles of Ballistics **	3	FAN 402	Forensic Anthropology**	3
FEN 401	Forensic Entomology***	3	FOD 402	Forensic Odontology***	3
CSI 401	Crime Scene Investigation**	2	DVI 402	Disaster Victim Identification	2
PRO 401	Project****	<mark>3</mark>	PRO 402	Project-I****	3
	Semester Cr. Hr.	15		Semester Cr. Hr.	14

<sup>\*</sup>General courses=32 \*\*Major=69 \*\*\* Minor=13 \*\*\*\*Project= 06 \*\*\*\*\* Elective

#### 1.10 ASSESSMENT CRITERIA.

Examinations for the **BS Forensic Science program** are conducted on a semester basis through a centralized examination department. Assessments comprise both theoretical and practical components tailored to the specific course requirements. Additionally, internal evaluations are conducted by faculty members using pre-defined scoring criteria. Students must successfully complete all courses, including prerequisites from the preceding semester, to progress to the next semester. To qualify for the degree, students are required to pass all courses—both disciplinary and interdisciplinary—along with credit-hour-based capstone research projects and non-credit elective courses.

#### 1.11 ELECTIVE COURSES.

- ✓ Crime scene investigation
- ✓ Forensic Photography
- ✓ Questioned Document
- ✓ Fingerprint analysis
- ✓ Chemical Laboratory
- ✓ Molecular Laboratory
- ✓ Ballistics Analysis
- ✓ Digital Forensic Department
- ✓ Forensic Anthropology
- ✓ Forensic Entomology



Join Us in Shaping the Future of Forensic Science!

# **Student Activities**











