



LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES JAMSHORO

UNDERGRADUATE PROSPECTUS

ACADEMIC SESSION 2023- 24

BS [DEGREE & DIPLOMA PROGRAMMES]

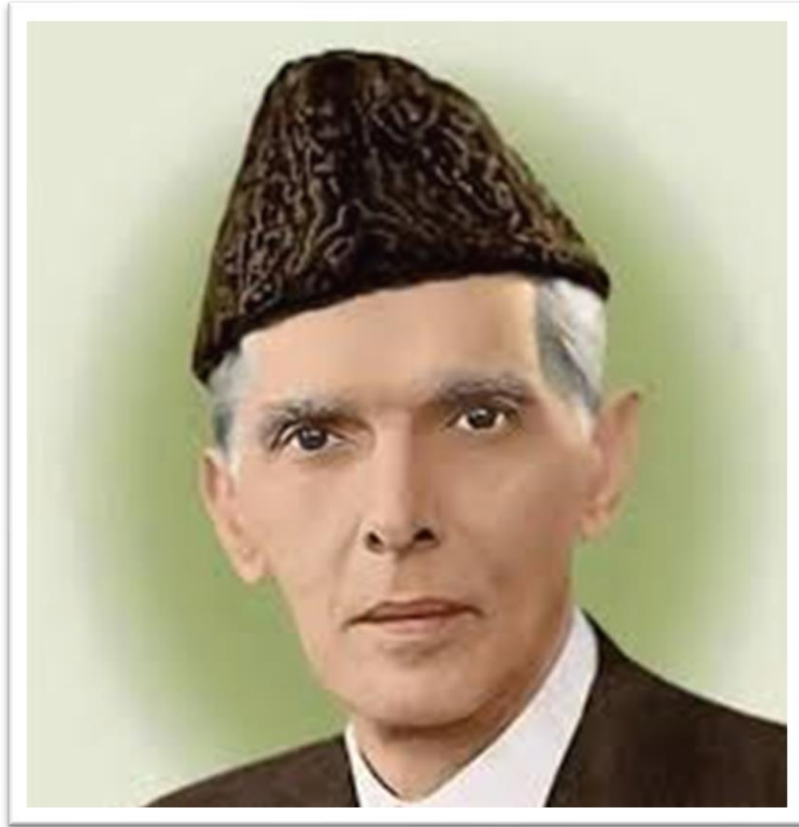
- Physiotherapy
- Pharmacy
- Nursing
- Technology Degree & Diploma Programmes
- Molecular Biology & Genetics
- Endoscopy Technician
- Biomedical Engineering



GATEWAY TO A BRIGHTER FUTURE

FOR FURTHER INFORMATION & QUERIES

QUAID E AZAM MUHAMMAD ALI JINNAH



With faith, discipline and selfless devotion to duty, there is nothing worthwhile that you cannot achieve.



Message of Vice Chancellor

It always gives me extreme pleasure to write this message addressing to our new generation aspiring for higher education. Liaquat University of Medical and Health Sciences (LUMHS), is the first public sector medical university in Pakistan. Established as institute in 1881, recognized as a medical college in 1956. Following its tremendous contribution in the medical profession, it attended the status of Medical University in 2001. The journey did not stop with the medical degrees only but keeping view of the market demand of allied science professionals LUMHS has introduced a number of courses which are in high demand not only in Pakistan but also globally. The programs include bachelors in Pharmacy, Nursing, Physiotherapy, Biomedical Engineering, Molecular Biology and Genetics and number of programs in technological courses including diplomas, and the list of ever-growing with addition of more programs each year.

All programs offered are well designed with modern curriculum up to the International standards and great emphasis on the personal growth as a professional. All the programs have equal opportunities for boys and girls keeping United Nations Sustainable development goal (SGD) 5. Liaquat University provides opportunity for International exposure to all our students, for that we have strong linkages with universities in United States of America, United Kingdom, China, Turkey and Azerbaijan.

Our primary focus is on the personal development of each student, for that we provide best possible teaching environment, highly qualified faculty, modern curriculum and state-of-art infrastructure. Each student getting admission in our University is taught according their personal traits. As you navigate through the pages of this prospectus, I encourage you to explore the enriching academic experiences, cutting-edge facilities, and the unwavering commitment of our esteemed faculty. Our dedicated team is here to support you on your academic journey, ensuring that you not only acquire knowledge but also develop the skills and resilience needed to thrive in your chosen profession.

I invite you to seize the opportunity to become part of our vibrant academic community. As you consider your educational path, rest a sure that LUMHS is dedicated to providing you with the tools and support necessary to succeed.

I wish you best of luck and look forward to welcoming you to our vibrant community.

Prof. Ikram Din Ujjan

Vice Chancellor LUMHS

UNDERGRADUATE PROGRAMS

DEGREE PROGRAMS

S. #	Program	Period of Study
1	Doctor of Physiotherapy (DPT)	05 Years
2	Doctor of Pharmacy (Pharm-D)	05 Years
3	BS. Nursing	04 Years
4	BS. Biomedical Engineering	04 Years
5	BS Molecular Biology & Genetics (BSMBG)	04 Years
6	BS Radiologic Technology (BSRT)	04 Years
7	BS Medical Laboratory Technology (BSMLT)	04 Years
8	BS Forensic Science in Forensic Biology (BSFB)	04 Years
9	BS Forensic Science in Forensic Chemistry & Toxicology (BSFC&T)	04 Years
10	Associate of Applied Sciences in Radiologic Technology (AASRT)	02 Years

DIPLOMA PROGRAMS

S. #	Program	Period of Study
1	Diploma in Dental Technician (DDT)	02 Years
2	Diploma in Ophthalmic Technician (DOT)	02 Years
3	Diploma in Refractionist Technician (DRT)	02 Years
4	Diploma in Endoscopy Technician (DET)	02 Years
5	Diploma in Blood Banking and Transfusion (DBBT)	01 Year
6	Diploma in CT Technology (DCTT)	01 Year
7	Diploma in MRI Technology (DMRIT)	01 Year

INSTITUTE OF PHYSIOTHERAPY & REHABILITATION SCIENCES
LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES, JAMSHORO



INTRODUCTION

Institute of Physiotherapy & Rehabilitation Sciences, LUMHS, Jamshoro

The Institute of Physiotherapy & Rehabilitation Sciences, LUMHS, Jamshoro has started Bachelor of Science in Physiotherapy (B.S. Physiotherapy) Degree Program during the tenure of Prof. Dr. Noshad A. Shaikh, Vice Chancellor, Liaquat University of Medical & Health Sciences, Jamshoro. This Institute is the first ever Public Sector Institute of Sindh Province offered B.S. Physiotherapy Degree Program, before this, Jinnah Postgraduate Medical Center (JPMC), Karachi was running under Federal Government of Pakistan.

The numbers of graduates from Private Institutes were rather low and the poor patients of whole Province in general & rural Sindh in particular could not have the facilities of Physiotherapy treatment. Moreover, the young blood did not have the easy & economical access to improve their education & training. Hence there was dire need of establishing the Institute of Physiotherapy to impart quality medical education dealing with Physiotherapy by this relieves pain and re-gain strength after serious injuries, illness and surgery.

The B.S. Physiotherapy (BSPT) four (04) years degree program announced first time at this Institute during the year 2009 and same program was offered up to the year 2011, then Doctor of Physiotherapy (DPT) five (05) years degree program started at Institute of Physiotherapy from the year 2012.

This Institute is equipped with modern and state art facilities i.e. Air-Conditioner Labs, Lecture Halls, Reading & Lending Library, Out Patient Department and teaching aids. The students have not only the opportunity to see the working of gadgets but also have the chance to practically learn the methods of Physiotherapy on the patients attending the O.P.D and also Wards in Liaquat University Hospital Jamshoro & Hyderabad.

In order to keep improve & update the knowledge of Faculty of IPRS & Staff of OPD, organizing/ conducting Continuous Medical Education (CME) and Continuous Professional Development (CPD) & Workshops. There has been a change in the teaching & training in the modality of treatment of various diseases through Physiotherapy with the advancements in the medical science, basic graduation throughout world is changing from four years program of Bachelor of Sciences in Physiotherapy to five (05) years degree program of Doctor of Physiotherapy (DPT). The LUMHS nevertheless is not left behind & is the first Public Sector Institute of Sindh Province to start the Doctor of Physiotherapy (DPT) five years degree program.

INTRODUCTION:

Institute of Physical Medicine and Rehabilitation Bilawal Medical College, Jamshoro

The dream regarding establishment of Institute of Physical Medicine and Rehabilitation Bilawal Medical College for Boys LUMHS has come true due to Philosophy, wisdom and constructive idea of Prof. Dr. Ikram Din Ujjan, Vice-Chancellor LUMHS Jamshoro. This Institute has established in the year 2023 on the recommendations and resolutions passed by Academic Council and also decided to start the studies of DPT and other at former building of Provincial Health Development Centre (PHDC) which has been taken over by Health Department, Government of Sindh adopted by LUMHS. He is determined to enhance the multi-disciplines and wish to expand and adding the values clinical activities to provide better health facilities to public.

ABOUT PHYSIOTHERAPY, PHYSICAL MEDICAL & REHABILITATION:

Physiotherapy is a process which involves in physical examination, diagnosis and management plan by the engaging of Physiotherapists who do manage pain and improve movement problems. Some pain and movement problems can become chronic and lead to surgery. Physiotherapy helps to reduce the symptoms of many chronic diseases and conditions. It also can keep many problems from getting bad.

Physiotherapy restores function, strengthens and improves fitness and Rehabilitation is concerned with treating disabilities, helping patients recover and revive physically as for as Physical medicine and rehabilitation also known as physiatry or rehabilitation medicine enhances and restores functional ability and quality of life to those with physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles, and tendons. Consultant Physicians always refer patients to physiatrist. Unlike other medical specialties that focus on a medical “cure,” the goals of the physiatrist are to maximize patients’ independence in activities of daily living and improve quality of life.

Physiotherapy relieves physical pain or any muscular or bone disorder which depends on an individual's medical history and physical examination to reach a diagnosis that helps them create a management plan.

**ADMINISTRATIVE & ACADEMIC SUPPORT OF
INSTITUTE OF PHYSIOTHERAPY & REHABILITATION SCIENCES**

ADMINISTRATIVE SUPPORT		
S. NO.	ADMINISTRATIVE/ SUPPORTING STAFF	DESIGNATION
01	Dr. Asif Gulzar Shaikh	Additional Director
02	Dr. Khurram-ullah Shaikh	Working as Additional Director
03	Mr. Abdul Ghafoor Sial	Administrative Officer
04	Mr. Niaz Ahmed Daudani	Assistant Librarian
05	Mr. Muhammad Shahid	Assistant
06	Mr. Muhammad Muqem	Computer Operator
07	Mr. Altaf Ahmed Larik	Senior Clerk
08	Mr. Shahmir Mallah	Junior Clerk
09	Mr. Bashir Ahmed Memon	Store Keeper
ACADEMIC SUPPORT		
S. No.	TEACHING FACULTY	DESIGNATION
01	Mr. Sikandar Ali Sangrasi	Assistant Professor
02	Syed Faizan Ali Shah	Lecturer
03	Ms. Wajeeha Sahre	Lecturer
04	Ms. Pinky	Lecturer
05	Mr. Ashok Kumar	Lecturer
06	Ms. Ghazala Langah	Lecturer
07	Mr. Satish Kumar	Lecturer
08	Ms. Fakhra Safdar	Lecturer

**ADMINISTRATIVE & ACADEMIC SUPPORT OF
INSTITUTE OF PHYSICAL MEDICINE & REHABILITATION (IPM&R)**

ADMINISTRATIVE & ACADEMIC SUPPORT		
S. NO.	ADMINISTRATIVE/ SUPPORTING STAFF	DESIGNATION
01	Prof. Dr. Abdul Rehman Sial	Director
02	Ms. Shifa Abbasi	Physiotherapist
03	Mr. Hussain Ali Memon	Physiotherapist
04	Ms. Aisha Paras	Physiotherapist (Acupuncture)
05	Mr. Ali Ibtesam	Teaching Assistant

COURSE CURRICULUM
DOCTOR OF PHYSIOTHERAPY

SCHEME OF STUDIES FOR 5-YEARS DPT PROGRAM (IPRS & IPM&R)

SEMESTER / YEAR	NAME OF SUBJECT	CREDITS
FIRST PROFESSIONAL YEAR		
FIRST	Anatomy-I	4(3-1)
	Physiology-I	3(2-1)
	Kinesiology-I	3(2-1)
	English (Functional English)	3(3-0)
	Pakistan Studies	2(2-0)
	Biostatistics-I	3(3-0)
		18
SECOND	Anatomy-II	4(3-1)
	Physiology-II	3(2-1)
	Kinesiology-II	3(2-1)
	English-II (Communication Skills)	3(3-0)
	Islamic Studies / Ethics	2(2-0)
	Biostatistics-II / University Optional	3(3-0)
		18
SECOND PROFESSIONAL YEAR		
THIRD	English-III (Technical Writing & Presentation Skills)	3(3-0)
	Introduction to Computer	3(2-1)
	Anatomy-III	3(2-1)
	Physiology-III	3(2-1)
	Biomechanics & Ergonomics-I	3(3-0)
	Biochemistry & Genetics-I	2(2-0)
		17
FOUR	Anatomy-IV (Neuro-Anatomy)	3(2-1)
	Biomechanics & Ergonomics-II	3(2-1)
	Behavioral Sciences (Psychiatry & Psychology)	3(3-0)
	Biochemistry & Genetics-II	2(2-0)
	Exercise Physiology	3(3-0)
	Medical Physics	3(2-1)
		17
THIRD PROFESSIONAL YEAR		
FIFTH	Pathology & Microbiology-I	2(2-0)
	Pharmacology-I	3(3-0)
	Physical Agents & Electrotherapy-I	3(2-1)
	Therapeutic Exercise & Techniques	3(2-1)
	Sociology	2(2-0)
	Health & Wellness	2(2-0)
	Supervised Clinical Practice-I	3(0-3)
		18

SIXTH	Pathology & Microbiology-II	3(2-1)
	Pharmacology-II	2(2-0)
	Physical Agents & Electrotherapy-II	3(2-1)
	Manual Therapy	3(2-1)
	Teaching Methodology & Community Medicine	3(3-0)
	Supervised Clinical Practice-II	3(0-3)
		17
FOURTH PROFESSIONAL YEAR		
SEVENTH	Medicine-I	3(3-0)
	Surgery-I	3(3-0)
	Radiology & Diagnostic Imaging	3(2-1)
	Musculoskeletal Physical Therapy	3(2-1)
	Human Growth Development & Community Based Rehabilitation	2(2-0)
	Supervised Clinical Practice-III	3(0-3)
		17
EIGHT	Medicine-II	3(3-0)
	Surgery-II	3(3-0)
	Neurological Physical Therapy	3(2-1)
	Evidence Based Practice	3(2-1)
	Prosthetics & Orthotics	2(2-0)
	Supervised Clinical Practice-IV	3(0-3)
		17
FIFTH PROFESSIONAL YEAR		
NINTH	Cardiopulmonary Physical Therapy	3(2-1)
	Emergency Procedure & Primary Care in Physical Therapy	2(2-0)
	Clinical Decision Making & Differential Diagnosis	3(3-0)
	Scientific Inquiry & Research Methodology	3(2-1)
	Professional Practice (Laws, Ethics & Administration)	2(2-0)
	Integumentary Physical Therapy	2(2-0)
	Supervised Clinical Practice-V	3(0-3)
		18
TENTH	Obstetrics & Gynecological Physical Therapy	2(2-0)
	Pediatric Physical Therapy	2(2-0)
	Gerontology & Geriatric Physical Therapy	2(2-0)
	Sports Physical Therapy	2(2-0)
	Supervised Clinical Practice-VI	4(0-4)
	Research Project	6
		18
	Total Credits	175

NOTE:

This scheme of curriculum is also applicable to annual system; in which two consecutive semesters will be considered as one professional year.

CREDIT HOURS DISTRIBUTION IS AS FOLLOWING:

- ▲ **Theory:** One Credit Hour shall be equal to one hour of teaching per week throughout the semester.
- ▲ **Practical/ Lab:** One Credit Hour shall be equal to two hours of lab work per week throughout the semester.
- ▲ **Clinical:** One Credit Hour shall be equal to three hours of clinical work per week throughout the semester.
- ▲ **Research:** One Credit Hour shall be equal to three hours of research work per week throughout the semester.

HOUSE JOB:

After graduation, DPT graduates of IPRS & IPM&R will be absorbed for the House Job for period of one (01) year in the Hospital/(s) affiliated to the Liaquat University of Medical & Health Sciences. They will be paid monthly stipend after successfully completion will have the certificates of Internship/ House Job.

EVALUATION SYSTEM:

- **Log Book:**
 - For Theory
 - For Practical / Clinical
- **Internal Evaluation**
(After 6th or 12th week of every semester)
- **Semester Examination**
 - SBQs _____ 50
 - SEQs _____ 30
 - Attendance _____ 10
 - Internal Evaluation _____ 10
 - Viva Voce/ Practical _____ 100

RULES OF EXAMINATIONS FOR IPRS & IPM&R:

- (1). The students having minimum **75%** attendance and are cleared all dues of fees will be eligible to appear in the semester examinations. Any student who fails to maintain minimum attendance as prescribed by the University/ Institute of Physiotherapy for appearance, his/ her examination form shall not be forwarded to the Controller of Examinations (UG).
- (2). Beside the Semester Examinations, two Internal Evaluation Tests after every six (06) Weeks study will be conducted and students should secure at **50%** marks in each test.
- (3). The organization of semester system is given below.

PROMOTION POLICY

- Promotion from one academic year to next higher academic year.
- Policy of conducting Re-sit (repeat) examination.

First and Second Semester Examinations:

1st semester students who after appearing in 1st Semester (Regular) examination, either declared pass or fail will be allowed promotion to 2nd Semester.

Upon promotion in 2nd Semester, students who have either passed or failed in 1st Semester examination both will be allowed to appear in 2nd Semester examination.

Pending result of 2nd Semester examination, if the classes for 3rd Semester are commenced, students of 2nd Semester (Either passed or failed in 1st semester) will be allowed to attend the classes of 3rd semester.

After announcement of 2nd Semester examination result, students of 1st and 2nd Semesters will fall in the following groups:

- a) Passed First and Second Semesters.
- b) Passed Second Semester but failed in First Semester.
- c) Passed First Semester but failed in Second Semester
- d) Failed in both the Semesters.

Students under category **B, C & D** will then be allowed re-sit examinations of **1st & 2nd** Semesters simultaneously while they remain under study process of 3rd Semester.

After announcement of re-sit (repeat) examinations result of both 1st & 2nd semesters, the students will be bifurcated into the following groups:

1. Passed 1st & 2nd semester's examinations completely they will continue in 3rd Semester
2. *Students who failed either in 1st Semester or in 2nd Semester or both semester examinations shall be reverted i.e. termed back to 1st Semester or 2nd Semester.*

Above group of students of "DPT" after term "B" will repeat the failure subject(s) of semester I or II with junior batch.

IMPORTANT:

In case of their failure in subject(s) of 1st / 2nd or both Semesters with junior batch (repeat examination) they shall cease to be eligible for further education in IPRS, LUMHS.

NOTE: This system applies to all the semesters in all the five years.

**REGULATIONS RELATING TO
DISCIPLINE, CONDUCT, WELFARE AND CODE OF HONOUR
FOR THE STUDENTS OF THE UNIVERSITY.**

I. SHORT TITLE:

These regulations may be called the Liaquat University of Medical & Health Sciences (Students Discipline, Conduct, Welfare and Code of Honour) Regulation 2008.

II. DATE OF COMMENCEMENT:

- a) These Regulations shall come into force with immediate effect.
- b) These Regulations shall apply to the students of Liaquat University of Medical & Health Sciences, Jamshoro.

