



# DEPARTMENT OF PHARMACY

## Program Vision

“Better health through transformational multidiscipline research”

## Degree Programs Offered

Doctor of Pharmacy (Pharm. D.)



**Coordinator:**

Dr. Mian M. Zeeshan Javaid

Tel: +92-5827-961014

E-mail: [drzeeshan@must.edu.pk](mailto:drzeeshan@must.edu.pk)

**Message from Coordinator:**

Pleasure and honor are the deep root feelings to my soul while presenting my message as founder Chairperson of Department of Pharmacy, Faculty of Health & Medical Sciences, Mirpur University of Science & Technology (MUST), Mirpur AJ&K. It's being established with a goal to impart quality education, skills and knowledge in the field of Pharmacy. The philosophy of institute is to transform and redefine the educational process in order to create a new system that is able to engender a new generation of professionals; capable of achieving new heights in academics and health apparatus of the region. This department has been equipped with the most up to date equipment and this will definitely help the youth to be professional Pharmacists in future. I welcome students and wish them a pleasant, safe and productive stay at Mirpur university of Science and Technology and beautiful city of Mirpur.



## Doctor of Pharmacy (Pharm. D.)

Discipline of Pharm D (Doctor of Pharmacy) is not a new entity for MUST as it has been opted as public private partnership in the form of Akson College of Pharmacy since 2011. After HEC recommendations, University has planned to establish its own Pharmacy Department. MUST as being a symbol of wisdom and virtue; has laid foundations of such locally and globally demanded entities on environment of critical thinking, quality attributes, human dignity, ethics, excellence, accountability and professionalism. Our primary focus will be to advance societal health through leadership in Pharmacy education, research, community engagements and improved patient care.

### Program Mission

“To provide quality pharmacy education & research that contributes significantly to improve health care system of the society, through intra disciplinary approach.”

## Program Educational Objectives (PEOs)

- To provide comprehensive pharmacy education to cope the challenges of pharmaceutical care of our health apparatus.
- To produce quality pharmacists capable of steering the helm of affairs of our pharmaceutical industry.
- To foster an environment that enables graduates to acquire knowledge, analytical skills, problem solving attitude and ethical values necessary to enter pharmacy practice and provide patient centered pharmacy services.
- To promote collaboration with other health professions to materialize the concept of rational and cost effective drug use for health promotion and illness prevention of the society.
- To educate the community about misuse/mishandling/ compliance of medicines through various civic engagement modules.

| Admission Criteria  |
|---|
| F.Sc. (Pre-medical) or equivalent with 60% minimum marks. |
| Duration  |
| 10-14 Semesters   |



### Scheme of Study (Pharm. D)

| 1 <sup>st</sup> Semester |   |            |              |           |
|--------------------------|---|------------|--------------|-----------|
| Course Code              | Course Title                                | Lect. Hrs. | Lab. Hrs.    | Cr. Hrs.  |
| ENG 300                  | English-A (Functional English)              | 2          | 0            | 2         |
| PHARM 310                | Pharmaceutics-IA (Physical Pharmacy)        | 3          | 1            | 4         |
| PHARM 311                | Pharmaceutical Chemistry-IA (Organic)       | 3          | 1            | 4         |
| PHARM 312                | Pharmaceutical Chemistry-IIA (Biochemistry) | 3          | 1            | 4         |
| PHARM 313                | Physiology-A                                | 3          | 1            | 4         |
| PHARM 314                | Anatomy & Histology                         | 3          | 1            | 4         |
|                          |   |            | <b>Total</b> | <b>22</b> |
| 2 <sup>nd</sup> Semester |   |            |              |           |
| Course Code              | Course Title                                | Lect. Hrs. | Lab. Hrs.    | Cr. Hrs.  |
| ENG 301                  | English-B (Communication & Writing skills)  | 4          | 0            | 4         |
| PHARM 315                | Pharmaceutics-IB (Physical Pharmacy)        | 3          | 1            | 4         |
| PHARM 316                | Pharmaceutical Chemistry-IB (Organic)       | 3          | 1            | 4         |
| PHARM 317                | Pharmaceutical Chemistry-IIB (Biochemistry) | 3          | 1            | 4         |
| PHARM 318                | Physiology-B                                | 3          | 1            | 4         |
|                          |   |            | <b>Total</b> | <b>20</b> |