III. DEFINITIONS:

- a) **“Chairman”** mean Chairman of the teaching Department of the University.
- b) **“Dean of Faculty”** mean Dean of the relevant Faculty of the University.
- c) **“Director Academics”** mean an officer appointed by the University/ Vice-Chancellor as a Director Academics.
- d) **“Disciplinary Committee”** means the Committee established under statues-11 of the 1st statues of the Liaquat University of Medical & Health Sciences, Jamshoro.
- e) **“Director Students Affairs”** mean an officer appointed by the University/Vice-Chancellor as a Director Students Affairs.
- f) **“Incharge Sports”** means an Officer appointed by the University/ Vice-Chancellor as an Incharge Sports.
- g) **“Provost”** means an Officer appointed by the University/ Vice-Chancellor as a Provost.
- h) **“University”** means the Liaquat University of Medical & Health Sciences, Jamshoro.
- i) **“Vice-Chancellor”** meant the Vice-Chancellor of Liaquat University of Medical & Health Sciences, Jamshoro.
- j) **“Warden”** means an officer appointed by the University/ Vice Chancellor as a Warden for a Hostel.

IV. GENERAL DISCIPLINE AND CODE OF HONOUR:

EVERY STUDENT INCLUDING STUDENTS RESIDING IN HOSTELS SHALL OBSERVE THE FOLLOWING CODE OF HONOUR:

- a) Respect for order, morality, personal honour and rights of others.
- b) He/ She must be faithful in his / her religion, duties and respect the convictions of others in matters of religion and custom.
- c) He/ She must be loyal to his / her country and refrain from doing anything which tends to lower its honour and prestige.
- d) He/ She shall be truthful and honest in his / her dealings with all people.
- e) He/ She must respect the elders and be polite to all, especially to women, children, old people, the weak and the helpless.
- f) He/ She must respect his / her teachers, officers, and authorities of the University.
- g) He/ She must keep clean in body and mind, standing for clean speech, clean sports and clean habits.
- h) He/ She shall help his / her fellow beings especially those in distress.
- i) He/ She must devote him / herself faithfully to his / her studies.
- j) He/ She must observe austerity and protect public property.

V. **ACTS OF INDISCIPLINE:**

THE FOLLOWING AMONG OTHERS, SHALL CONSTITUTE ACTS OF INDISCIPLINE, FOR WHICH ACTIONS MAY BE TAKEN AGAINST:

- a) Breach of Public morals, such as:
 - a. Use of Indecent or Filthy Language.
 - b. Use of Immodest Dress.
 - c. Use of Undesirable remarks or Gestures.
 - d. Disorderly behavior, such as shouting, abusing, quarrelling, fighting and insolence.
- b) Defiance of any University Authority.
- c) False personification or giving false information or willful suppression of facts, information, cheating or deceiving.
- d) Visiting places declared 'out of bounds' for students.
- e) Visiting without a Pass, places which are not to be visited without a Pass issued by an Officer or Authority of the University entrusted for the purpose.
- f) Inciting or staging a walkout, strike or an unauthorized procession in the University Campus/ Hostels/ Examination Hall/ (s).
- g) Shouting of slogans derogatory to the prestige of the University or the reputation of its officers or teachers.
- h) Consumption of Alcoholic Liquor, Drugs or other Intoxicants within or outside the University Campus.
- i) Violation of known standards of immorality.
- j) Actions/ Comments defamatory of or derogatory to Islam.
- k) Smoking in a Class Room, Laboratory, Workshop, Library, Examination Hall, and Convocation Hall or during Academic functions.
- l) Organize or take part in any function with the University Campus or a Hall of residence or organize any club or society of students except in accordance with prescribed rules and regulations.
- m) Collect money or receive donation/ (s) or pecuniary assistance for or on behalf of the University or any University organization except with the written permission of the Vice-Chancellor.
- n) Neglect his/ her work habitually or absents from class/ (s) without reasonable cause or permission or the relevant officer of the University.
- o) Damage the University property or the property of a fellow student or teacher or employee of the University.
- p) Do not pay fees, fines or other dues levied, within due time, under the University Statues and Regulations.
- q) Do not comply with the Regulations relating to residence in the Hostels or Hall of residence or the Regulations relating to the wearing of prescribed Uniform or Academic Dress.
- r) Commit criminal, immoral or dishonorable act within or outside the University Campus prejudicial to the interest and reputation of the University.

VI. **OFFICIAL RESPONSIBLE FOR THE MAINTENANCE OF DISCIPLINE:**

Members of the teaching Staff, Director Academics and Director Students Affairs in general and Provost, Warden and the Incharge of Sports of the University shall be responsible for maintenance of order among the students, while under their charge and disorderly behavior must be dealt with promptly.

VII. PENALTIES:

Punishment or penalty for any of the offence mentioned under the preceding Regulations shall be awarded according to gravity of the case, and may be any one or more of the following:

- a) Record an adverse remark in the Black Book maintained by the Chairman/ Provost.
- b) Fine which may amount to a maximum of **Rs. 1000/-**.
- c) Expulsion from Class, Hall for a specified period not exceeding six months.
- d) Detention from Examinations.
- e) Cancellation of examination results or with-drawl of a Certificate granted.
- f) Withdrawal of concession of free/ half-free / cancellation of Scholarship granted by the University and;
- g) Expulsion or rustication from the University for a specific period or permanently. Provided that no punishment shall be imposed without giving an opportunity to the students concerned to Show Cause and a chance to hear and defend him / her, if he / she, so desires.

VIII. COMPETENT AUTHORITIES TO IMPOSE PENALTIES:

The authority to impose punishment or penalty shall be exercised by the officers to the extent given below and shall be recorded in the Enrollment Register maintained by the Registrar of the University.

1) THE VICE-CHANCELLOR MAY:

- a) Fine a student up to **Rs. 5000/-** for each offence and deprive him / her privileges and positions open to students;
- b) Detain a student from appearing in a University Examination;
- c) Cancel the admission of a student or refuse to admit a student without giving any reason;
- d) Direct a Principal / Director / Incharge to cancel the admission or not to admit a student;
- e) Cancellation of University Scholarship; and
- f) Expel or rusticate a student for a specific period or for good.

2) THE DEAN OF A FACULTY MAY:

- a) Fine a student up to **Rs. 3000/-** for each / single offence; and
- b) Expel a student from the relevant Faculty for fifteen **(15)** days.

3) THE CHAIRMAN/ CHAIRPERSON/ DIRECTOR/ INCHARGE OF TEACHING DEPARTMENT OF UNIVERSITY MAY:

- a) Fine a student up to **Rs. 1000/-** for each / single offence; and
- b) Expel a student from the relevant Department for a period of one week.

4) THE PROVOST MAY:

- a) Fine a student up to **Rs. 1000/-** for each / single offence; and
- b) Expel a student from a Hall or Hostel for a specific period or for good.

5) THE DEAN OF A FACULTY MAY:

The Discipline Committee of the University shall deal with such serious cases of indiscipline as may be referred to it by the Vice-Chancellor and punishment in such cases shall be imposed on consideration of the recommendation of the Committee. Provided that no punishment shall be imposed without giving an opportunity to the student concerned to Show Cause and a chance to hear and defend him / her, if he / she so desires.

RULES OF ADMISSION (IPRS) & IPM&R:

ELIGIBILITY CRITERIA:

- 1) The admission in the course of Doctor of Physiotherapy will purely be on merit basis. Those candidates who have passed the Higher Secondary School Certificate (HSC) Examinations (Pre-Medical Group) or 'A' level (Pre-Medical) secured at least **60%** marks in aggregate from any Board of Higher Secondary Education in Pakistan or any Institution from Foreign Countries duly recognized by Inter-Board Committee of Chairman (IBCC) are eligible to apply for the DPT Admission.
- 2) **The** candidate should be permanent Resident of any District of Sindh.

FORMULA FOR WORKING OUT THE OVERALL MERIT:

- | | |
|--|----------------------|
| a) HSC (Pre-Medical)/ Equivalent Examination | 50% weightage |
| b) Entry Test | 50% weightage |
-
- 1) Once option exercised for admission will be final and there will be no change in the admission category from "Self Finance "or" Foreign National" to District Merit but in case the candidate who is finally declared for provisional selection under District Merit/Self Finance Category, if, he/she leaves/ withdraws from provisional selection or incase such seat under same category falls vacant during the period, before or up to 45 days same shall be filled by admitting next candidate in accordance with merit of that category and if any seat falling vacant after period of 45 days, it shall not be filled and same shall stand vacant/ forfeited.
 - 2) The period of 45 days shall be countable from the commencement of classes of 1st year (1st Semester) of Academic Session 2023.
 - 3) The candidates who apply for admission on the basis of fake certificates/ documents and detected at any stage shall be liable to prosecution under criminal law and their admission shall be cancelled. Institute/ University reserve right to take legal action against the candidate.
 - 4) There is no rule of migration during the studies of DPT for transfer from IPRS to any other Public/Private Sector Institute/University of Sindh or transfer from other Public/Private Institute/ University of Sindh to IPRS LUMHS.

ALLOCATION OF ADMISSIONS SEATS OF IPRS

S #:	NAME OF DISTRICT	ADMISSIONS CATEGORIES			TOTAL SEATS
		DISTRICT MERIT	SELF-FINANCE	OVERSEAS	
1.	Badin	02			One Hundred (100) Seats
2.	Dadu	02			
3.	Ghotki	02			
4.	Hyderabad	04			
5.	Jacobabad	02			
6.	Jamshoro	04			
7.	Karachi	04			
8.	Kashmore @ Kandhkot	02			
9.	Khairpur Mirs	04			
10.	Larkana	04			
11.	Matiari	02			
12.	Mirpurkhas	02			
13.	Naushahro Feroz	02	38	02	
14.	Qamber @ Shahdadkot	02			
15.	Sanghar	02			
16.	Shaheed Benazirabad	04			
17.	Shikarpur	02			
18.	Sujawal	02			
19.	Sukkur	02			
20.	Tando Allahyar	02			
21.	Tando Mohammad Khan	02			
22.	Tharparkar	02			
23.	Thatta	02			
24.	Umerkot	02			
TOTAL		60	38	02	100

- NOTE: (I) UNIVERSITY RESERVES THE RIGHTS TO CHANGE IN ALLOCATION OF SEATS
 (II) Un-utilized vacant seats of Overseas categories converted into Self Finance and will be filled from waiting list of Self Finance candidates.

REQUIREMENT FOR ADMISSION ON OVERSEAS:

- 1) Those candidates whose Parents/ Guardian are working/ residing abroad are eligible to apply for admission in DPT on Overseas category.
- 2) Candidate's Parent/ Guardian must possess Domicile of Sindh Province.
- 3) Photocopy of Candidate's Residence Certificate of Foreign Country.
- 4) Photocopy of Candidate's and Father's/ Mother's Passport & Visa.
- 5) Application for admission on Overseas can be submitted on plain paper must be addressed to the Director Admissions, LUMHS Jamshoro along with Photocopy of Demand Draft of **US\$.2,400/- (US-DOLLARS)** in favor of Vice-Chancellor LUMHS Jamshoro.

NOTE:

- All the seats under District Merit, Self-Finance and Overseas categories will be filled as per Merit List.
- Applications for admissions on Self-finance and Overseas categories will be invited after display of first Merit List.

PRESCRIBED FEES SCHEDULE OF IPRS:

S.NO.	FEES HEAD	ADMISSION CATEGORY	FEE
01	Admission Fee	District Merit	Rs. 50, 000/-
		Self-Finance	Rs. 75, 000/-
		Overseas	US\$ 800/-
02	Semester/ Tuition Fee From 1 st to 10 th Semester (Each Semester)	District Merit	Rs. 70, 000/-
		Self-Finance	Rs. 140, 000/-
		Overseas	US\$ 1600/-
03	Library Fee (Per Semester)	FOR ALL ADMISSIONS CATEGORIES	Rs. 500/-
04	Transport Fee (Per Year)	FOR ALL ADMISSIONS CATEGORIES	Rs. 15000/-
05	Examination Fee (Per Semester)	FOR ALL ADMISSIONS CATEGORIES (District Merit, Self-Finance & Overseas)	Rs. 3050/-
06	I.D. Card Fee (One Time) <i>Note: Rs. 200/- will be charged for duplicate/ triplicate copy</i>	FOR ALL ADMISSIONS CATEGORIES (District Merit, Self-Finance & Overseas)	Rs. 500/-
07	Documents Verification fee	FOR ALL ADMISSIONS CATEGORIES (District Merit, Self-Finance & Overseas)	Rs. 2500/-
08	Sports (Per Semester)	FOR ALL ADMISSIONS CATEGORIES (District Merit, Self-Finance & Overseas)	600/-
NOTE: FEE ONCE PAID WILL NOT BE REFUNDED			

FEE RULES:

Once fee paid shall not be refunded, if, provisional selection made in the course of DPT under any category i.e. District Merit/ Self-Finance/ Overseas is cancelled before or up to 45 days, fee which is paid by the candidate shall be refunded.

After 45 days or closing of admission process, if, a candidate leaves/ withdraws from the admission/ studies of Doctor of Physiotherapy for any reason, He/ She will submit a Pay Order/ Demand Draft of **Rs.100,000/- (Rupees One Hundred Thousand only)** payable to the Institute of Physiotherapy & Rehabilitation Sciences LUMHS Jamshoro as a penalty for wasting of precious seat.

ADVANCE INCOME/ WITHHOLDING TAX:

As per Finance Act 2013, Income Tax Ordinance, 2001, under the section 236I every educational institution is required to collect advance income tax at the rate **5%** on the amount of fee paid to an educational institution. The person responsible for preparing monthly, bimonthly or quarterly fee voucher or challan shall also charge withholding tax in case the fee exceeds two hundred thousand rupees annually. The term fee includes tuition fee and all charges received by the educational institution, by whatever name called, excluding the amount which is refundable, therefore, "Withholding Tax" shall be charged and collected from the student/(s) on educational fee exceeds two hundred thousand annually.

INSTITUTE OF PHYSICAL MEDICINE & REHABILITATION

BILAWAL MEDICAL COLLEGE FOR BOYS, LUMHS JAMSHORO.



ALLOCATION OF ADMISSIONS SEATS OF IPM&R (BMC)

NO. OF SEATS ALLOCATED: 50 (FIFTY)

ADMISSION CATEGORY: *Provincial Open Merit under Self-Finance Scheme***NOTE:**

- (i) University/ BMC/ IPM&R reserves the rights to increase or decrease the seat/(s)
- (ii) Admission seats will be filled according to merit.

PRESCRIBED FEES SCHEDULE OF IPM&R:

S.NO.	FEES HEAD	FEE AMOUNT
01	Admission Fee (Once)	Rs. 75,000/-
02	Semester/ Tuition Fee (Each Semester)	Rs. 140,000/-
03	Library Fee (Per Semester)	Rs. 500/-
04	Transport Fee (Per Year)	Rs. 15000/-
05	Examination Fee (Per Semester)	Rs. 3050/-
06	I.D. Card Fee (Once) <i>Note: Rs. 200/- will be charged for duplicate/ triplicate copy</i>	Rs. 500/-
07	Documents Verification fee (Only at the time of admission)	Rs. 2500/-
08	Sports (Per Semester)	600/-

THERE WILL BE NO HOSTEL FACILITY FOR BMC.**FEE RULES:**

Once fee paid shall not be refunded, if, provisional selection made in the course of DPT is cancelled before or up to 45 days, fee which is paid by the candidate shall be refunded.

After 45 days or closing of admission process, if, a candidate leaves/ withdraws from the admission/ studies of Doctor of Physiotherapy for any reason, He/ She will submit a Pay Order/ Demand Draft of **Rs. 100,000/- (Rupees One Hundred Thousand only)** payable to the Institute of Physical Medicine & Rehabilitation (BMC) as a penalty for wasting of precious seat.

ADVANCE INCOME/ WITHHOLDING TAX:

As per Finance Act 2013, Income Tax Ordinance, 2001, under the section 236I every educational institution is required to collect advance income tax at the rate **5%** on the amount of fee paid to an educational institution. The person responsible for preparing monthly, bimonthly or quarterly fee voucher or challan shall also charge withholding tax in case the fee exceeds two hundred thousand rupees annually. The term fee includes tuition fee and all charges received by the educational institution, by whatever name called, excluding the amount which is refundable, therefore, "Withholding Tax" shall be charged and collected from the student/(s) on educational fee exceeds two hundred thousand annually.

FREESHIP:

(ONLY STUDENTS OF IPRS WILL BE ELIGIBLE TO APPLY SUBJECT TO FULFILLING THE CRITERIA):

1. Free-ship of fees means exemption of paying tuition fee only (full/half). The student who is granted full/ half free-ship of tuition fee shall be required to make full payment for all other subscription/ funds.
2. The Free-ship will grant from 2nd year.
3. Free ship whole/ half of the tuition fees can be allowed by free-ship committee not exceeding more than **10%** number of the discipline.
4. The grant of free-ship will depend upon the circumstance of the students to his/ her studies. Absence or failure from professional examination, breach of discipline, neglect of studies or reprehensible conduct shall bring about loss of concession.
5. Fresh application/(s) along with relevant document/(s) shall be invited every year from students they will be submitted through their respective departments.
6. After scrutiny of document/(s) by concerned department/ institute, interview will be conducted from eligible students at Directorate of Academics.
7. Free-ship will be granted on annual basis.
8. Student who is receiving any other scholarship will not be eligible for free-ship.
9. Student is studying in Self-Finance/ overseas basis will not be eligible.

ELIGIBILITY CRITERIA:

- a) Orphan Student or Single Parent
 - b) Poor Cum Merit-Basis
 - c) High Percentage or GPA**3+** (**EXCEPT TOP TEN POSITION HOLDERS**)
 - d) Parent/ Guardian's income should be up to **Rs. 50, 000/=** per month.
10. Sibling basis free-ship cases will be entertained.



COLLEGE OF PHARMACY

Mission:

The mission of the college of pharmacy, Liaquat University of Medical & Health Sciences is to educate, train and provide life-long learning opportunities for students, pharmacist and other health care professionals, while creating disseminating and applying new knowledge based on research in the field of pharmacy and clinical sciences to enhance the quality of life through improved health.

Vision.

College of Pharmacy, LUMHS strives to support the profession of pharmacy's vision for practice, research and education by providing an environment for development and appropriate use of medications for the welfare and safety of the public.



Scope of Pharmacy

a) Pharmaceutical industry:

An important career option in the Pharmacy is represented by pharmaceutical industry. Here, pharmacists are employed in manufacturing, product, development, research, quality control, quality assurance, marketing, sales and administration.

b) Hospital and other Institutional settings:

The expansion of health care needs the society to put the hospital pharmacist in a position to have direct involvement in the patient care, it also establishes the roles of Drug purchases, control, supply & distribution of drugs, management functions, system development and planning.

c) Managed care Pharmacy:

Managed care is a system designed to optimize patient care through greater coordination of medical and pharmaceutical services. Managed care pharmacy services are extended health delivery system services that provide the pharmaceutical care at the primary or preventive level.

d) Community/Retail Pharmacy:

This area involves the practice of pharmacy in community settings or retail outlets. Pharmacists, in the community settings are actively involved in educating patients, maintaining and monitoring drug records and providing information resource of highest caliber.

e) Other fields in Pharmacy:

Pharmacists use their basic educational background in a host of federal, state and professional positions. At the federal or provincial level, pharmacist hold post like drug inspectors, drug Controllers, Pharmacist at Drug Testing Laboratories and also as Commissioned officers in Pakistan Armed Forces. Pharmacists with interest and special talents in organizational work also guide several national professional associations. There are pharmacists with legal training who are serving as patent lawyers or as experts in pharmaceutical law.



MESSAGE OF PRINCIPAL

It is with great pleasure and enthusiasm that I extend my warmest greetings to you on behalf of College of Pharmacy. As the Administrator of our esteemed institution, I take immense pride in presenting to you our college prospectus.

At College of Pharmacy, we believe in the transformative power of education. We are committed to providing a nurturing and intellectually stimulating environment that empowers students to excel academically, grow personally, and become future leaders in their chosen fields. Our esteemed faculty Members emphasis on interactive teaching methodologies, research-based learning, and practical application of knowledge equips our graduates with the skills necessary to thrive in a competitive global landscape.

We understand the significance of real-world exposure and hands-on experience. Through our robust industry partnerships, internships, and experiential learning opportunities, students gain valuable insights, develop industry-relevant skills, and establish a strong network of professional contacts. I invite you to explore the pages of this prospectus to learn more about our college, its program, and the numerous opportunities that await you.

On behalf of the faculty, staff, and students of College of Pharmacy, I extend a warm invitation to visit our campus, meet our vibrant community, and witness the exceptional educational environment we offer.

Thank you for considering College of Pharmacy. We look forward to welcoming you and being part of your educational success story.

Warm regards,

Prof. Dr. Naheed Memon

Principal

College of Pharmacy

LUMHS Jamshoro

ELIGIBILITY CRITERIA

The minimum educational qualification of the candidate for the admission to first year Doctor of Pharmacy program is:

1. Those candidates who have passed the Higher Secondary School Certificate (HSC) Examinations (Pre-Medical Group) or 'A' level (Pre-Medical) secured at least 60% marks in aggregate from any Board of Higher Secondary Education in Pakistan or any Institution from Foreign Countries duly recognized by Inter-Board Committee of Chairman (IBCC) are eligible to apply for the Pharm-D.
2. Candidate for admission under the categories Merit/UEAP Self Finance/Overseas must be the permanent residence of Sindh province and have domicile of respective Districts of Sindh and his / her father must be holding domicile and PRC of same district or of Sindh Province, but not out of Sindh Province.
3. **Eligibility criteria for Overseas**
 - a) Secondary School Certificate/ O-level equivalent certificate from IBCC.
 - b) Equivalence Certificate of HSC (Pre-Medical) with a minimum 60% marks, from IBCC Islamabad.
 - c) Country Secondary School Certificate/ Marks Certificate of Intermediate examination Level
 - d) SAT-II examination score with minimum 550 marks in each of three subjects, of which two have to be Biology and Chemistry or MCAT with minimum aggregate score of 24.
 - e) Valid TOEFL OR IELTS with a score of 550 OR 5.5.
 - f) Candidate must be permanent resident of and have domicile of respective districts of Sindh Province and his/her father must also be holding domicile and PRC of same district or of Sindh Province, but not out of Sindh.
 - g) Candidate applying under the category of overseas Pakistani should submit the proof of his/ her father/ mother/ parents working outside Pakistan duly issued from the concerned Embassy or Consulate).

ALLOCATION OF SEATS

Total number of seats to be offered for admission in Doctor of Pharmacy is 80 (Eighty). 50 Seats are reserved for the candidates on District wise merit basis, 25 seats are reserved on University Education Assistance Program (UEAP/ Self Finance and 03 Seats for Overseas Pakistani under self-finance and 02 seats for Afghan nationals under HEC scholar ship.

S #.	NAME OF DISTRICT	ALLOCATION OF SEATS DISTRICT WISE		OVERSEAS	HEC SCHOLARSHIP FOR AFGHAN NATIONALS SEATS	TOTAL SEATS
		MERIT	UEAP SELF FINANCE			
1.	Hyderabad	5	1	03	02	(80) Eighty Seats
2.	Khairpur Mir's	4	1			
3.	Larkana	2	1			
4.	Shaheed Benazirabad (Nawabshah)	2	1			
5.	Mirpurkhas	3	1			
6.	Umerkot	1	1			
7.	Jamshoro	1	1			
8.	Badin	2	1			
9.	Dadu	2	1			
10.	Sukkur	2	1			
11.	Matiari	1	1			
12.	Tando Allahyar	1	1			
13.	Tando Muhammad Khan	1	1			
14.	Naushahro Feroze	2	1			
15.	Sanghar	4	1			
16.	Thatta	1	1			
17.	Shikarpur	2	1			
18.	Jacobabad	2	1			
19.	Qambar&Shahdadkot	2	1			
20.	Kashmore	1	1			
21.	Ghotki	2	1			
22.	Tharparkar	2	1			
23.	Sujawal	1	1			
24.	Karachi	4	2			
Total		50	25	03	02	80

NOTE: 1) University reserves the rights to decrease or increase any category of seats.

2) Un-utilized vacant seats of District wise Self Finance / Overseas categories will be converted into General Self Finance and will be filled from general waiting pool under Self Finance.

FEES SCHEDULE DOCTOR OF PHARMACY

FEES STRUCTURE FOR MERIT CATEGORY							
Annual	Semester System	Admission Fee	Tuition Fee	Misc. Fee	Transport Fee	Total (Per Semester)	Total (Per Year)
1st Professional	Semester-I	50,000	70,000	20,000	15,000	155,000	225,000
	Semester-II	-	70,000	-	-	70,000	
2nd Professional	Semester-III	-	70,000	20,000	15,000	105,000	175,500
	Semester-IV	-	70,000	-	-	70,000	
3rd Professional	Semester-V	-	70,000	20,000	15,000	105,000	175,500
	Semester-VI	-	70,000	-	-	70,000	
4th Professional	Semester-VII	-	70,000	20,000	15,000	105,000	175,500
	Semester-VIII	-	70,000	-	-	70,000	
5th Professional	Semester-IX	-	70,000	20,000	15,000	105,000	175,500
	Semester-X	-	70,000	-	-	70,000	

FEES STRUCTURE FOR UEAP SELF FINANCE CATEGORY							
Annual	Semester System	Admission Fee	Tuition Fee	Misc. Fee	Transport Fee	Total (Per Semester)	Total (Per Year)
1st Professional	Semester-I	75,000	140,000	40,000	15,000	270,000	410,000
	Semester-II	-	140,000	-	-	140,000	
2nd Professional	Semester-III	-	140,000	40,000	15,000	195,000	335,000
	Semester-IV	-	140,000	-	-	140,000	
3rd Professional	Semester-V	-	140,000	40,000	15,000	195,000	335,000
	Semester-VI	-	140,000	-	-	140,000	
4th Professional	Semester-VII	-	140,000	40,000	15,000	195,000	335,000
	Semester-VIII	-	140,000	-	-	140,000	
5th Professional	Semester-IX	-	140,000	40,000	15,000	195,000	335,000
	Semester-X	-	140,000	-	-	140,000	

Note: 5% Advanced Tax will be applicable as per Govt. Rules.

FEES STRUCTURE FOR OVERSEAS CATEGORY						
S.No.	Fees Structure	First Year	Second Year	Third Year	Fourth Year	Final Year
1.	Admission	\$500
2.	Tuition	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
TOTAL		\$3,500	\$3,000	\$3,000	\$3,000	\$3,000

NOTE: Transport Fee Rs.15000/- & Misc. Fee Rs.40000/ per year charged of Overseas candidates

HOSTEL FEE: Candidates are supposed to deposit hostel fees at the time of admission			
1.	Admission Fee	Per Year	Rs.2200/
2.	Room Rent Incl. Electric And Water Charges	Per Year	RS.4400/
3.	Identity Card Fee	Per Year	Rs.110/
4.	Hostel Maintenance and Repair non Govt.	Per Year	Rs.2640/
		1 st Year	Rs.9350/
		2 nd Year	Rs.9350/
TOTAL RS.18,700/			

01. HOSTEL FEE RATES CAN BE REVISED AS PER UNIVERSITY RULES

02. DOCUMENTS VERIFICATION FEE OF RS.2500/ WILL BE CHARGED AT THE TIME OF ADMISSION.

SPORTS GAMES

SPORTS/GAMES FEES:		
S. No.	Year	Amount
1.	First Year	Rs.2000/- Per Student
2.	Second year	Rs.1000/- Per student
3.	Third year	Rs.1000/- Per Student
4.	Fourth year	Rs.1000/- Per Student
5.	Fifth year	Rs.1000/- Per Student

NOTE: -

Sports / Games fee: candidates are supposed to deposit sports/ games fee at the time of admission.



RULES FOR PAYMENT OF FEE

- a. Once fees paid shall not be refunded, if, Provisional Selection in course of Pharm-D under any admission category i.e. District Merit/UEAP Self-Finance / Overseas is cancelled up to 45 days, fees which is paid by the candidate shall be refunded.
- b. Fee is subject to revision by the university at any time during the course of study and will be applicable at once for all years.
- c. Candidates selected for admission in 1year Pharm-D under any category will have to deposit fee within (03) days after display of final list, failing which their names will be cancelled without any notice no claim will be entertained.
- d. The student will have to pay the prescribed fee for the remaining years at the start of each session within stipulated time period, i.e. 15 days. The challan forms will be issued by the directorate of finance
- e. If any student fails to deposit fee/dues within stipulated time period shall not be eligible to appear in examination. If student appear in examination without clearing dues the controller of examination UG will be held responsible.
- f. In case student appeared in examination with the permission of the competent authority the controller of examination U.G will withheld the examination result till issuing of No Dues Certificate from Directorate of Finance.
- g. The Directorate of Finance will be responsible to collect the prescribed fee of remaining years from students, if any student fails to deposit the prescribed fee the Directorate of Finance will issue notice to the defaulter student.
- h. The Controller of Examination U.G will provide the examination record of the students to the Directorate of Finance on semester basis.
- i. The Directorate of Admission will provide the record of student to the Directorate of Finance for Issuance of notice on demand,
- j. Late payment of (semester) will be surcharged from those students who fail to pay their prescribed fee (Merit/UEAP Self-Finance and Overseas) within due date, at the rate of Rs. 2000/- per month from Self Finance Students, Rs.1000/- per month from Merit students and US\$ 100 per month from Overseas students.
- k. 50% concession in prescribed fee shall be allowed to children of regular employees of LUMHS Jamshoro, as per syndicate Resolution No.18.12 (4/b). dated 21.02.2009.
- l. 50% concession in prescribed fee shall also be allowed to children of retired teaching faculty members of this university in accordance with the Syndicate Resolution No.Syn-18.2(4/r- dated 21.02.2009.
- m. In case of misplace /loss of identity card RS.200 will be charged from student for re issuance of identity card.
- n. Convocation fee of Rs. 2000/- will be charged from students at the time of submission final year examination (Pharm-D 9th semester).
- o. Degree fee of Rs.2000/- will be charged from students at the time of submission of Examination form of final year (10th semester Pharm.-D.)
- p. After 45 days or closing the admission process, if, a candidate leaves/ withdraws before completing the Pharm-D Course for any reason, He/ She will submit a Pay Order/ DemandDraft of Rs. 2,50,000/- (Rupees Two Lacs and Fifty Thousand) only payable to College of Pharmacy (COP) LUMHS Jamshoro as a penalty for wasting a precious seat.

FEE FOR FAILURE/REPEATER STUDENTS.

- (i) In case of students who are admitted under semester system and are declared fail in one semester but passed the other semester of the same year, they will be charged half self finance fee.
- (iii) Repeater candidates admitted under regular general merit will be charged full fee.

ADVANCE INCOME/ WITHHOLDING TAX

As per Finance Act 2013, Income Tax Ordinance, 2001, under the section 2361 every educational institution is required to collect advance income tax at the rate 5% on the amount of fee paid to an educational institution. The person responsible for preparing monthly, bimonthly or quarterly fee voucher or challan shall also charge withholding tax in case the fee exceeds two hundred thousand rupees annually. The term fee includes tuition fee and all charges received by the educational institution, by whatever name called, excluding the amount which is refundable, therefore, "Withholding Tax" shall be charged and collected from the student/(s) on educational fee exceeds two hundred thousand annually.

FREE-SHIP FOR STUDENTS DOCTOR OF PHARMACY

- 1) Remission of tuition fee shall be considered for the students who are admitted only on the merit basis.
- 2) Remission of the whole or half of the tuition fees may be allowed by Free-ship Committee not exceeding than 10% number of students.
- 3) Remission of fees means exemption of paying tuition fee only full or half as the case may be. The students who are granted full/ half remission of tuition fee shall be required to make full payment for all other subscription/ fund.
- 4) The facility of Free-ship shall be on annual basis.
- 5) Application for remission shall be submitted by the students on the date to be fixed by free-ship committee. The application should be accompanied with Income certificate form D.C.Os or Mukhtiarkar (Revenue) of the concerned districts/taluka to which students belong.
- 6) Following students are eligible for free-ship.
 - a) Poverty cum merit basis.
 - b) Brother and sister basis or two brothers or two sisters in the University. (one will pay full fees and other is eligible for full free-ship of tuition fees.)

RULES OF MIGRATION

There is no rule of migration from the College to any other institute during the course of Pharm-D program.

COLLEGE LIBRARY RULES AND REGULATIONS

1. The Library and Reading Room shall remain open in the premises of COP on every working day during office hours.
2. Books / Journals will be issued to students only on deposit of their Seminar Library card.
3. Prescribed Text Books and reference books should only be read in the library.
4. Each student is entitled to borrow maximum two books for three days at a time.
5. All the books are to be returned in intact position and the clearance certificate from the Librarian of the College will be necessary at final semester examination.
6. Books are to be kept in good condition. No any marking is to be made inside the books. Any damage or loss of books will be recovered from the student.
7. Books should be returned within due date otherwise fine @ Rs.30/- per day will be charged.

ACADEMIC PROGRAM

a) SEMESTER SYSTEM

Integrated teaching and semester system has been introduced at the University. The semester system is a unique system in which education is imparted through a process where student's performance and progress is assessed through different types of tests / assignments; they earn degree on their cumulative performance throughout the program of the study.

b) ATTENDANCE OF THE STUDENTS:

- a) The University is determined to improve its teaching standards.
- b) The record of attendance is essential to determine eligibility of students for her/ his appearing the examination.
- c) Seventy five percent (75%) attendance is required to be eligible in the semester examination. However, 10% waiver (5% Waiver by Vice-Chancellor and 5% waiver by waiver committee) can be given on medical grounds or any other valid reason acceptable to the Vice-Chancellor and waiver committee.
- d) The candidate having attendance less than 65% shall not be eligible to appear in the semester examination and will be considered as fail in that particular semester but he/she will be allowed to move in the next semester as mentioned in the "Organization of Semester System".
- e) However, the candidate having attendance less than 40% shall not be eligible to appear in the re-sits semester examination. He / She shall appear with next junior batch after fulfilling the required attendance in that particular semester.

ORGANIZATION OF SEMESTER SYSTEM

- c) For award of degree, students must pass all the courses taught during five years education Pharm-D with minimum CGPA 2.0
- d) Promotion from one academic year to next higher academic year
- e) Policy of conducting re-sit (repeat) examination
- f) (Re-sit Examination will be conduct in the end of academic year).

FIRST AND SECOND SEMESTER EXAMINATIONS (1ST PROFESSIONAL)

First semester students who after appearing in first semester (Regular) examination, either declared pass or fail will be allowed promotion to second semester.

Upon promotion to second semester, students who have either passed or fail in first semester examination both will be allowed to appear in second semester examination, if the cases for third semester are commenced, students of second semester (either passed or failed in first semester) will be allowed to attend the classes of third semester.

After announcement of second semester examination result, students of first and second semester will fall in the following groups.

- a) Passed first and second semester
- b) Passed second semester but failed in first semester
- c) Passed first semester but failed in second semester
- d) Failed in both semester

Students under category b, c, and d will be allowed re-sit examination of first and second semester simultaneously while they remain under study process of third semester.

After announcement of re-sit examination result of both first and second semester, the students will be bifurcated into the following groups.

- 1) Students who passed first and second semester examinations completely, they will continue in third semester.
- 2) Students who failed in first or second semester or both examinations shall be reverted i-e termed back to first semester or in second or both junior batch.
Above group of students of pharm-D after term back will repeat the failed subject(s) of semester I or II or both with junior batch.

Important Note:

Any students, who fail of or pass the First Professional Exam in five chances availed or un-availed, shall cease to pursue further Pharmacy Education.

THIRD AND FOURTH SEMESTER EXAMINATIONS (2ND PROFESSIONAL)

Third semester students who after appearing in third semester (Regular) examination, either declared pass or fail will be allowed promotion to Fourth semester.

Upon promotion to fourth semester, students who have either passed or failed in third semester examination both will be allowed to appear in fourth semester examination, pending result of fourth semester examination, if the cases for fifth semester are commenced, students of fourth semester (either passed or failed in third semester) will be allowed to attend the classes of Fifth semester.

After announcement of Fourth semester examination result, students of Third and Fourth semester will fall in the following groups.

- a) Passed Third and Fourth semester
- b) Passed Fourth semester but failed in Third semester
- c) Passed Third semester but failed in Fourth semester
- d) Failed in both semester

Students under category b, c, and d will be allowed re-sit examination of Third and Fourth semester simultaneously while they remain under study process of Fifth semester.

After announcement of re-sit examination result of both Third and Fourth semester, the students will be bifurcated into the following groups.

- 1) Students who passed Third and Fourth semester examinations completely, they will continue in Fifth semester.
- 2) Students who failed in Third or in Fourth semester or both examinations shall be reverted i-e termed back to Third semester or in Fourth or both with junior batch.

Above group of students of Pharm-D after termed back will repeat the failure subjects of Third and Fourth or both with junior batch.

FIFTH AND SIXTH SEMESTER EXAMINATIONS (3RD PROFESSIONAL)

Fifth semester students who after appearing in Fifth semester (Regular) examination, either declared pass or fail will be allowed promotion to Sixth semester.

Upon promotion to Sixth semester, students who have either passed or failed in Fifth semester examination both will be allowed to appear in Sixth semester examination, pending result of Sixth semester examination, if the classes for Seventh semester are commenced, students of Sixth semester (either passed or failed in Fifth semester) will be allowed to attend the classes of Seventh semester.

After announcement of Sixth semester examination result, students of Fifth and Sixth semester will fall in the following groups.

- a) Passed Fifth and Sixth semester
- b) Passed Sixth semester but failed in Fifth semester
- c) Passed Fifth semester but failed in Sixth semester
- d) Failed in both semester

Students under category b, c, and d will be allowed re-sit examination of Fifth and Sixth semester simultaneously while they remain under study process of Seventh semester.

After announcement of re-sit examination result of both Fifth and Sixth semester, the students will be bifurcated into the following groups.

- 1) Students who passed Fifth and Sixth semester examinations completely, they will continue in Seventh semester.
- 2) Students who failed in Fifth or in Sixth semester or both examinations shall be reverted to Fifth semester or in Sixth or both with junior batch.
Above group of students of Pharm-D after termed back will repeat the failure subjects of Fifth and Sixth or both with junior batch.

SEVENTH AND EIGHTH SEMESTER EXAMINATIONS (4TH PROFESSIONAL)

Seventh semester students who after appearing in Seventh semester (Regular) examination, either declared pass or fail will be allowed promotion to Eighth semester.

Upon promotion to Eighth semester, students who have either passed or failed in Seventh semester examination both will be allowed to appear in Eighth semester examination, pending result of Eighth semester examination, if the classes for Ninth semester are commenced, students of Eighth semester.

After announcement of Eighth semester examination result, students of Seventh and Eighth semester will fall in the following groups.

- a) Passed Seven and Eighth semester
- b) Passed Eighth semester but failed in Seventh semester
- c) Passed Seventh semester but failed in Eighth semester
- d) Failed in both semester

Students under category b, c, and d will be allowed re-sit examination of Seventh and Eighth semester simultaneously while they remain under study process of Ninth semester.

After announcement of re-sit examination result of both Seventh and Eighth semester, the students will be bifurcated into the following groups.

- 1) Students who passed Seventh and Eighth semester examinations completely, they will continue in Ninth semester.
- 2) Students who failed in Seventh or in Eighth semester or both examinations shall be reverted i.e. termed back to Seventh semester or in Eighth or both with junior batch.

Above group of students of Pharm-D after termed back will repeat the failure subjects of Seventh and Eighth or both with junior batch.

NINTH AND TENTH SEMESTER EXAMINATIONS (5TH PROFESSIONAL)

Ninth semester students who after appearing in Ninth semester (Regular) examination, either declared pass or fail will be allowed promotion to Tenth semester.

Upon promotion to Tenth semester, students who have either passed or failed in Ninth semester examination both will be allowed to appear in Tenth semester examination.

After announcement of Tenth semester examination result, students of Ninth and Tenth semester will fall in the following groups.