| <b>3<sup>rd</sup> Semester</b> |   |                   |                  |                 |
|--------------------------------|---|-------------------|------------------|-----------------|
| <b>Course Code</b>             | <b>Course Title</b>   | <b>Lect. Hrs.</b> | <b>Lab. Hrs.</b> | <b>Cr. Hrs.</b> |
| IS 402                         | Islamic Studies / Ethics                                      | 3                 | 0                | 3               |
| PHARM 410                      | Pharmaceutics-IIA (Dosage Forms Science)                      | 3                 | 1                | 4               |
| PHARM 411                      | Pharmaceutics-IIIA(Pharmaceutical Microbiology & Immunology)  | 3                 | 1                | 4               |
| PHARM 412                      | Pharmacology and Therapeutics-IA                              | 3                 | 1                | 4               |
| PHARM 413                      | Pharmacognosy-IA (Basic)                                      | 3                 | 1                | 4               |
| PHARM 414                      | Pharmacy Practice–IA (Pharmaceutical Mathematics)             | 3                 | 0                | 3               |
|                                |   |                   | <b>Total</b>     | <b>22</b>       |
| <b>4<sup>th</sup> Semester</b> |   |                   |                  |                 |
| <b>Course Code</b>             | <b>Course Title</b>   | <b>Lect. Hrs.</b> | <b>Lab. Hrs.</b> | <b>Cr. Hrs.</b> |
| PS 403                         | Pakistan Studies  | 2                 | 0                | 2               |
| PHARM 415                      | Pharmaceutics-IIB (Dosage Forms Science)                      | 3                 | 1                | 4               |
| PHARM 416                      | Pharmaceutics-IIIB (Pharmaceutical Microbiology & Immunology) | 3                 | 1                | 4               |
| PHARM 417                      | Pharmacology and Therapeutics-IB                              | 3                 | 1                | 4               |
| PHARM 418                      | Pharmacognosy-IB (Basic)                                      | 3                 | 1                | 4               |
| PHARM 419                      | Pharmacy Practice – IB (Bio-statistics)                       | 3                 | 0                | 3               |
|                                |   |                   | <b>Total</b>     | <b>21</b>       |



| 5 <sup>th</sup> Semester |   |            |              |           |
|--------------------------|---|------------|--------------|-----------|
| Course Code              | Course Title  | Lect. Hrs. | Lab. Hrs.    | Cr. Hrs.  |
| AR 504                   | Arabic  | 3          | 0            | 3         |
| PHARM 510                | Pharmacy Practice-IIA (Dispensing Pharmacy)                         | 3          | 1            | 4         |
| PHARM 511                | Pharmaceutical Chemistry-III A (Pharmaceutical Analysis)            | 3          | 1            | 4         |
| PHARM 512                | Pharmacology and Therapeutics-IIA                                   | 3          | 1            | 4         |
| PHARM 513                | Pharmacognosy-IIA (Advanced)  | 3          | 1            | 4         |
| PHARM 514                | Pathology   | 3          | 1            | 4         |
|                          |   |            | <b>Total</b> | <b>23</b> |
| 6 <sup>th</sup> Semester |   |            |              |           |
| Course Code              | Course Title  | Lect. Hrs. | Lab. Hrs.    | Cr. Hrs.  |
| PHARM 515                | Pharmacy Practice-IIB (Community, Social & Administrative Pharmacy) | 3          | 0            | 3         |
| PHARM 516                | Pharmaceutical Chemistry-III B (Pharmaceutical Analysis)            | 3          | 1            | 4         |
| PHARM 517                | Pharmacology and Therapeutics-IIB                                   | 3          | 1            | 4         |
| PHARM 518                | Pharmacognosy-IIB (Advanced)  | 3          | 1            | 4         |
| PHARM 519                | Pharmacy Practice-III (Computer and its Applications in Pharmacy)   | 3          | 1            | 4         |
|                          |   |            | <b>Total</b> | <b>19</b> |