- a) Passed Ninth and Tenth semester
- b) Passed Tenth semester but failed in Ninth semester
- c) Passed Ninth semester but failed in Tenth semester
- d) Failed in both semester

Students under category a will be declared to have passed Pharm-D examination completely and shall be awarded degree.

Students under category b, c, and d will be allowed re-sit examination of Ninth and Tenth semester simultaneously while they remain under study process of Ninth semester.

After announcement of re-sit examination result of both Ninth and Tenth semester, the students will be bifurcated into the following groups.

- 1) Students who passed Ninth and Tenth semester examinations completely, they will be Declared to have passed Pharm-D examination and shall be awarded degree.
- 2) However in case of failures in either Ninth or tenth semester they will be allowed to appear in re-sit examination will continue to repeat failure subjects with junior batch till they completely pass Pharm-D examination.

CURRICULUM

1ST PROFESSIONAL PHARM-D

1 ST Semester			2 ND Semester		
Course #	Subject	Cr. Hr.	Course.#	Subject	Cr. Hr.
300	English-A (Functional English)	2	301	English-B (Communication & writing skills)	4
Pharm-310	Pharmaceutics-IA (physical pharmacy) Th.	3	Pharm- 320	Pharmaceutics-IB (physical pharmacy) Th.	3
Pharm-311	Pharmaceutics-IA (physical pharmacy) Lab.	1	Pharm- 321	Pharmaceutics-IB (physical pharmacy) Lab.	1
Pharm-312	Pharmaceutical Chemistry-IA (organic) Th.	3	Pharm- 322	Pharmaceutical Chemistry-IB (organic) Th	3
Pharm-313	Pharmaceutical Chemistry-IA (organic)Lab.	1	Pharm- 323	Pharmaceutical Chemistry-IB (organic) Lab	1
Pharm-314	Pharmaceutical Chemistry-IIA (Biochemistry) Th.	3	Pharm-324	Pharmaceutical Chemistry-IIB (Biochemistry) Th.	3
Pharm-315	Pharmaceutical Chemistry-IIA (Biochemistry) Lab.	1	Pharm- 325	Pharmaceutical Chemistry-IIB (Biochemistry) Lab.	1
Pharm-316	Physiology-A Th.	3	Pharm- 326	Physiology-B Th.	3
Pharm-317	Physiology-A Lab	1	Pharm-327	Physiology-B Lab.	1
Pharm-318	Anatomy & Histology Th.	3			
Pharm-319	Anatomy & Histology Lab.	1			
	Total Cr. Hr.	22	Total Cr. Hr.	Total Cr. Hr.	20

CURRICULUM

2ND PROFESSIONAL PHARM-D

1 ST Semester			2 ND Semester		
Course #	Subject	Cr. Hr.	Course.#	Subject	Cr. Hr.
IS 402	Islamic Studies	3	PS 403	Pakistan Studies	2
Pharm- 410	Pharmaceutics-IIA (Dosage from sciences) Th.	3	Pharm- 420	Pharmaceutics-IIB (Dosage from sciences) Th	3
Pharm- 411	Pharmaceutics-IIA (Dosage from sciences) Lab.	1	Pharm- 421	Pharmaceutics-IIB (Dosage from sciences) Lab.	1
Pharm- 412	Pharmaceutics-IIIA (Pharmaceutical Microbiology and Immunology) Th.	3	Pharm- 422	Pharmaceutics-IIIB (Pharmaceutical Microbiology and Immunology) Th.	3
Pharm- 413	Pharmaceutics-IIIA (Pharmaceutical Microbiology and Immunology) Lab.	1	Pharm- 323	Pharmaceutics-IIIB (Pharmaceutical Microbiology and Immunology) Lab.	1
Pharm- 414	Pharmacology and Therapeutics-IA Th.	3	Pharm- 424	Pharmacology and Therapeutics-IB Th.	3
Pharm- 415	Pharmacology and Therapeutics-IA Lab.	1	Pharm- 425	Pharmacology and Therapeutics-IB Lab.	1
Pharm- 416	Pharmacognosy-IA (Basic) Th.	3	Pharm- 426	Pharmacognosy-IB (Basic) Th.	3
Pharm- 417	Pharmacognosy-IA (Basic) Lab	1	Pharm- 327	Pharmacognosy- IB(Basic) Lab.	1
Pharm- 418	Pharmacy Practice-IA (Pharmaceutical Mathematics)	3	Pharm- 428	Pharmacy Practice-IB (Bio-Statistics)	3
	Total Cr. Hr.	22	Total Cr. Hr.	Total Cr. Hr.	21

CURRICULUM

3RD PROFESSIONAL PHARM-D

1 ST Semester			2 ND Semester		
Course #	Subject	Cr. Hr.	Course.#	Subject	Cr. Hr.
Pharm-510	Pharmacy Practice-IIA (Dispensing Pharmacy) Th.	3	Pharm- 520	Pharmacy Practice-IIB (Community Social and Administrative Pharmacy) Th.	3
Pharm-511	Pharmacy Practice-IIA (Dispensing Pharmacy) Lab.	1	Pharm- 522	Pharmaceutical Chemistry- IIIB (Pharmaceutical Analysis) Th.	3
Pharm-512	Pharmaceutical Chemistry-III A (Pharmaceutical Analysis) Th.	3	Pharm- 523	Pharmaceutical Chemistry- IIIB (Pharmaceutical Analysis) Lab.	1
Pharm-513	Pharmaceutical Chemistry-III A (Pharmaceutical Analysis) Lab.	1	Pharm- 524	Pharmacology and Therapeutics-IIB Th.	3
Pharm-514	Pharmacology and Therapeutics-IIA Th.	3	Pharm- 525	Pharmacology and Therapeutics-IIB Lab.	1
Pharm-515	Pharmacology and Therapeutics-IIA Lab.	1	Pharm- 526	Pharmacognosy-IIB (Advanced) Th.	3
Pharm-516	Pharmacognosy-IIA (Advanced) Th.	3	Pharm- 527	Pharmacognosy-IIB (Advanced) Lab.	1
Pharm-517	Pharmacognosy-IIA (Advanced) Lab	1	Pharm- 528	Pharmacy Practice-III (Computer and its applications in Pharmacy) TH.	3
Pharm-518	Pathology Th.	3	Pharm- 529	Pharmacy Practice-III (Computer and its applications in Pharmacy) Lab.	1
Pharm-519	Pathology Lab.	1			
	Total Cr. Hr.	20	Total Cr. Hr.	Total Cr. Hr.	19

CURRICULUM

4TH PROFESSIONAL PHARM-D

1 ST Semester			2 ND Semester		
Course #	Subject	Cr. Hr.	Course.#	Subject	Cr. Hr.
Pharm- 610	Pharmacy Practice-IVA (Hospital Pharmacy) Th.	3	Pharm- 620	Pharmacy Practice-IVB (Hospital Pharmacy) Th.	3
Pharm- 612	Pharmacy Practice-VA (Clinical Pharmacy) Th.	3	Pharm- 622	Pharmacy Practice-VB (Clinical Pharmacy) Th.	3
Pharm- 613	Pharmacy Practice-VA (Clinical Pharmacy) Lab.	1	Pharm- 623	Pharmacy Practice-VB (Clinical Pharmacy) Lab.	1
Pharm- 614	Pharmaceutics -IVA (Industrial Pharmacy) Th.	3	Pharm- 624	Pharmaceutics -IVB (Industrial Pharmacy) Th.	3
Pharm- 615	Pharmaceutics- IVA (Industrial Pharmacy) Lab.	1	Pharm- 625	Pharmaceutics- IVB (Industrial Pharmacy) Lab.	1
Pharm- 616	Pharmaceutics - VA (Bio Pharmaceutics & Pharmacokinetics) Th.	3	Pharm- 626	Pharmaceutics - VB (Bio Pharmaceutics & Pharmacokinetics) Th.	3
Pharm- 617	Pharmaceutics - VA (Bio Pharmaceutics & Pharmacokinetics) Lab.	1	Pharm- 627	Pharmaceutics - VB (Bio Pharmaceutics & Pharmacokinetics) Lab.	1
Pharm- 618	Pharmaceutics -VIA (Pharmaceutical Quality Management) Th.	3	Pharm- 628	Pharmaceutics -VIB (Pharmaceutical Quality Management) Th.	3
Pharm- 619	Pharmaceutics -VIA (Pharmaceutical Quality Management) Lab.	1	Pharm- 629	Pharmaceutics -VIB (Pharmaceutical Quality Management) Lab	1
Total Cr. Hr.		19	Total Cr. Hr.	Total Cr. Hr.	19

CURRICULUM

5TH PROFESSIONAL PHARM-D

1 ST Semester			2 ND Semester		
Course #	Subject	Cr. Hr.	Course.#	Subject	Cr.Hr.
Pharm-710	Pharmaceutics-VIIA (Pharmaceutical Technology) Th.	3	Pharm-720	Pharmaceutics-VIIB (Pharmaceutical Technology) Th.	3
Pharm-711	Pharmaceutics-VIIA (Pharmaceutical Technology) Lab.	1	Pharm-721	Pharmaceutics-VIIB (Pharmaceutical Technology) Lab.	1
Pharm-712	Pharmacy Practice-VIA Clinical Pharmacy- II (Advanced) Th.	3	Pharm-722	Pharmacy Practice-VIB Clinical Pharmacy- II (Advanced) Th.	3
Pharm-713	Pharmacy Practice-VIA Clinical Pharmacy- II (Advanced) Lab.	1	Pharm-723	Pharmacy Practice-VIB Clinical Pharmacy- II (Advanced) Lab.	1
Pharm-714	Pharmacy Practice-VIIA Forensic Pharmacy Th.	3	Pharm-724	Pharmacy Practice-VIIB Forensic Pharmacy Th.	3
Pharm-716	Pharmacy Practice-VIIIA Pharmaceutical Management & Marketing) Th.	3	Pharm-726	Pharmacy Practice-VIIIB Pharmaceutical Management & Marketing) Th.	3
Pharm-718	Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th.	3	Pharm-728	Pharmaceutical Chemistry-IVA (Medicinal Chemistry) Th.	3
Pharm-719	Pharmaceutical Chemistry-IVA (Medicinal Chemistry)Lab.	1	Pharm-729	Pharmaceutical Chemistry-IVA (Medicinal Chemistry)Lab.	1
Total Cr. Hr.		18	Total Cr.Hr.	Total Cr. Hr.	18

Pharm-D Five Year Credit Hours Summary

Pharm-D Professional	1 ST Semester Cr. Hr.	2 nd Semester Cr. Hr.	Total Cr. Hr.
1 ST	22	20	42
2 ND	22	21	43
3 RD	20	19	39
4 TH	19	19	39
5 TH	18	18	36
Total Credit Hours	101	97	198

TEACHING FACULTY
College of Pharmacy

<u>NAME</u>	<u>PICTURE</u>	<u>NAME</u>	<u>PICTURE</u>
Prof. Dr. Naheed Memon Ph. D (Pharmaceutics) Principal		Dr. Syed Shafquat Ali Shah M.Phil (Pharmaceutics) Ph.D (Pharmacognosy) Lecturer	
Dr. Raheela Afzal Shaikh Ph.D (Pharmaceutics) MBA (General Management) Assistant Professor		Dr. Asif Soomro Ph.D (Pharmaceutics) Lecturer	
Dr. Ahsan Ali Memon M.Phil(Pharmacology) MBA-HR, Ph.D * (Analytical Chemistry) Assistant Professor		Dr. Syed Mubashir Shah Ph.D (Pharmaceutics) Lecturer	
Dr. Sadaf Hayat Laghari M.Phil, Ph.D* (Pharmaceutics), Assistant Professor		Dr. Maira Ahsan Memon M.Phil (Pharmaceutics) Ph.D* (Pharmacy Practice) Lecturer	
Dr. Izhaar Mirani M.Phil (Pharmacology) Assistant Professor		Dr. Hetesh Kumar Ph.D* (Pharmaceutics) MBA (Marketing) Lecturer	
Dr. Bilal Mustafa Memon PhD (Pharmaceutical Sciences, France), M.Phil (Health Sciences, France)		Dr. Komal Zaman M.Phil (Pharmaceutics),Ph.D* (Pharmacy Practice) Lecturer	
Dr. Danish Patoli Post-doc(France),PhD (Life Sciences,France)		Dr. Dr. Bilal Memon MSc (Neuroscience, Malaysia), Pharm-D	

TEACHING FACULTY
College of Pharmacy

NAME

Dr. Shereen Burghuri

Ph.D* (Pharmaceutics)

Teaching Assistant

Dr. Moin Ahmed Nonari

Pharm.D, M.Phil*

(Pharmacognosy)

Teaching Assistant

Dr. Imran Ali

M.Phil* (Pharmacology)

Teaching Assistant

Dr. Safia Laghari

M.Phil*

(Pharmacology)

Pharm.D

Teaching Assistant

Dr. Rehana

Pharm.D

Teaching Assistant

Dr. Arshi

Pharm.D

Teaching Assistant

Dr. Farzana Qaiser

Pharm.D

Teaching Assistant

Dr. Mahesh Kumar

Pharm. D

Teaching Assistant

PEOPLES NURSING SCHOOL



ADMINISTRATION COMMITTEE

Prof. Dr. Ikram Din Ujjan
Vice Chancellor / Chairman
Liaquat University
of Medical & Health Sciences, Jamshoro

MEMBER

Prof. Dr. Munawar Alam Ansari
Dean
Faculty of Community Medicine & Public Health Sciences,
LUMHS, Jamshoro

Prof. Dr. Samreen Memon
Director Academics LUMHS, Jamshoro

Dr. Haji Muhammad Shaikh
Registrar LUMHS, Jamshoro

Ms. Parveen Akhter
Director
PNS, LUMHS, Jamshoro

Ms. Preesa Bhutto
Director Admission LUMHS, Jamshoro

Dr. Sajjan Halepoto
Director Student Affairs LUMHS, Jamshoro

FACULTY PEOPLE'S NURSING SCHOOL

Director Nursing
 Ms. Parveen Akhter
 MPH, PhD
 People's Nursing school (PNS)

Ms. Musarat Fatima
 Assistant Professor
 PNS, LUMHS, Jamshoro

Ms. Victoria Samar
 Assistant Professor
 PNS, LUMHS, Jamshoro

Mr. Amanullah Rind
 Senior Lecturer /
 Deputy Director(Admin)
 PNS, LUMHS, Jamshoro

Mr. Muhammad Bakhsh
 Lecturer, Pak. Studies
 PNS, LUMHS, Jamshoro

Mr. Mairaj Hafeez Chang
 Lecturer
 PNS, LUMHS, Jamshoro

Ms. Fatima Soomro
 Lecturer
 PNS, LUMHS, Jamshoro

Ms. Khushboo Chandio
 Lecturer (Contract)
 PNS, LUMHS, Jamshoro

Ms. Hussan Bano Channar
 Assistant Professor
 PNS, LUMHS, Jamshoro

Ms. Shaneela Sadruddin
 Assistant Professor
 PNS, LUMHS, Jamshoro

Ms. Rubina Margrate
 Senior Lecturer
 PNS, LUMHS, Jamshoro

Mr. Manzoor Ali Janveri
 Lecturer, Sociology
 PNS, LUMHS, Jamshoro

Mr. Mansoor-ul-Haq Nohri
 Lecturer
 PNS, LUMHS, Jamshoro

Ms. Amber Halepoto
 Lecturer
 PNS, LUMHS, Jamshoro

Mr. Abdul Hameed Bacho
 Teaching Assistant
 PNS, LUMHS, Jamshoro

INTRODUCTION

The people's Nursing School, LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES, JAMSHORO (LUMHS) is the first ever public sector Nursing School in Pakistan started Four Years BS Nursing Generic Degree Program to provide quality Nursing Education to deserving students. It is fully equipped with all necessary equipment and furniture according to the need of modern nursing profession.

MISSION STATEMENT AND VISION

To provide quality education to students, to groom their personality and teach them sense of responsibility, confidence, commitment and dedication toward their profession, community and society at national as well as at global level to provide better health care to the community.

OBJECTIVES:

- To prepare highly qualified nurses to meet the future challenges to provide the highest quality nursing care.
- To provide leadership in nursing education, administration and research.
- To prepare nursing human resources to pursue higher education at accredited universities throughout the world.

ACADEMIC PROGRAM

People's Nursing School, LUMHS, Jamshoro - Sindh PAKISTAN, offers a four years course of study which leads to BS Nursing Degree.

SEMESTER SYSTEM

Integrated teaching and semester system has been introduced at the University. The semester system is a unique system in which education is imparted through a process where student's performance and progress is assessed through different types of tests / assignments; they earn degree on their cumulative performance throughout the program of the study.

REGISTRATION OF PAKISTAN NURSING COUNCIL

BSN degree Program is registered with Pakistan Nursing council (PNC), Islamabad as per their Rules & Regulations

GENERIC BSN (04 YEARS DEGREE PROGRAM)

- Qualification: (Subjects) a. Matric Science (Physics, Chemistry & Biology as compulsory
b. Intermediate (Pre-Medical) with 50% marks minimum
(Physics, Chemistry & Biology as compulsory subjects)
- Age Limit: (14 – 35 Years)
- Gender Ration: 50% Male and 50% Female

COURSE OUTLINES

FIRST YEAR Semester-I			Credit Hours	Credit Hours		Total Credit Hours
Sr. #	Course Code	Course Name	Theory	Clinical	Skills / Lab	
1	BSNG 01-1-1	Fundamental of Nursing -I	2	---	2	4
2	BSNG 02-1-1	Microbiology	2.5	---	0.5	3
3	BSNG 03-1-1	Anatomy & Physiology- I	3	---	0	3
4	BSNG 04-1-1	Biochemistry for Nurses	2	---	1	3
5	BSNG 05-1-1	English-I (Functional)	2	---	---	2
6	BSNG 06-1-1	Computer Skills	---	---	1	1
TOTAL CREDIT HOURS			11.5	--	4.5	16

FIRST YEAR Semester-II			Credit Hours	Credit Hours		Total Credit Hours
Sr. #	Course Code	Course Name	Theory	Clinical	Skills / Lab	
1	BSNG 01-1-2	Fundamental of Nursing-II	2	1	1	4
2	BSNG 03-1-2	Anatomy & Physiology-II	3	---	---	3
3	BSNG 07-1-2	Community Health Nursing-I	2	1	---	3
4	BSNG 08-1-2	Applied Nutrition	1	---	---	1
5	BSNG 05-1-2	English-II (Communication Skills)	2	---	---	2
6	BSNG 09-1-2	Islamiyat	2	---	---	2
7	BSNG 10-1-2	Pakistan Studies	2	---	---	2
TOTAL CREDIT HOURS			14	2	1	17

SECOND YEAR Semester-III			Credit Hours	Credit Hours		Total Credit Hours
Sr. #	Course Code	Course Name	Theory	Clinical	Skills / Lab	
1	BSNG 11-2-3	Adult Health Nursing-I	4	3	1	8
2	BSNG 12-2-3	Pathophysiology-I	1. 75	---	0.25	2
3	BSNG 13-2-3	Health Assessment-I	1	---	1	2
4	BSNG 14-2-3	Pharmacology- I	2	---	---	2
5	BSNG 15-2-3	Mathematics	1	---	---	1
6	BSNG 05-2-3	English-III	2	---	---	2
TOTAL CREDIT HOURS			11.75	3	2.25	17

SECOND YEAR Semester-IV			Credit Hours	Credit Hours		Total Credit Hours
Sr. #.	Course Code	Course Name	Theory	Clinical	Skills / Lab	
1	BSNG 11-2-4	Adult Health Nursing-II	4	3	1	8
2	BSNG 12-2-4	Pathophysiology-II	2.75	---	0.25	3
3	BSNG 13-2-4	Health Assessment-II	1	---	1	2
4	BSNG 14-2-4	Pharmacology-II	2	---	---	2
5	BSNG 16-2-4	Developmental Psychology	2	---	---	2
6	BSNG 05-2-4	English-IV	2	---	---	2
7	BSNG 17-2-4	Nursing Ethics	1	---	---	1
TOTAL CREDIT HOURS			14.75	3	2.25	20

THIRD YEAR Semester-V			Credit Hours	Credit Hours		Total Credit Hours
Sr. #	Course Code	Course Name	Theory	Clinical	Skills / Lab	
1	BSNG 18-3-5	Pediatric Health Nursing	3	3	1	7
2	BSNG 07-3-5	Community Health Nursing-II	2.5	2.5	1	6
3	BSNG 19-3-5	Teaching Learning Principles & Practices	3	---	---	3
4	BSNG 05-3-5	English-V	2	---	---	2
TOTAL CREDIT HOURS			10.5	5.5	2	18

THIRD YEAR Semester-VI			Credit Hours	Credit Hours		Total Credit Hours
Sr. #	Course Code	Course Name	Theory	Clinical	Skills / Lab	
1	BSNG 20-3-6	Mental Health Nursing	3	3	---	6
2	BSNG 21-3-6	Introduction to Biostatistics	2.5	---	0.5	3
3	BSNG 22-3-6	Behavioral Psychology	3	---	---	3
4	BSNG 23-3-6	Epidemiology	2	---	---	2
5	BSNG 05-3-6	English-VI (Academic Writing)	2	---	---	2
6	BSNG 24-3-6	Culture, Health & Society	2	---	---	2
TOTAL CREDIT HOURS			14.5	3	0.5	18

FOURTH YEAR Semester-VII			Credit Hours	Credit Hours		Total Credit Hours
Sr. #	Course Code	Course Name	Theory	Clinical	Skills / Lab	
1	BSNG 25-4-7	Critical Nursing Care	2.5	4	0.5	7
2	BSNG 26-4-7	Introduction to Nursing Theories	2	---	---	2
3	BSNG 27-4-7	Leadership & Management in Nursing	2	1	---	3
4	BSNG 28-4-7	Nursing Research	3	---	---	3
5	BSNG 05-4-7	English-VII (Professional Writing)	2	---	---	2
TOTAL CREDIT HOURS			11.5	5	0.5	17

FOURTH YEAR Semester-VIII			Credit Hours	Credit Hours		Total Credit Hours
Sr. #	Course Code	Course Name	Theory	Clinical	Tutorial	
1	BSNG 07-4-8	Community Health Nursing-III	2	3	---	5
2	BSNG 29-4-8	Nursing Seminars / Role Transition	2	---	---	2
3	BSNG 30-4-8	Clinical Practicum	---	4	1	5
4	BSNG 05-4-8	English-VIII (Writing for Research Report)	2	---	---	2
TOTAL CREDIT HOURS			6	7	1	14

TOTAL CREDIT HOURS (4 YEARS PROGRAM)

137

ALLOCATION OF SEATS

NUMBER OF SEATS (100)

SINDH PROVINCE NUMBER OF SEATS -90

CATEGORY			
Merit		Self Finance	
Female	Male	Female	Male
25	25	20	20

OTHER PROVINCE NUMBER OF SEATS - 10

CATEGORY		
Self Finance		
Province	Female	Male
Punjab	01	01
Khyber Pakhtunkhwa	01	01
Baluchistan	01	01
Azad Jammu & Kashmir	01	01
FATA/ FANA	01	01
Total	05	05

NOTE:

1. All admission seats shall be filled on merit basis.
2. If any seat of District Merit lying vacant, shall be filled from the upper General Merit Waiting Pool from all districts of Province Sindh on merit basis.
3. If any seat of Other Province Lying vacant, shall be filled from upper General waiting under self finance of Sindh Province candidates.

UNIFORM

- a) White apron with maroon color piping in campus
- b) Pakistan Nursing Council's prescribed Uniforms during the clinical practice in the wards

GIRLS

White shirt White Shalwar
White Dopata White Apron Black Shoes

BOYS

White Shirt white Paint
White Apron Black Shoes

**SINDH PROVINCE DISTRICT OPEN MERIT QUOTA
TOTAL (50) SEATS**

Sr. No.	District Quota	Open Merit Female	Open Merit Male
1	Karachi	2	2
2	Badin	1	1
3	Dadu	1	1
4	Ghotki	1	1
5	Hyderabad	1	1
6	Jacobabad	1	1
7	Jamshoro	1	1
8	Kashmor	1	1
9	Khairpur Mirs	1	1
10	Larkana	1	1
11	Matiari	1	1
12	Mirpurkhas	1	1
13	Naushahro Feroz	1	1
14	Qambar @ Shahdadkot	1	1
15	Sanghar	1	1
16	Shaheed Benazirabad	1	1
17	Shikarpur	1	1
18	Sijawal	1	1
19	Sukkur	1	1
20	Tando Allah Yar	1	1
21	Tando Muhammad Khan	1	1
22	Tharparkar	1	1
23	Thatta	1	1
24	Umarkot	1	1
TOTAL		25	25

FEE STRUCTURE

BS Nursing Degree Program

MERIT FEE STRUCTURE				
FEES (Merit Basis)	1 st Year	2 nd Year	3 rd Year	4 th Year
Admission Fees	30,000	-	-	-
PNC Enrollment Fees	2,000	-	-	-
Tuition Fees	20,000	20,000	20,000	20,000
Transport Fees	15,000	15,000	15,000	15,000
Misc. Fees	20,000	20,000	20,000	20,000
Documents Verification Fee	2500	----	----	---
Sports Fees	2000	1000	1000	1000
SUB TOTAL	91,500	56,000	56,000	56,000
GRAND TOTAL				259,500/

FEES (Self Finance Basis)				
FEES (Self Finance Basis)	1 st Year	2 nd Year	3 rd Year	4 th Year
Admission Fees	50,000	-	-	-
PNC Enrollment Fees	2,000	-	-	-
Tuition Fees	80,000	80,000	80,000	80,000
Transport Fees	15,000	15,000	15,000	15,000
Misc. Fees	40,000	40,000	40,000	40,000
Documents Verification Fee	2500	---	---	---
Sports Fees	2000	1000	1000	1000
SUB TOTAL	191,500	136,000	136,000	136,000
GRAND TOTAL				599,500/

NOTE: (i) Transport Fee * as per University Policy
(ii) Enhance the 10% in prescribed fees (per Year)

PROCEDURE POLICY / RULES OF ADMISSION

1. The candidates according to quota will be selected from the merit list of the candidates.
2. The seat vacated by the candidate will be filled-in by next the candidate on merit list.
3. The selected candidate has to deposit fees, all required documents (in original) and join within (03) days after the selection in BS Nursing, in case of failure the selection of candidate shall be cancelled and the Vacant Seat will be offered to next available candidate on waiting list, any seat falling vacant after closing of admission will not be filled and shall stand forfeited.
4. Candidate's admission will be cancelled (from the list of enrolled in PNS, LUMHS, Jamshoro), after joining the PNS if he/she remains absent for thirty days or more, without any information to the competent authority.
5. All admissions are provisional, subject to verification of their original documents submitted by the candidate. If, at any stage it is proved that the candidate has been admitted on the basis of FAKE or INCORRECT document(s), his/her admission will be cancelled and University authorities reserve the right to take legal action against that candidate.
6. Selected candidates either open merit or self-finance shall have to pledge through a signed affidavit that they will complete the BS Nursing degree (04 years) program. However, in case, if he/she leaves the program he/she will have to pay an amount of (Rs.100,000 for merit student and Rs.200,000 for self-finance student) (as a compensation of wasting another desired candidate's seat).

Academic Policies and Procedures

A. GENERAL INSTITUTIONAL REGULATIONS

- a). All the candidates must present themselves in the institute on the first day of firstsemester, i.e. Orientation Week.
- b). Class schedule / time table will be posted on bulletin / Notice boardc). Classes will be scheduled to 8.00 am to 3.00 pm.
- d). A Student will not be allowed after 15 Minutes of the start of the class.

1. Attendance in Classes and Clinical Experience.

The University is determined to improve its teaching standards. The record of attendance is essential to determine eligibility of students for her / his appearing in the examination.

- It is mandatory for students to attend all classes and clinical sessions. Further it is responsibility of students to arrange make up for missed classes, assignments, test and clinical.
- 75% attendance is mandatory to be eligible to appear in the semester examination.
- 10% waiver (5% by Vice Chancellor & 5% by waiver Committee) can be given on **medical grounds** by the committee as per university rule.
- At least 40% attendance shall be required to appear in the **RE-SIT EXAMINATION**.
- **As per Pakistan Nursing Council Rule** students must have to attend 100% of the total clinical hours and 85% of the theoretical hours in each subject of academic session to appear in examination.
- If a student fails to attend as per PNC Rule will repeat the Subjects in next academic year (See PNC Rule 1995).

2. Regular Assigned Leave:

- a. There will be 15 days leave between each semester.
- b. During the maternity leave, the student will cover the remaining course work by herself.
- c. No student is allowed to remain absent during clinical experiences.
- d. Leave of absence for special reasons must be obtained from the Head of Institution / Co-coordinator of the Class.

3. Withdrawal Dismissal.


The authority of the LUMHS, has the privilege of recommending the withdrawal or dismissal of admission or semester of any student for the following reasons.

- a. Class or Clinical attendance of less than 75%.
- b. Any conduct which is judged unsatisfactory, illegal or immoral.
- c. Failure to meet the Academic standards due to academic failure.
- d. Failure to abide by the rules and regulations.



**LIAQUAT UNIVERSITY OF MEDICAL &
HEALTH SCIENCES, JAMSHORO**

DEGREE & DIPLOMA PROGRAMS



LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES, JAMSHORO



Diploma Programs

Diploma in CT Technology (DCTT)

Diploma in MRI Technology (DMRIT)

Diploma in Blood Banking and Transfusion (DBBT)

Diploma in Ophthalmic Technician (DOT)

Diploma in Dental Technician (DDT)

Diploma in Refractionist Technology (DRT)

Degree Programs

BS Radiologic Technology (BSRT)

BS Medical Laboratory Technology (BSMLT)

BS Forensic Science in Forensic Biology (BSFB)

BS Forensic Science in Forensic Chemistry & Toxicology (BSFC&T)

Associate of Applied Sciences in Radiologic Technology (AASRT)

Contact

Director, College
of Technology,
LUMHS, Jamshoro



DIRECTOR'S MESSAGE

As the Director of College of Technology, Liaquat University of Medical & Health Sciences Jamshoro, I am delighted to welcome all of you to the new chapter of your academic journey.

The College of Technology was founded with the aim of upholding and fulfilling the values of the prestigious institution that is LUMHS. Thus, through the many disciplines that we offer in our Undergraduate and Diploma programs, we strive to nurture students as both people and professionals with knowledge and skills to compete locally, nationally, and internationally.

We will do our utmost to provide you with state-of-the-art technical training and qualification in Pathology, Radiology, Forensic Medicine, Ophthalmology, and Dentistry.

Faculty and clinical preceptors work hard to provide the best educational opportunities for our students.

My message concludes by reminding all stakeholders that we live in a rapidly changing world along with technology, customs, traditions, methods, and aims of education which are undergoing a corresponding change. We all must be cognizant of the paradigm shift in education that has taken place over the last quarter of a century. At the same time we must also keep an eye on the horizon – to quickly detect the changes that are taking place, and are likely to take place and adjust our 'sails' accordingly.

In return, all I request is for all of you to use this opportunity to find and maximize your true potentials to be the leaders of the next generation.

PROF. DR. MUNAWAR HUSSAIN
MBBS, MCPS, FCPS,
Director,
College of Technology, LUMHS, JAMSHORO



The Vision of the College of Technology, LUMHS, Liaquat University of Medical and Health Sciences is to be among the best college in providing various undergraduate degree and Diploma programs in Diagnostic Radiology, Medical Laboratory Technology, Forensic Science, Blood Banking, Dentistry and Ophthalmology.

Our College will learn from, build on and respect the past, be active and aggressive in improving the present, but look to the future, and rather than asking **“why,” we will ask “why not”**

Future perspective included MS, Mphil, and PHD.



Top-Notch Education. Cutting-Edge Research. Outstanding Clinical Capabilities. The College of Technology, LUMHS is a respected leader on all three fronts. Our talented faculty and advanced technology attract trainees and scientists who are among the best and brightest – offering the opportunity to work and train in a dynamic innovative environment which remains personal and accessible. Our mission is simple: to bring scientific advances in medical technology to clinical application. We strive to create an inclusive, engaged environment in which faculty, residents, fellows, medical students and technical staff all learns from each other and freely collaborate with our clinical and basic-science colleagues. We have a team of highly professional and dedicated full time and visiting faculty who have expertise in all fields. Our visiting faculty from abroad have capabilities for online teaching. Most of our faculty members are supervisor and examiners of PHD, MD, MS, MCPS, and FCPS.

ADMINISTRATIVE BLOCK COLLEGE OF TECHNOLOGY, LUMHS



Ms. Sehrish Bhurgari
Senior Office Assistant,
Student Coordinator



Mr. Abdul Waheed
Office Assistant



Mr. Shahzad Zaur
Office Assistant



Mr. Majid Ali
Computer Operator



Muhammad Tariq Khan
Office Attendant

ACADEMIC PROGRAMS

The College of Technology, LUMHS, is involved in academics by the conduct of various Undergraduate degree and Diploma programs.

We are very much determined and focused to launch further undergraduate and postgraduate programs in this year.

Following are Degree Programs:

S. No	DEGREE PROGRAMS	Course Duration
1	BS Radiologic Technology (BSRT)	Four Years
2	BS Medical Laboratory Technology (BSMLT)	Four Years
3	BS Forensic Science in Forensic Biology (BSFB)	Four Years
4	BS Forensic Science in Forensic Chemistry & Toxicology (BSFC&T)	Four Years
5	Associate of Applied Sciences in Radiologic Technology (AASRT)	Two Years

Following are Diploma Programs:

S. No	DIPLOMA PROGRAM	Course Duration
1	Diploma in Ophthalmic Technician (DOT)	Two Years
2	Diploma in Dental Technician (DDT)	Two Years
3	Diploma in Refractionist Technology (DRT)	Two Years
4	Diploma in Blood Banking and Transfusion (DBBT)	One Year
5	Diploma in MRI Technology (DMRIT)	One Year
6	Diploma in CT Technology (DCTT)	One Year

ALLOCATION OF SEATS FOR ALL PROGRAMS

Allocation of Degree Program:

S. No	DEGREE PROGRAM	ALLOCATION OF SEATS				
		General Merit		Self-Finance	Overseas / Self Finance	Total
		Sindh	Other Provinces			
1	BS Radiologic Technology (BSRT)	60	0	10	0	70
2	BS Medical Laboratory Technology (BSMLT)	60	0	10	0	70
3	BS Forensic Science in Forensic Biology (BSFB)	39	8	6	7	60
4	BS Forensic Science in Forensic Chemistry & Toxicology (BSFC&T)	39	8	6	7	60
5	Associate of Applied Sciences in Radiologic Technology (AASRT)	60	0	0	0	60

Important Note:

Un-utilized / vacant seats of BS Radiologic Technology (BSRT) & BS Medical Laboratory Technology (BSMLT) under Self Finance category while vacant seats of BS Forensic Science in Forensic Biology (BSFB), BS Forensic Science in Forensic Chemistry & Toxicology (BSFC&T) under Overseas / Self-Finance and Other Provinces will be converted into Merit Category and will be provided to the local candidates of Sindh Province.

Allocation of Diploma Program:

S. No	DIPLOMA PROGRAM	COURSE DURATION	TOTAL NUMBER SEATS (GENERAL MERIT)
1	Diploma in Ophthalmic Technician (DOT)	Two Years	10 (Ten)
2	Diploma in Dental Technician (DDT)	Two Years	10 (Ten)
3	Diploma in Refractionist Technology (DRT)	Two Years	Five (05)
4	Diploma in Blood Banking and Transfusion (DBBT)	One Year	10 (Ten)
5	Diploma in MRI Technology (DMRIT)	One Year	Five (05)
6	Diploma in CT Technology (DCTT)	One Year	Five (05)

ELIGIBILITY CRITERIA

Those candidates who have passed the Higher Secondary School Certificate (HSC) Examinations (Pre-Medical Group) or 'A' level (Pre-Medical) secured at least 50% marks in aggregate from any Board of Higher Secondary Education in Pakistan or any Institution from Foreign Countries duly recognized by Inter-Board Committee of Chairman (IBCC) are eligible to apply in BS. Degree and Diploma Programs.

For admission in Diploma in CT Technology and Diploma in MRI Technology, in addition to the above criteria's, additional one year certificate course in Radiography from Sindh Medical Faculty is mandatory.

RULES OF ADMISSION:

1. Once option exercised for admission will be final and there will be no change in the admission category from "Self Finance "or" Foreign National" to District Merit but in case the candidate who is finally declared for provisional selection under District Merit/Self Finance Category, if, he/she leaves/ withdraws from provisional selection or incase such seat under same category falls vacant during the period, before or up to 45 days same shall be filled by admitting next candidate in accordance with merit of that category and if any seat falling vacant after period of 45 days, it shall not be filled and same shall stand vacant/ forfeited.
2. The period of 45 days shall be countable from the commencement of classes of 1st year (1st Semester) of Academic Session 2023.
3. The candidates who apply for admission on the basis of fake certificates/ documents and detected at any stage shall be liable to prosecution under criminal law and their admission shall be cancelled. Institute/ University reserve right to take legal action against the candidate.
4. Candidate who is finally selected for admission in BS Degree Program on District Merit/ Self-Finance/ Overseas or any category shall have to pledge, through an affidavit that He/ She shall complete the course of BS Degree Programs. In case He /She leaves the College before completing the Course for any reason, He /She will submit a Pay Order/ Demand Draft of Rs.100, 000/- (Rupees One Lac Only) payable to the College of Technology, LUMHS, as a penalty for wasting a precious seat.