| 7 <sup>th</sup> Semester |  |            |              |           |
|--------------------------|--|------------|--------------|-----------|
| Course Code              | Course Title   | Lect. Hrs. | Lab. Hrs.    | Cr. Hrs.  |
| PHARM 610                | Pharmacy Practice-IVA (Hospital Pharmacy)              | 3          | 0            | 3         |
| PHARM 611                | Pharmacy Practice-VA (Clinical Pharmacy-I)             | 3          | 1            | 4         |
| PHARM 612                | Pharmaceutics-IVA (Industrial Pharmacy)                | 3          | 1            | 4         |
| PHARM 613                | Pharmaceutics-VA (Biopharmaceutics & Pharmacokinetics) | 3          | 1            | 4         |
| PHARM 614                | Pharmaceutics-VIA (Pharmaceutical Quality Management)  | 3          | 1            | 4         |
|                          |  |            | <b>Total</b> | <b>19</b> |
| 8 <sup>th</sup> Semester |  |            |              |           |
| Course Code              | Course Title   | Lect. Hrs. | Lab. Hrs.    | Cr. Hrs.  |
| PHARM 615                | Pharmacy Practice-IVB (Hospital Pharmacy)              | 3          | 0            | 3         |
| PHARM 616                | Pharmacy Practice-VB (Clinical Pharmacy-I)             | 3          | 1            | 4         |
| PHARM 617                | Pharmaceutics-IVB (Industrial Pharmacy)                | 3          | 1            | 4         |
| PHARM 618                | Pharmaceutics-VB (Biopharmaceutics & Pharmacokinetics) | 3          | 1            | 4         |
| PHARM 619                | Pharmaceutics-VIB (Pharmaceutical Quality Management)  | 3          | 1            | 4         |
|                          |  |            | <b>Total</b> | <b>19</b> |



| 9 <sup>th</sup> Semester  |   |            |              |           |
|---------------------------|---|------------|--------------|-----------|
| Course Code               | Course Title  | Lect. Hrs. | Lab. Hrs.    | Cr. Hrs.  |
| PHARM 710                 | Pharmaceutics-VIIA (Pharmaceutical Technology)                  | 3          | 1            | 4         |
| PHARM 711                 | Pharmacy Practice-VIA (Advanced Clinical Pharmacy-II)           | 3          | 1            | 4         |
| PHARM 712                 | Pharmacy Practice-VIIA (Forensic Pharmacy)                      | 3          | 0            | 3         |
| PHARM 713                 | Pharmacy Practice-VIIIA (Pharmaceutical Management & Marketing) | 3          | 0            | 3         |
| PHARM 714                 | Pharmaceutical Chemistry-IVA (Medicinal Chemistry)              | 3          | 1            | 4         |
|                           |   |            | <b>Total</b> | <b>18</b> |
| 10 <sup>th</sup> Semester |   |            |              |           |
| Course Code               | Course Title  | Lect. Hrs. | Lab. Hrs.    | Cr. Hrs.  |
| PHARM 715                 | Pharmaceutics-VIIB (Pharmaceutical Technology)                  | 3          | 1            | 4         |
| PHARM 716                 | Pharmacy Practice-VIB (Advanced Clinical Pharmacy-II)           | 3          | 1            | 4         |
| PHARM 717                 | Pharmacy Practice-VIIB (Forensic Pharmacy)                      | 3          | 0            | 3         |
| PHARM 718                 | Pharmacy Practice-VIIIB (Pharmaceutical Management & Marketing) | 3          | 0            | 3         |
| PHARM 719                 | Pharmaceutical Chemistry-IVB (Medicinal Chemistry)              | 3          | 1            | 4         |
|                           |   |            | <b>Total</b> | <b>18</b> |