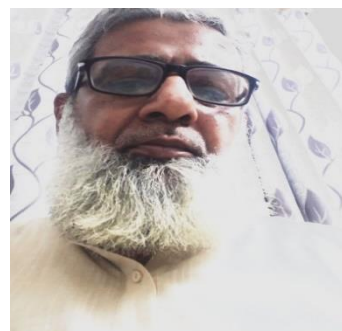
LIST OF TEACHERS

S.#	SUBJECT	NAME OF TEACHER	DESIGNATION	Department
1	Hematology (BSMLT)	Prof, Dr. Kiran Amir	Professor	Professor
2	Human Anatomy (All BS & Diploma Programs)	Dr. Shagufta Qureshi(BSRT& MLT)	Assistant Professor	BMC, LUMHS
3		Dr. Pashmina Shaikh (BS FORENSIC)	Assistant Professor	Anatomy Department
4		Dr. Lal Bux (BS & DIPLOMA)	Assistant Professor	BMC, LUMHS
5	General Pathology (BSRT)	Dr. Muhammad Ali Soomro	Lecturer	BMC, LUMHS
6	Physiology (BS & DIPLOMA Programs)	Dr. Afsheen Abro	Lecturer	BMC, LUMHS
7		Dr. Shamsunisa	Lecturer	BMC, LUMHS
8		Dr. Javed Bajeer	Lecturer	BMC, LUMHS
9		Dr. Pirah Zardari	Lecturer	BMC, LUMHS
10	Pakistan Study (BSRT) & BSMLT	Mr. Muhammad Bux	Lecturer	PNS, LUMHS
11	Sociology (BSRT) & BSMLT	Mr. Manzoor Janwari	Lecturer	PNS, LUMHS
12	English (All BS & diploma Programs)	Ms. Bakhtawar	Lecturer	BMC, LUMHS
13	Computer Skills (All BS & diploma Programs)	Mr. Faheem Ahmed Soomro	I.T Trainer	IT Department, LUMHS
14	Regional & Radiological Anatomy-I (BSRT)	Prof. Dr. Munawar Hussain	Radiologist	ADC/BMC LUMHS
15	Conventional Radiological Position & Clinical Practice (BSRT)	Dr. Abu Zafar		
16	Regional & Radiological Anatomy-I (BSRT)	Prof. Dr. Munawar Hussain	Radiologist / Director COT	ADC/BMC LUMHS
17	Interventional Radiology (BSRT)	Dr. Paras Surahyo	Senior Registrar	ADC/BMC LUMHS
18	Medical Terminology and Radiological Position (ALL BS & Diploma)	Dr. Mir Khuda Bux	Assistant Professor	ADC/BMC, LUMHS
19	Diagnostic Instrument & Refractive Errors and Optic & Refraction-I	Dr. Noman Ahmed	Assistant Professor	Department of Ophthalmology , LUMHS
20		Dr Azfar Mirza		
21	Dental Material (DDT)	Dr. Muhammad Rizwan	Assistant Professor	Institute of Dentistry, LUMHS
22		Dr. Muslim		
23		Dr. Naseem Shaikh		
24	Microbiology & Cross Infection (DDT)	Dr. Humaira Bhuargari	Assistant Professor	Institute of Dentistry, LUMHS
25	Calculus & lab mathematics (BS Forensic Science)	Mr. Muqadar Nawaz	Visting Tutor	Jamshoro
26	General Pharmacology (BSRT)	Dr. Qamar Zaman	Assistant Professor	BMC, LUMHS
27		Dr. Hammad	Lecturer	

28	Clinical Chemistry (BSMLT)	Dr. Aisha Waqas	Lecturer	BMC, LUMHS
29	Microbiology	Dr, Zahida	Assistant Professor	Pathology Deptt: LUMHS
30	Biochemistry & Microbiology (BSMIT)	Dr Farhatullah Kandhro	Assistant Professor	College of Technology
31	Clinical Chemistry-II (BSMLT)	Dr. Aamir Ramzan	Assistant Professor	Pathology Department of LUMHS
32	Microbiology-III (BSMLT)	Dr. Rameez	Lecturer	BMC, LUMHS
33			Lecturer	
34	Clinical Chemistry-II (BSMLT)	Dr Aisha Waqas	Lecturer	BMC, LUMHS
35	Histopathology-1 (BSMLT)	Dr. Sorath Sindhu	Lecturer	Pathology Dept: LUMHS
36	Radiation science & Technology (BSRT)	Dr. Yousaf	Senior Scientist	NIMRA, LUMHS
37		Dr. Zubair Soomro	Senior Scientist	NIMRA, LUMHS
38	Surgery (BSRT)	Dr Rafique Pathan	Assistant Professor	LUMHS, JAMSHORO
39	Forensic Psychology (BS Forensic)	Dr. Isharat Bibi Syed	Assistant Professor	
40	Radiobiology & radiation Protection (BSRT)	Mr Fasail Ali	Senior Scientist	NIMRA, LUMHS
41	Islamiyat	Ms. Aisha Junejo	Visiting Tutor	Jamshoro
42	ECG & ECHO	DR MARIA QAZI	Senior Registrar	BMC, LUMHS
43	ANGIOGRAPHY	DR MARIA QAZI	Senior Registrar	BMC, LUMHS
44	SONOLOGY & RADIOLOGICAL PATHOLOGY	DR ZAFARULLAH SHAIKH	SENIOR REGISTRAR	RADIOLOGY DEPARTMENT
45	Interventional Radiology	Dr. Abid Ali Sahito	Assistant Professor	ADC/BMC, LUMHS
46	CT Procedures and Clinical Practice	Dr. Asma Jatoi	Assistant Professor	Radiology department, LUMHS
47	Clinical Sonography	Dr. Saima Zafar	Dr. Saima Zafar	Radiology department, LUMHS
48	Microbiology	Dr. Shabnum	Senior Lecturer	Pathology Department LUMHS



Dr. Paras Surahyo
MBBS, FCPS
Assistant Professor,



Dr. Abuzafar Moin ul Haq
MBBS, DMRD
Clinical Demonstrator
Diagnostic Radiology
Hyderabad



Dr. Amir Ramzan,
Assistant Professor,
Clinical Chemistry-II



Noor Ahmed Nahyoon,
Visiting Faculty,
Environmental Forensic



Faisal Ali,
Master in Medical Physics, Pakistan
Institute of Engineering and Applied
Sciences (PIEAS)



Dr. Zahida Shaikh
MBBS, DCP(Diploma in clinical
pathology), M.Phil
Microbiology.
Assistant Professor



Dr. Muhammad MuslimKhahro
BDS, MSC.
Chairman Science of Dental materials
Department, Faculty of Dentistry,
LUMHS, Jamshoro



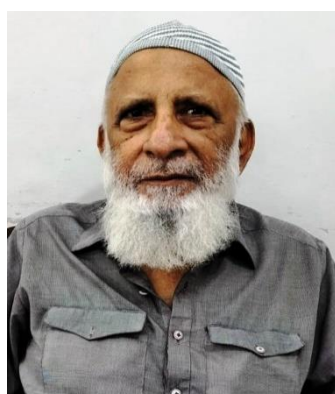
Dr Sadia Akbar
M.Phil Haematologist
FCPS-II Trainee
Lecturer, Pathology Department
LUMHS, Jamshoro



Dr Rameez Iqbal Memon
MBBS, M. Phill Haematology
Lecturer, Pathology Department
LUMHS



Dr. Falak Murad Shah
Assistant Professor- Forensic Odontology
Department



Dr. Shafi Nizamani
Visiting Professor
PhD. USA, Post Doctorate. USA



Dr. Mahira Kazi
MBBS, DGO
Lecture Forensic Medicine



Dr Memoona Naz
MBBS, Masters in Molecular Diagnosis and
Genetics disease from Nottingha, UK
Lecturer



Dr. Yawar Latif
PhD Analytical Chemistry.
Medical Technologist.



Dr. Abdul Samad Memon
MBBS, DIP DIAB, DFHC, DMJ, CHPE
Associate Professor
Department of Forensic Medicine & Toxicology,
LUMHS Jamshoro.



Dr. Nadia Aslam
MBBS, DMJ
Lecturer
Department of Forensic Medicine &
Toxicology, LUMHS Jamshoro.



Dr. Rizwana Khanzada
M.sc, M.Phil Microbiology
PhD. Scholar Molecular Biology
Medical technologist/ Forensic DNA
Analysts



Dr. Ishrat Bibi
MD Forensic Medicine
Assistant Professor
Forensic Medicine and Toxicology department



Dr Aisha Khalid
M.B.B.S, DGO, MD, Forensic science
Assistant Professor



Dr. Rana Gul. Hassan,
Sr. WMO, Consultant, Sonologist



Muhammad Yousuf Zaman,



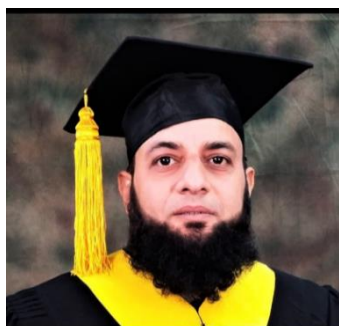
Dr Abid Ali Sahito
MBBS, DMRD, FCPS
Assistant Professor Radiology
BMC, LUMHS, Jamshoro



Dr. Aisha Waqas
Lecturer in Pathology Department,
BMC. LUMHS



Farhatullah Kandharo
Assistant Professor
College of Technology, LUMHS



Dr. Farhan Ahmed Shaikh,
Lecturer,
Department of Pathology, LUMHS



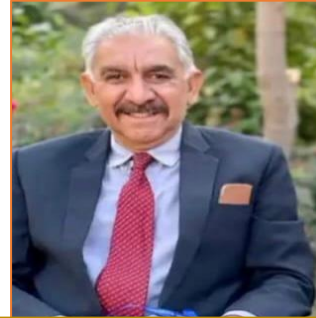
Mr. Zahid Ali Zounr (Ph.D.
Chemistry), Forensic Sciences
Department

FRAME WORK FOR FOUR YEARS BACHELOR OF SCIENCE (BS) DEGREE PROGRAM	
Total number of Credit hours	120 - 135
Duration	4 years
Semester duration	16-18 weeks
Semesters	8
Total Course	40 - 45
Course Load per Semester	15-18 Credit hours
Number of courses per semester	4-6

BS RADIOLOGIC TECHNOLOGY (BSRT) & ASSOCIATE OF APPLIED SCIENCES IN RADIOLOGIC TECHNOLOGY (AASRT)



Dr. Mir Khuda Bux
Course Coordinator
BSRT & AASRT Programs



Prof. Ghulam Qadir Buledi,
H.O.D, Department of Radiology,
BMC/ADC, LUMHS

The world of medical care is constantly evolving. The methods and the technology used to treat patients improve significantly with each passing year. Accordingly, keeping up with these technological advances is no easy task.

College of Technology, LUMHS provides students with the means needed to begin the path toward a career in healthcare with a professional radiologic technology program. The healthcare industry is growing quickly and the demand for capable, skilled individuals is increasing along with it.

The program consists of training students in the field of diagnostic imaging through a combination of classroom assignments, labs and extensive clinical experience with patients. It also prepares students for the National Certifying Examination by the American Registry of Radiologic Technologists and they will have the opportunity to specialize in a particular field or technology.

The program includes a thorough curriculum requiring as per HEC criteria which encompass general education courses that provide students with a solid foundation in which to confidently build on and core requirement courses including Patient Care Procedures, Radiation Protection & Radiobiology, Image Production & Evaluation, and Radiographic Pathology, which provide students with the critical skills and knowledge used by professional radiological technologists to ensure proper patient care.

Radiologic technologists work with patients who are experiencing some type of health trouble in order to better understand and pinpoint the cause. Knowing that one's efforts are directly translating into the efficient and successful care of patients is a rewarding sensation that only few experience.

A Radiologic Technologist is an integral part of a growing field of health care professionals who are in increasingly high demand. If you're interested in entering the radiologic technology program, where you'll work side by side with the leading professionals in the healthcare field like doctors and nurses, COT, LUMHS is dedicated to your continued educational development. [JOIN US](#) and see how we can support you in creating a new future.

BS RADIOLOGY TECHNOLOGY (BSRT)

SCHEME OF STUDIES FOR 4-YEARS (BSRT) PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	BSRT-411	Biochemistry – I	3+1
	BSR -412	Human Physiology – I	3+1
	BSRT-413	Human Anatomy – I	3+1
	BSRT-414	English – I	2+0
	BSRT-415	Pak Studies	2+0
	BSRT-416	Computer Skills	1+1
		Total	
SECOND	BSRT-421	Biochemistry – II	3+1
	BSRT-422	Human Physiology – II	3+1
	BSRT-423	Human Anatomy – II	3+1
	BSRT-424	English – II	2+0
	BSRT -425	Islamic Studies	2+0
		Total	
SECOND PROFESSIONAL YEAR			
THIRD	BSRT-431	Regional And Radiological Anatomy – I	2+1
	BSRT-432	General Radiology	2+1
	BSRT-433	Radiation Sciences and Technology	2+1
	BSRT-434	General Pathology	2+1
	BSRT-435	Clinical Pharmacology	2+1
	BSRT-436	Communication Skills	2+0
		Total	
FOURTH	BSRT-441	Clinical Medicine – I	1+1
	BSRT-442	Regional And Radiological Anatomy – II	2+1
	BSRT-443	Conventional Radiology Procedures & Clinical Practice	2+2
	BSRT-444	Radiological Positioning & Clinical Practice	2+2
	BSRT-445	Computed & Digital Radiography (Cr & Dr)	1+1
	BSRT-446	Radiobiology & Radiation Protection	1+1
		Total	
THIRD PROFESSIONAL YEAR			
FIFTH	BSRT-451	Computed Tomography (CT)	2+2
	BSRT-452	Mammography & Special Radiological Techniques	2+1
	BSRT-453	Magnetic Resonance Imaging (MRI)	2+2
	BSRT-454	General Surgery	1+1
	BSRT-455	Interventional Radiology	1+1
	BSRT-456	Clinical Medicine – II	1+1
		Total	

SIXTH	BSRT-461	Radiological & Cross Sectional Anatomy	2+1
	BSRT-462	Computed Tomography (CT) Procedures & Clinical Practice	2+1
	BSRT-463	Magnetic Resonance Imaging (MRI) Procedures & Clinical Practice	2+1
	BSRT-464	Therapeutic Radiology	2+1
	BSRT-465	Biostatistics	2+1
	BSRT-466	Research Methodology	2+1
		Total	
FOURTH PROFESSIONAL YEAR			
SEVENTH	BSRT-471	Clinical Sonography	2+2
	BSRT-472	Angiography and Cardiac Imaging	2+2
	BSRT-473	Nuclear Medicine	2+1
	BSRT-474	Echocardiography	1+1
	BSRT-475	Electrocardiography (ECG)	1+1
	BSRT-476	Clinical Pathology & Radiological Presentation	1+1
		Total	
EIGHTH	BSRT-481	Patient Care & Management	2+0
	BSRT-482	Medical Sociology	2+0
	BSRT-483	Research Project	0+6
	BSRT-484	Bio-Ethics	2+0
	BSRT-485	Bio-Entrepreneurship	2+0
		Total	

TOTAL CREDIT HOURS: 134

BS MEDICAL LABORATORY TECHNOLOGY (BSMLT) & DIPLOMA BLOOD BANKING TRANSFUSION



Dr. Kiran Aamir
Course Coordinator
BSMLT Program & Diploma Blood Banking & Transfusion

Dear Prospective BSMLT Students,

It is with great pleasure and enthusiasm that I extend a warm welcome to you as the Course Coordinator of the Bachelor of Science in Medical Laboratory Technology (BSMLT) program. As you consider embarking on this educational journey, I would like to share some insights into what makes our program truly exceptional.

BSMLT is not just a degree; it is a passport to a world of knowledge, innovation, and meaningful impact in the realm of healthcare. Our program is designed to equip you with the skills, expertise, and ethical foundation required to excel in the dynamic field of medical laboratory technology.

Here at LUMHS, we take pride in fostering an environment that encourages critical thinking, hands-on experience, and a commitment to excellence. Our dedicated faculty members are not just educators but mentors who are deeply invested in your success.

Throughout your BSMLT journey, you will delve into the fascinating world of laboratory sciences, where precision and accuracy are paramount. You will gain exposure to cutting-edge technologies and research opportunities that will broaden your horizons and shape your future. Moreover, our program places a strong emphasis on ethics, professionalism, and patient-centered care. We believe that these qualities are just as important as technical proficiency and will set you apart as compassionate and competent healthcare professionals.

As you peruse this prospectus, you will find detailed information about our curriculum, faculty, facilities, and the many opportunities that await you here. Choosing a program for your higher education is a significant decision, and I commend you for considering BSMLT at LUMHS. It is a choice that can lead to a rewarding and fulfilling career dedicated to the well-being of others. In conclusion, I extend my best wishes to you as you contemplate your educational path. Remember that our doors are always open, and we are here to support you in your academic journey. I look forward to the possibility of welcoming you into our BSMLT family and witnessing your growth and achievements. Thank you for considering LUMHS.

Dr. Kiran Aamir

BS MEDICAL LABORATORY TECHNOLOGY (BSMLT)
SCHEME OF STUDIES FOR 4-YEARS (BSMLT) PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	BSMLT-311	Anatomy	2+1
	BSMLT-312	Biochemistry	3+1
	BSMLT-313	Physiology	3+1
	BSMLT-314	English Foundation	2+0
	BSMLT-315	Computer Skills	1+1
	BSMLT-316	Pakistan Studies	2+0
		Total	17
SECOND	BSMLT-321	Clinical Pathology I	3+2 (Laboratory)
	BSMLT-322	Microbiology I	3+2
	BSMLT-323	English II	2+0
	BSMLT-324	Laboratory Mathematics	2+0
	BSMLT-325	Islamiat	2+0
		Total	16
SECOND PROFESSIONAL YEAR			
THIRD	BSMLT-331	Clinical Pathology-II	3+1 (Laboratory)
	BSMLT-332	Microbiology-II	3+1
	BSMLT-333	Clinical Chemistry-I	3+1
	BSMLT-334	Clinical Pharmacology	2+1
	BSMLT-335	Sociology	2+0
		Total	17
FOURTH	BSMLT-341	Haematology-I	3+1(Laboratory)
	BSMLT-342	Histopathology-I	3+1
	BSMLT-343	Clinical Chemistry-II	3+1
	BSMLT-344	Microbiology-III	2+2
		Total	16

THIRD PROFESSIONAL YEAR			
FIFTH	BSMLT - 351	Quality Assurance	2+1
	BSMLT - 352	Hematology-II	3+1
	BSMLT - 353	Histopathology-II	3+1
	BSMLT - 354	Immunology -I	3+1
	BSMLT - 355	Body Fluid Analysis	1+1
		Total	17
SIXTH	BSMLT – 361	Immunology / Serology-II	3+2
	BSMLT – 362	Immunoematology	3+1
	BSMLT – 363	Research Methodology	2+2
	BSMLT – 364	Biostatistics	2+1
		Total	16
FOURTH PROFESSIONAL YEAR			
SEVENTH	BSMLT - 371	Transfusion Medicine	3+2
	BSMLT - 372	Molecular Biology	2+2
	BSMLT - 373	Advance Clinical Pathology	2+1
	BSMLT - 374	Cytology	3+1
		Total	16
EIGHTH	BSMLT - 381	Health Care Management	3+2
	BSMLT - 382	Research Project	0+8
	BSMLT - 383	Human Genetics	2+1
		Total	16

Total number of Credit hours: 131

FORENSIC SCIENCE IN FORENSIC BIOLOGY (BSFB) & BS FORENSIC SCIENCE IN FORENSIC CHEMISTRY & TOXICOLOGY (BSFC&T)



Prof. Dr. Waheed Ali Nahyoon
Chairman
Institute of Forensic Sciences,
Forensic Medicine & Toxicology

Forensic science is all about the preservation and analysis of scientific evidence collected from the crime scene for the purpose of investigation. Experts in forensic science visit the crime scene immediately to collect the scientific evidence, and then they analyse the collected evidence in forensic labs. Forensic science has a close relationship with biology, chemistry, information technology, criminology, biomedical engineering, law, and medical fields. Although it has a close connection with law and investigation, it is basically a kind of applied medical science. A forensic expert must have good knowledge about the local criminal laws. Police, investigation, and law enforcement agencies cannot go forward in many criminal cases without their help. Sometimes they have to appear in court as witnesses, and the opponent's lawyers reserve the right to cross-examine them. So they must have good knowledge about their field and convincing arguments in defense of their reports.

Forensic science in Pakistan

We live in the world of science and technology. Pakistan is falling on the list of top countries with respect to the growth of science and technology. It refers to the investigation and collects details and evidence of criminal activities. There are a few universities in Pakistan that offer forensic science as one of their academic disciplines.

The scope of forensic science in Pakistan is very high because of the high ratio of criminal activities. We must require some professional forensic scientists in order to investigate well and truly. Even every state must require a forensic science department in Pakistan in order to investigate the crime. Our police departments are not able to investigate well because it would require some professional forensic officer to investigate and collect true evidence of criminal activity. There are so many government departments in Pakistan that offer employment opportunities in forensic science.

Jobs:

A forensic scientist can easily get a job in any of the departments listed below:

NAB, Intelligence Agencies, Anti-Corruption Department, Forensic Labs, Police Training Colleges, FIA, Armed Forces, Investigation Departments, Military Police Courts, Colleges/Universities

Prof. Dr. Waheed Ali Nahyoon

BS FORENSIC SCIENCE IN FORENSIC BIOLOGY (BSFB)
SCHEME OF STUDIES FOR 4-YEARS BSFB PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	ENG-300	English	3(3+0)
	FRNSC-310	College Algebra	3(3+0)
	FRNSC-311	Principles of Chemistry	3(3+0)
	FRNSC-312	Human anatomy-I	3(2+1)
	FRNSC-313	Medical Physiology-I	3(2+1)
	FRNSC-314	Information Technology	3(2+1)
		Semester Cr. Hr.	
SECOND	ENG-301	English II	3(3+0)
	FRNSC-320	Calculus	3(3+0)
	FRNSC-321	Organic Chemistry	3(3+0)
	FRNSC-322	Human anatomy-II	3(2+1)
	FRNSC-323	Medical Physiology-II	3(2+1)
	FRNSC-324	Principles of Forensic Science	3(3+0)
		Semester Cr.Hr	
SECOND PROFESSIONAL YEAR			
THIRD	IS-402	Islamiyat	2(2+0)
	EB-402	Ethics[1]	
	ENG-400	English III / Communication skills	3(3+0)
	FRNSC-414	Forensic Entomology	3(2+1)
	FRNSC-411	Medical Biochemistry-I	4(3+1)
	FRNSC-412	Human Genetics	3(3+0)
	FRNSC-413	Forensic Psychology	3(3+0)
		Semester Cr. Hr.	
FOURTH	PS-403	Pakistan Studies	2(2+0)
	FRNSC-420	Forensic Photography	3(3+0)
	FRNSC-425	Immunology	3(3+0)
	FRNSC-421	Medical Biochemistry-II	4(3+1)
	FRNSC-422	Molecular Biology	3(3+0)
	FRNSC-423	Digital Evidence Analysis	3(3+0)
		Semester Cr.Hr	
THIRD PROFESSIONAL YEAR			
FIFTH	Course #	Subject	Cr.Hr.
	FRNSC-511	Medical Pharmacology-I	3(3+0)
	FRNSC-512	Forensic Serology	3(2+1)
	FRNSC-413	Forensic Science in Court room	3(3+0)
	FRNSC-514	Forensic Anthropology	3(3+0)
	FRNSC-515	Criminalistics and Crime Scene Investigations	3(3+0)
	FRNSC-517	Environmental Forensics	3(3+0)
		Semester Cr. Hr.	

SIXTH	Course #	Subject	Cr.Hr.
	FRNSC-521	Medical Pharmacology-II	3(3+0)
	FRNSC-522	Forensic DNA Analysis	3(2+1)
	FRNSC-523	Forensic Medicine	3(2+1)
	FRNSC-524	Firearms and Tool marks Analysis	3(2+1)
	FRNSC-525	Forensic analysis of Fingerprints and Writing	3(2+1)
	FRNSC-527	Biosecurity and Microbial Forensics	3(3+0)
	Semester Cr.Hr		18
FOURTH PROFESSIONAL YEAR			
SEVENTH	Course #	Subject	Cr.Hr.
	FRNSC-610	Principles of toxicology	3(3+0)
	FRNSC-611	Medical jurisprudence	3(2+1)
	FRNSC-612	Forensic Computer Science Investigations	3(3+0)
	FRNSC-613	Ethical and Legal Issues in Forensic Science	3(3+0)
	FRNSC-615	Forensic Pathology	3(3+0)
	Semester Cr. Hr.		15
EIGHTH	Course #	Subject	Cr.Hr.
	FRNSC-620	Forensic Toxicology	3(3+0)
	FRNSC-621	Homicide Scene Investigations	3(3+0)
	FRNSC-622	Biostatistics	3(3+0)
	FRNSC-623	Forensic Quality Management System	1(1+0)
	FRNSC-624	Internship	3+0
	Semester Cr.Hr		13

BS FORENSIC SCIENCE IN FORENSIC CHEMISTRY & TOXICOLOGY (BSFC&T)
SCHEME OF STUDIES FOR 4-YEARS BSFC&T PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	ENG-300	English	3(3+0)
	FRNSC-310	College Algebra	3(3+0)
	FRNSC-311	Principles of Chemistry	3(3+0)
	FRNSC-312	Human anatomy-I	3(2+1)
	FRNSC-313	Medical Physiology-I	3(2+1)
	FRNSC-314	Information Technology	3(2+1)
		Semester Cr. Hr.	
SECOND	ENG-301	English II	3(3+0)
	FRNSC-320	Calculus	3(3+0)
	FRNSC-321	Organic Chemistry	3(3+0)
	FRNSC-322	Human anatomy-II	3(2+1)
	FRNSC-323	Medical Physiology-II	3(2+1)
	FRNSC-324	Principles of Forensic Science	3(3+0)
		Semester Cr.Hr	
SECOND PROFESSIONAL YEAR			
THIRD	IS-402	Islamiyat	2(2+0)
	EB-402	Ethics[1]	
	ENG-400	English III / Communication skills	3(3+0)
	FRNSC-410	Physical Chemistry	3(3+0)
	FRNSC-411	Medical Biochemistry-I	4(3+1)
	FRNSC-412	Human Genetics	3(3+0)
	FRNSC-413	Forensic Psychology	3(3+0)
	Semester Cr. Hr.		18
FOURTH	PS-403	Pakistan Studies	2(2+0)
	FRNSC-420	Forensic Photography	3(3+0)
	FRNSC-424	Analytical Chemistry	3(3+0)
	FRNSC-421	Medical Biochemistry-II	4(3+1)
	FRNSC-422	Molecular Biology	3(3+0)
	FRNSC-423	Digital Evidence Analysis	3(3+0)
		Semester Cr.Hr	
THIRD PROFESSIONAL YEAR			
FIFTH	FRNSC-511	Medical Pharmacology-I	3(3+0)
	FRNSC-512	Forensic Serology	3(2+1)
	FRNSC-513	Forensic Science in Court room	3(3+0)
	FRNSC-514	Forensic Anthropology	3(3+0)
	FRNSC-515	Criminalistics and Crime Scene Investigations	3(3+0)
	FRNSC-516	Instrumental Analysis	3(2+1)
		Semester Cr. Hr.	

SIXTH	FRNSC-521	Medical Pharmacology-II	3(3+0)
	FRNSC-522	Forensic DNA Analysis	3(2+1)
	FRNSC-523	Forensic Medicine	3(2+1)
	FRNSC-524	Firearms and Tool marks Analysis	3(2+1)
	FRNSC-525	Forensic analysis of Fingerprints and Writing	3(2+1)
	FRNSC-526	Forensic analytical Chemistry	3(2+1)
		Semester Cr.Hr	
FOURTH PROFESSIONAL YEAR			
SEVENTH	FRNSC-610	Principles of toxicology	3(3+0)
	FRNSC-611	Medical jurisprudence	3(2+1)
	FRNSC-612	Forensic Computer Science Investigations	3(3+0)
	FRNSC-613	Ethical and Legal Issues in Forensic Science	3(3+0)
	FRNSC-614	Spectrometric Identification of Toxicants	3(3+0)
		Semester Cr. Hr.	
EIGHTH	FRNSC-620	Forensic Toxicology	3(3+0)
	FRNSC-621	Homicide Scene Investigations	3(3+0)
	FRNSC-622	Biostatistics	3(3+0)
	FRNSC-623	Forensic Quality Management System	1(1+0)
	FRNSC-624	Internship	3+0
		Semester Cr.Hr	

ASSOCIATE IN APPLIED SCIENCES IN RADIOLOGIC TECHNOLOGY (AASRT)
SCHEME OF STUDIES FOR 02-YEARS AASRT PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	AASRT-811	Biochemistry	2+1
	AASRT -812	Human Physiology	2+1
	AASRT -813	Human Anatomy	3+1
	AASRT-814	English I (English Composition & Comprehension)	2+0
	AASRT-815	Computer Skills	1+1
	AASRT-816	Medical Imaging Physics I	2+1
		Total	17
SECOND	AASRT-821	Pakistan Studies	2+0
	AASRT-822	Radiological Positioning & Clinical Practice	2+1
	AASRT-823	Medical Imaging Physics– II	2+1
	AASRT-824	English II (Communication/Presentation skills)	2+1
	AASRT-825	Regional And Radiological Anatomy – I	2+1
	AASRT - 826	Principles and Procedures of Rad Tech I	2+2
		Total	18
SECOND PROFESSIONAL YEAR			
THIRD	AASRT-831	Regional And Radiological Anatomy – II	2+1
	AASRT-832	Islamic Studies/Sociology	2+0
	AASRT-833	Principles and Procedures of Rad Tech II	2+2
	AASRT-834	General Pathology	3+1
	AASRT-835	Clinical Pharmacology	2+1
	AASRT-836	Radiobiology & Radiation Protection	1+1
		Total	18
FOURTH	AASRT-841	Sectional Anatomy for Imaging	2+1
	AASRT-842	Radiologic Special Procedures & Clinical Practice	2+2
	AASRT-843	Computed & Digital Radiography (Cr & Dr)	1+1
	AASRT-844	Computed Tomography Procedures & Clinical Practice	1+2
	AASRT-845	Nuclear Medicine	2+1
		Total	15

TOTAL CR.HR: = 68

DIPLOMA IN DENTAL TECHNOLOGY (DDT)



Prof. Dr. Rizwan Memon
Course Coordinator
Diploma in Dental Technology (DDT)

Diploma in Dental Technology is a niche programs designed for students who have completed Intermediate or its equivalent and are interested in a future as dental technologists working in dental laboratories or clinics.

Dental Technologists construct/produce prostheses for the treatment of damaged or maligned teeth, replacement of missing teeth and protection of teeth.

During the course of the programme, students will learn the complex skills in designing, constructing, and repairing dental prostheses and appliances such as bridges, crowns, dentures, orthodontic appliances, mouth guards and other dental fixtures.

Students will also be taught first-aid, infection control procedures, safety and health standards store management and entrepreneurial skills.

Upon completion of the programme, students graduating as Dental Technologists from MAHSA will be up to date in professional knowledge, competent in their skills, ethical and possess good moral values.

The future of dentistry is meshed within technology. Almost every major breakthrough in fabrication process has been due to technological advancement.



CURRICULUM FOR DENTAL TECHNICIAN COURSE

PROGRAM OVERVIEW:

Institute of Dentistry, Liaquat University of Medical & Health Sciences is starting Diploma in Dental Technology to meet the demands of more cultivated Dental care system in Pakistan. This program is going to be established with the aim to provide trained dental technologist for rapid increasing number of Dental Surgeons in all over Pakistan.

A demand of trained Dental technologist is constantly increasing to cater the needs. At present there are very limiting teaching and training facilities available for dental technologists.

An increasing demand for esthetic dentistry and the aging population in Pakistan are creating a growing demand for dental technicians. Employment opportunities exist in commercial dental laboratories, laboratories in dental clinics and in-office laboratories. With experience, dental technicians can become department supervisors, laboratory managers and laboratory owners. Dental technicians also find employment as sales or manufacturers' representatives.

The curriculum is designed to meet the local as well international standards. Dental technician gains knowledge and learn skills needed to fabricate dental restorations, including metal and ceramic crowns and bridges and complete dentures, orthodontic appliances, maxillofacial as well Implant prosthetics. The curriculum also includes Basic medical sciences, dental terminology and dental anatomy. Students will acquire laboratory skills through hands-on experience.

Program Learning Outcomes — Dental Technician to be able to:

- Use dental terminology appropriately
- Relate concepts of oral anatomy, morphology and occlusion to dental laboratory procedures
- Competently perform laboratory techniques and procedures
- Utilize dental materials with consideration of their chemical and physical properties
- Assume the role of the dental laboratory technician as a member of the dental health care team
- Observe proper infection control procedures

MAJOR SKILLS ACQUIRED

Design and construction of complete dentures, removable partial dentures, fixed partial dentures, maxillofacial, TMJ and orthodontic appliances.

Dental Technicians usually concentrate on one area of dental technology and specialize in laboratory procedures. A licensed or registered Dental Laboratory Technician may own and operate a dental laboratory to provide services to a dentist, a number of dentists, or a group practice of dentists

TYPICAL EMPLOYERS

Dental laboratories, dental practices.

ACADEMIC SCHEDULE

Diploma will be completed in FOUR SEMESTERS

An academic year will be divided in Two Semesters as follows

- | | |
|--|----------|
| • Pre semester admissions | 04 weeks |
| • First semester teaching and Examination | 18 weeks |
| • Inter semester break | 04 weeks |
| • Second semester teaching and Examination | 18 weeks |
| • Session break | 08 weeks |

QUOTA OF PRACTICAL

- | | |
|--|----------|
| 1. Complete denture | 5 |
| 2. Partial denture | 20 |
| 3. Crown and bridge | 10 |
| 4. Relining and rebasing | 5 |
| 5. Splint and obturators | 5 |
| 6. Orthodontic appliances and cast partial denture | 10 |
| 7. Articulations | 20 |
| 8. Cast fabrication | 40 |
| 9. Clasp making | 30 |
| 10. Die fabrication | 20 |
| 11. Sterilization instruments | 100 sets |
| 12. Maximum attendance | 60% |

Prof. M Rizwan Memon

Course Coordinator

Diploma in Dental Technician

Dr. Muslim Khero

Associate Professor

Dr. Naseem Shaikh

Senior Lecturer

Dr. Humaira Bhurgri

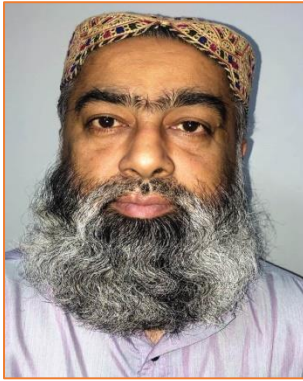
Lecturer

DIPLOMA IN DENTAL TECHNICIAN (DDT)

SCHEME OF STUDIES FOR 02-YEARS DDT PROGRAM

SEMESTER / YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	DDT- 511	Dental Materials	2 + 3
	DDT- 512	Oral Biology, Dental Anatomy & Dental Morphology	3 + 3
	DDT- 513	English	2 + 0
	DDT- 514	Computer Skills	1 + 1
		Total	15
SECOND	DDT- 521	Removable Partial Dentures	2 + 3
	DDT- 522	Oral pathology & Periodontology	2 + 2
	DDT- 523	Microbiology, Sterilization and Disinfection	2 + 2
	DDT- 524	Islamiat	2 + 0
		Total	15
SECOND PROFESSIONAL YEAR			
THIRD	DDT- 531	Basic Dental Technology and Laboratory Management Skills (Acrylic work)	2 + 3
	DDT- 532	Removable Complete Dentures	2 + 2
	DDT- 533	Occlusion for Dental Laboratory procedures	2 + 2
	DDT- 534	Orthodontic and Conservative appliances	2 + 2
		Total	17
		DDT- 541	Maxillofacial Prosthodontics
FOURTH	DDT- 542	Implant Prosthodontics	2 + 2
	DDT- 543	Fixed Prosthodontics	2 + 2
	DDT- 544	Advance Dental Technology and laboratory Management Skills (Ceramic work)	2 + 3
		Total	17

TOTAL CREDIT Hours = 64



Dr. Imtiaz Gilal
Assistant Professor
Course Coordinator

OPHTHALMIC TECHNICIANS

Ophthalmic Technicians are highly skilled professionals who work in the field of eye care and health. The ophthalmic technician will assist ophthalmologists as they perform clinical eye care. The ophthalmic technician will administer eye medication, perform diagnostic eye exams, help educate patients on at-home eye care and perform clinical eye tests. The ophthalmic technician will help maintain the clinical needs in the department as necessary.

They will be responsible for the performance of procedures for the diagnostic and treatment of ophthalmic disease.

The Ophthalmic Technician performs a range of duties which includes preparing the patients, to be seen by attending Ophthalmologist (preliminary examination, medical history, & testing), preparation of examination and treatment rooms, performing basic and routine vision screening examinations, administering eye medications, cleaning and maintaining ophthalmic instruments and assisting ophthalmologist during minor or major surgical and laser procedures.

DIPLOMA IN OPHTHALMIC TECHNICIAN (DOT)

SCHEME OF STUDIES FOR 02-YEARS DOT PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	DOT- 211	Anatomy	2 + 1
	DOT- 212	Physiology	2 + 1
	DOT- 213	Diagnostic Instruments and Refractive Errors	3 + 5
	DOT- 214	English	2 + 0
	DOT- 215	Computer Skills	1 + 1
		Total	
SECOND	DOT- 221	Ocular Anatomy & Ocular Physiology	4 + 2
	DOT- 222	Optic and Refraction (Viva only)	0 + 4
	DOT- 223	Islamiat	2 + 0
	DOT- 224	Pakistan Studies	2 + 0
		Total	
SECOND PROFESSIONAL YEAR			
THIRD	DOT- 231	Ocular Pathology & Ocular Pharmacology	4 + 2
	DOT- 232	Clinical Pharmacology	2 + 1
		Total	
FOURTH	DOT- 241	Sterilization (Viva Only)	0 + 6
	DOT- 242	Ocular Surgical Procedures	3 + 4
		Total	

TOTAL CREDIT Hours = 54

DIPLOMA IN REFRACTIONIST TECHNOLOGY (DRT)

SCHEME OF STUDIES FOR 02-YEARS DRT PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	DRT- 611	Anatomy	2 + 1
	DRT- 612	Physiology	2 + 1
	DRT- 613	Diagnostic Instruments and Refractive Errors	3 + 5
	DRT- 614	English	2 + 0
	DRT- 615	Computer Skills	1 + 1
		Total	
SECOND	DRT- 621	Ocular Anatomy & Ocular Physiology	4 + 2
	DRT- 622	Optic and Refraction (Viva only)	0 + 4
	DRT- 623	Islamiat	2 + 0
	DRT- 624	Pakistan Studies	2+ 0
		Total	
SECOND PROFESSIONAL YEAR			
THIRD	DRT- 631	Ocular Pathology & Ocular Pharmacology	4 + 2
	DRT- 632	Squint Assessment & Optic and Refraction	3 + 3
	DRT- 633	Clinical Pharmacology	2+ 1
		Total	
FOURTH	DRT- 641	Practical Refraction & Surgical Procedures in Refraction	4+4
		Total	

TOTAL CREDIT Hours = 55

DIPLOMA IN CT TECHNOLOGY (DCTT)

SCHEME OF STUDIES FOR 01-YEAR DCTT PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	DIPCT-211	General anatomy for imaging	2 + 1
	DIPCT-212	English – I	2 + 0
	DIPCT-213	Computer Skills	1 + 1
	DIPCT-214	CT procedure / Patient Care I	2 + 3
	DIPCT-215	CT Physics I	2 + 2
		Semester Cr.Hr	
SECOND	DIPCT-221	CT physics II	2 + 2
	DIPCT-222	English –II	2+0
	DIPCT-223	Cross Sectional Anatomy for Imaging	2+0
	DIPCT-224	CT procedure and Patient care II	2 + 3
		Semester Cr.Hr	

TOTAL CREDIT HOURS: 29 hr.'s

DIPLOMA IN MRI TECHNOLOGY (DMRIT)

SCHEME OF STUDIES FOR 01-YEAR DMRIT PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	DIPMRI-311	General Anatomy for Imaging	2 + 1
	DIPMRI-312	English – I	2+0
	DIPMRI-313	Computer Skills	1 + 1
	DIPMRI-314	MRI procedure / Patient care I	2+ 3
	DIPMRI-315	MRI Physics I	2 + 2
		TOTAL CR. HRS	
SECOND	DIPMRI-321	MRI Physics II	2 + 2
	DIPMRI-322	English – II	2+0
	DIPMRI-323	Cross Sectional Anatomy for Imaging	2 +0
	DIPMRI-324	MRI procedure / Patient care II	2 + 3
	TOTAL CR. HRS		13

TOTAL CREDIT HOURS: 29 hr.'s

DIPLOMA IN BLOOD BANKING & TRANSFUSION (DBBT)

SCHEME OF STUDIES FOR 01-YEAR DBBT PROGRAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL YEAR			
FIRST	DBT - 711	Blood Banking 1	03 + 04
	BBE - 712	English	2 + 0
	BBCS- 713	Computer Skill	1 + 1
		TOTAL CR. HRS	
SECOND	DBT - 721	Blood Banking II	4 + 6
		TOTAL CR. HRS	

TOTAL CREDIT HOURS: 21 hr.'s

FEES STRUCTURE FOR FOUR YEARS BS PROGRAMS

(BS RADIOLOGIC TECHNOLOGY, BS MEDICAL LABORATORY TECHNOLOGY)

MERIT BASIS

Year	Semester	Admission Fee	Tuition Fee	Transport Fee	Sports/Games Fee	Security Deposit (Refundable)	Document Verification Fee	Total
1ST	1st	20000	42500	15000	2000	10000	2500	92000
	2nd	0	42500	0	0	0	0	42500
2ND	3rd	0	42500	15000	1000	0	0	58500
	4th	0	42500	0	0	0	0	42500
3RD	5th	0	42500	15000	1000	0	0	58500
	6th	0	42500	0	0	0	0	42500
4TH	7th	0	42500	15000	1000	0	0	58500
	8th	0	42500	0	0	0	0	42500

FEES STRUCTURE FOR FOUR YEARS BS PROGRAMS

(BS RADIOLOGIC TECHNOLOGY, BS MEDICAL LABORATORY TECHNOLOGY)

Self-Finance:

Year	Semester	Admission Fee	Tuition Fee	Transport Fee	Sports/Games Fee	Security Deposit (Refundable)	Documents Verification Fee	Total
1ST	1st	40000	80000	15000	2000	10000	2500	149500
	2nd	0	80000	0		0	0	80000
2ND	3rd	0	80000	15000	1000	0	0	96000
	4th	0	80000	0		0	0	80000
3RD	5th	0	80000	10000	1000	0	0	96000
	6th	0	80000	0		0	0	80000
4TH	7th	0	80000	10000	1000	0	0	96000
	8th	0	80000	0		0	0	80000

FEES STRUCTURE FOR FOUR YEARS BS PROGRAMS

(BS Forensic Science in Forensic Biology, BS Forensic Science in Forensic Chemistry & Toxicology)

On Merit

Year	Semester	Admission Fee	Tuition Fee	Transport Fee	Sports/Games Fee	Security Deposit (Refundable)	Documents Verification Fee	Total
1ST	1st	20000	60000	15000	2000	10000	2500	109500
	2nd	0	60000	0		0	0	60000
2ND	3rd	0	60000	15000	1000	0	0	76000
	4th	0	60000	0		0	0	60000
3RD	5th	0	60000	15000	1000	0	0	76000
	6th	0	60000	0		0	0	60000
4TH	7th	0	60000	15000	1000	0	0	76000
	8th	0	60000	0		0	0	60000

FEES STRUCTURE FOR FOUR YEARS BS PROGRAMS

(BS Forensic Science in Forensic Biology, BS Forensic Science in Forensic Chemistry & Toxicology)

Self Finance:

Year	Semester	Admission Fee	Tuition Fee	Transport Fee	Sports/Games Fee	Security Deposit (Refundable)	Documents Verification Fee	Total
1ST	1st	40000	125000	15000	2000	10000	2500	194500
	2nd	0	125000	0		0		125000
2ND	3rd	0	125000	15000	1000	0		141000
	4th	0	125000	0		0		125000
3RD	5th	0	125000	15000	1000	0		141000
	6th	0	125000	0		0		125000
4TH	7th	0	125000	15000	1000	0		141000
	8th	0	125000	0		0		125000

FEES STRUCTURE FOR FOUR YEARS BS PROGRAMS

(BS Forensic Science in Forensic Biology, BS Forensic Science in Forensic Chemistry & Toxicology)

Overseas Category:

Year	Semester	Admission Fee	Tuition Fee	Transport Fee	Sports/ Games Fee	Security Deposit (Refundable)	Documents Verification Fee	Total
1ST	1st	US\$500	US\$ 2,500	15000	Rs. 2000	Rs.10000	2500	US\$3,000 + PKR. 29500
	2nd	0	US\$ 2,500	0		0		US\$ 2,500
2ND	3rd	0	US\$ 2,500	15000	Rs. 1000	0		US\$ 2,500 + Rs. 16000
	4th	0	US\$ 2,500	0		0		US\$ 2,500
3RD	5th	0	US\$ 2,500	15000	Rs. 1000	0		US\$ 2,500+ Rs. 16000
	6th	0	US\$ 2,500	0		0		US\$ 2,500
4TH	7th	0	US\$ 2,500	15000	Rs. 1000	0		US\$ 2,500+ Rs. 16000
	8th	0	US\$ 2,500	0		0		US\$ 2,500

FEES STRUCTURE FOR TWO YEARS PROGRAMS

ASSOCIATE IN APPLIED SCIENCES IN RADIOLOGIC TECHNOLOGY (AASRT)

Year	Semester	Admission Fee	Tuition Fee	Transport Fee	Sports/ Games Fee	Security Deposit (Refundable)	Documents Verification Fee	Total
1ST	1st	5000	27500	15000	2000	10000	2500	62000
	2nd	0	27500	0		0	0	27500
2ND	3rd	0	27500	15000	1000	0	0	43500
	4th	0	27500	0		0	0	27500

FEES STRUCTURE FOR TWO YEARS DIPLOMA PROGRAMS

(Diploma in Ophthalmic Technician, Diploma in Dental Technician and Diploma in Refractionist)

S. No	Description	Semester			
		I	II	III	IV
1	Admission Fees	5000	0	0	0
3	Tuition Fee	27500	27500	27500	27500
4	Transport Fee	15000	0	15000	0
5	Security Deposit (Refundable)	10000	0	0	0
6	Documents Verification Fees	2500	0	0	0
7	Sports/Games Fee	2000		1000	
	TOTAL	62000	27500	43500	27500

FEES STRUCTURE FOR ONE YEARS DIPLOMA PROGRAMS

(Diploma in CT Technology, Diploma in MRI Technology, Diploma in Blood Banking and Transfusion)

S.No	Description	Semester	
		I	II
1	Admission Fees	5000	0
3	Tuition Fee	27500	27500
4	Transport Fee	15000	0
5	Security Deposit (Refundable)	10000	0
6	Documents Verification Fees	2500	0
7	Sports/Games Fee	2000	
	TOTAL	62000	27500

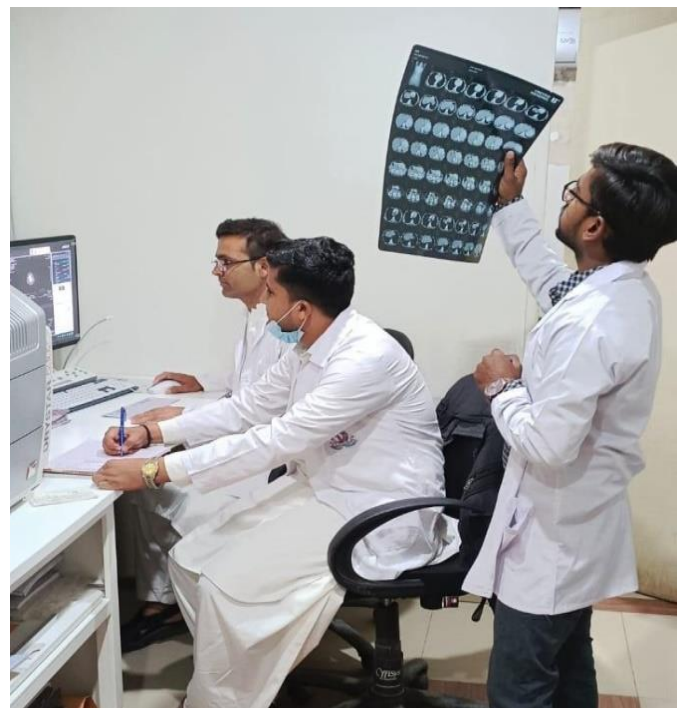
BS RADIOLOGIC TECHNOLOGY (BSRT)

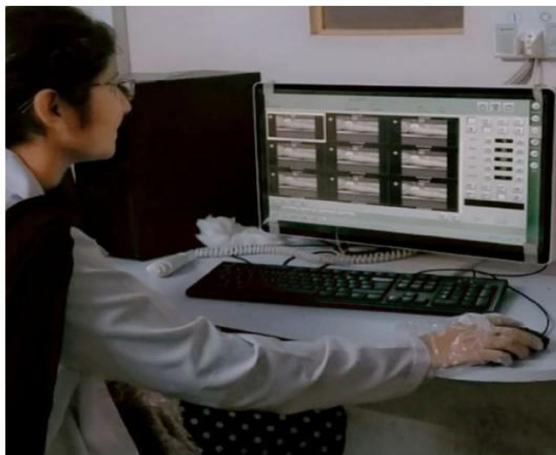
AIMS:

Bachelor of Science in Radiologic Technology (**BSRadTech**) is a four year degree program designed to train students how to operate medical imaging equipment such as X-rays, CT scanners, MRIs, sonogram machines, and 3D medical imaging programs among other computer and web-based software programs. Students are also taught how to perform associated clerical duties, including scheduling and maintaining paperwork for office and clinical machinery.

FRAME WORK FOR BS Radiologic Technology (4 YEAR PROGRAMME)

- ✓ Total number of Credit hours 130
- ✓ Duration 4 years
- ✓ Semester duration 16-18 weeks
- ✓ Semesters 8
- ✓ Course Load per Semester 15-18 Credit hours
- ✓ Numbers of courses per semester 4-6





BS MEDICAL LABORATORY TECHNOLOGY (BSMLT)

INTRODUCTION:

AIMS

Bachelor of Science in Medical Laboratory Technology (BSMLT) is a four year degree program is directed towards medical Technologists who would like to improve their qualifications. The integration of these courses will provide the students with comprehensive knowledge to meet the educational needs of students who can be employed as medical technologists in medical laboratories, biotechnology and medical research as well as in tertiary care hospitals. The aim of this program is to equip the students with relevant professional knowledge, skills, techniques and ethical values to enable them to apply their acquired expertise at level between the clinicians and the patient for efficient health service delivery, to develop research skills and further to produce high quality professionals for organizations in various specialized and emerging area.

FRAME WORK FOR BS MEDICAL LABORATORY TECHNOLOGY (4 YEAR PROGRAMME)

- ✓ Total number of Credit hours 148
- ✓ Duration 4 years
- ✓ Semester duration 16-18 weeks
- ✓ Semester 8
- ✓ Course Load per Semester 15-18 Credit hours
- ✓ Number of Courses per semester 4-6





FORENSIC SCIENCE PROGRAMS

B.S. (Four Year/Eight Semester Program)

IN

1. B.S in FORENSIC BIOLOGY 2. B.S in FORENSIC CHEMISTRY & TOXICOLOGY

1. Introduction

1.1 Forensic Science

Forensic Science is all about preservation and analysis of scientific evidence collected from the crime scene for the investigation purpose. Experts of forensic science visit the crime scene immediately for collecting the scientific evidences, and then they analyze the collected evidences in forensic labs. Forensic Science has close relation with Biology, Chemistry, Information Technology, Criminology, Bio-medical Engineering, Law and Medical fields. Although it has close connection with law and investigation but basically it is a kind of applied medical science. Forensic expert must have good knowledge about the local criminal laws. Police, investigation and law enforcement agencies cannot go forward in many criminal cases without their help. Sometimes they have to appear in court as witness and opponent lawyers reserve the right to cross examine them. So, they must have good knowledge about their field and convincing arguments in defense of their reports.

A forensic scientist can easily get job in any of the department listed below:

- ✓ NAB
- ✓ Intelligence Agencies
- ✓ Anti-Corruption Department
- ✓ Forensic Labs
- ✓ Police Training Colleges
- ✓ FIA
- ✓ Armed Forces
- ✓ Investigation Departments
- ✓ Military Police
- ✓ Courts

2. Standardized Format For BS (4-Year) in Forensic Science

FRAME WORK FOR BS IN FORENSIC SCIENCE (4 YEAR PROGRAMME)

(As per HEC National Qualifications Framework of Pakistan 2015)

✓ Total numbers of Credit hours	124-140
✓ Duration	4 years (8 Semesters)
✓ Semester duration	16-18 weeks
✓ Semesters	08
✓ Course Load per Semester	15-18 Cr hr
✓ Number of courses per semester	4-6 (not more than 3 lab / Practical courses)





ASSOCIATE OF APPLIED SCIENCE (AAS) DEGREE IN RADIOLOGIC TECHNOLOGY:

- ✓ Well-structured degree program equivalent to BSC to be conducted over four regular semesters over a two years period consisting of 69 credit hours.

Our Mission:

The Radiologic Science Program prepares students to practice competently and effectively as medical imaging professionals in diverse healthcare environments with awareness of global health issues. The academic and clinical foundation in the curriculum develops graduates with professional flexibility and adaptability to assume prominent roles and responsibilities after graduation in both career and scholarly pursuits.

Goals:

Develop competent, effective, medical imaging professionals;

- ✓ Support development of skills necessary to practice in diverse healthcare environments and to acquire prominent roles in radiologic science;
- ✓ Program curriculum, teaching methods, and philosophy promote development of integrative, critical thinking, and communication skills to include written, oral, and electronic discourse;
- ✓ Graduate successfully pursue scholarly activities such as contributions to the profession and post-baccalaureate education; and,
- ✓ Encourage global awareness of cultural and health care perspectives.



DIPLOMA IN CT TECHNOLOGY (DCTT)

One year Diploma in CT technology leading to CT technologist is a well-structured program having two regular semesters over one year period consisting of 40 credit hours. After this diploma candidate will be able to perform all types of CT scans independently. The curriculum is at par with the international standard.

Goals:

- ✓ Develop competent, effective, medical imaging professionals.
- ✓ Support development of skills necessary to practice in diverse healthcare environments and to acquire prominent roles in radiologic science.
- ✓ Program curriculum, teaching methods, and philosophy promote development of integrative, critical thinking, and communication skills to include written, oral, and electronic discourse.
- ✓ Graduate successfully pursue scholarly activities such as contributions to the profession and post-baccalaureate education.
- ✓ Encourage global awareness of cultural and health care perspectives.

STUDENT OUTCOMES

Graduates completing the program will:

- ✓ Competently perform CT procedures to obtain diagnostic images.
- ✓ Provide appropriate patient care to CT patients.
- ✓ Demonstrate ALARA principles to ensure radiation safety.
- ✓ Communicate professionally with patients and members of the healthcare team.
- ✓ Perform and monitor quality assurance tests.
 - Emphasizes the principles of exposure, image quality, patient care, radiation safety and other associated professional skills.
 - Placement of clinical assignment is by program coordinator.



DIPLOMA IN MRI TECHNOLOGY (DMRIT)

INTRODUCTION:

One year Diploma in MRI technology leading to MRI technologist is a well-structured program having two regular semesters over one year period consisting of 40 credit hours.

After this diploma candidate will be able to perform all types of MRI scans independently. The curriculum is at par with the international standard.

Goals:

- ✓ Develop competent, effective, medical imaging professionals;
- ✓ Support development of skills necessary to practice in diverse healthcare environments and to acquire prominent roles in radiologic science;
- ✓ Program curriculum, teaching methods, and philosophy promote development of integrative, critical thinking, and communication skills to include written, oral, and electronic discourse;
- ✓ Graduate successfully pursue scholarly activities such as contributions to the profession and post-baccalaureate education; and,
- ✓ Encourage global awareness of cultural and health care perspectives.

STUDENT OUTCOMES

- ✓ Graduates completing the program will:
- ✓ Competently perform MRI procedures to obtain diagnostic images.
- ✓ Provide appropriate patient care to MRI patients.
- ✓ Communicate professionally with patients and members of the healthcare team.
- ✓ Perform and monitor quality assurance tests. .



DIPLOMA IN BLOOD BANKING AND TRANSFUSION (DBBT)

INTRODUCTION

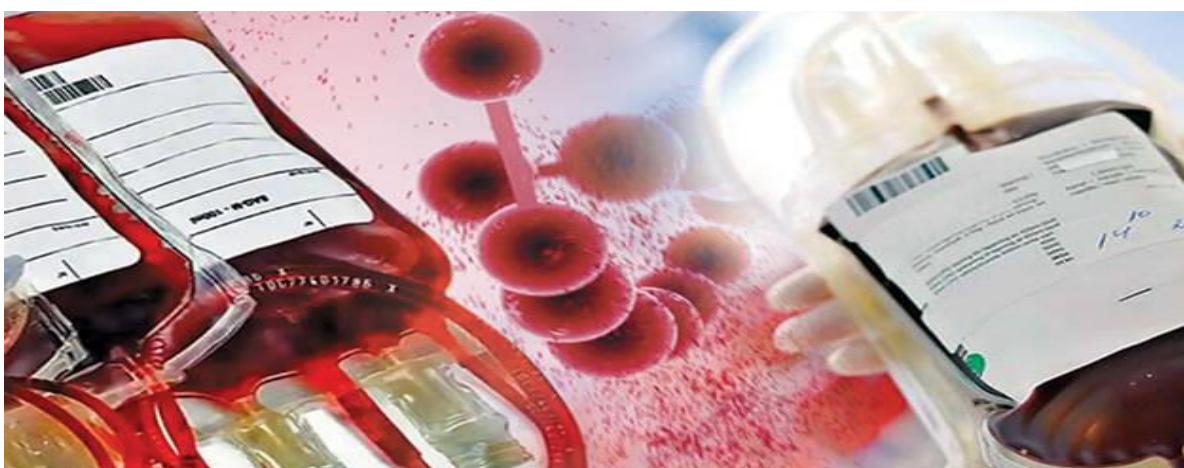
This program is intended for students who are willing to pursue their career in Blood Banking and Transfusion Medicine.

AIM

After completion of this Diploma course candidates will be able to perform all types of basic as well as advanced Blood Banking techniques.

ABOUT THIS PROGRAM

One year diploma in Blood Banking and Transfusion is a well- structured program having two regular semesters comprising 40 credit hours.



DIPLOMA IN OPHTHALMIC TECHNICIAN (DOT)

INTRODUCTION

This program is intended for students who are willing to pursue their career as an ophthalmic Technician.

ABOUT THIS PROGRAM

Two years diploma program for ophthalmic technician is a well- structured program having four regular semesters.





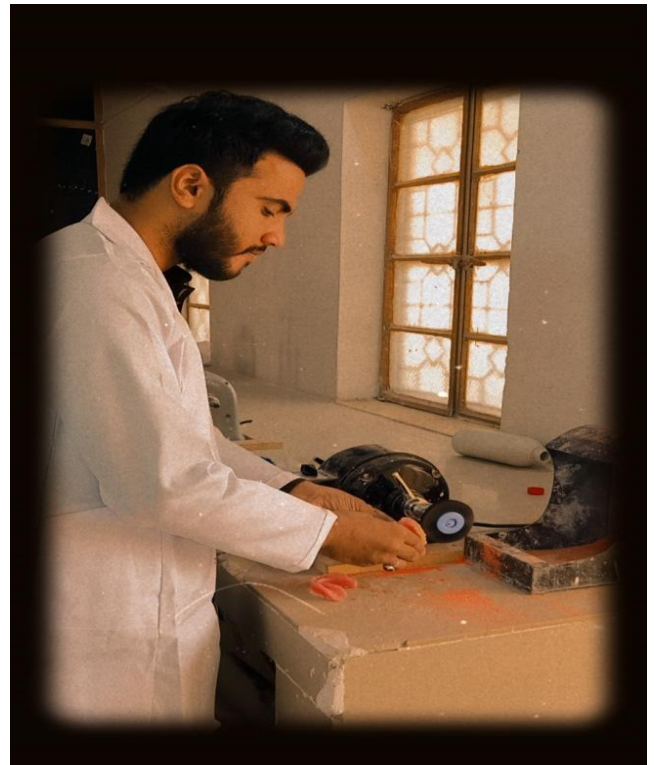
DIPLOMA IN DENTAL TECHNICIAN (DDT)

INTRODUCTION:

This program is intended for students who are willing to pursue their career as a dental technician.

ABOUT THIS PROGRAM:

Two years diploma program for dental technician is a well-structured program having four regular semesters. Sound knowledge regarding dental procedures, techniques and oral hygiene will be given to the candidates.





FINAL MESSAGE

COLLEGE OF TECHNOLOGY, LUMHS endeavors to promote distinctive, world-class academics in Medical technology. It also strive to cultivate students global competence by developing in each of them a high level of expertise and refined sensibilities needed to tackle the challenges of the 21st Century while playing an active role in a wide range of fields throughout the world. We strive hard for the fulfillment of this mission and help in improving overall healthcare through quality Diagnostic Services and Academics.



Introduction

Molecular biology & Genetics is a rapidly developing field of biological sciences that involves the study of organisms on a cellular and molecular level. It has many important applications such as biomedical sciences, molecular medicine, disease prevention and treatment, generation of new protein products, and manipulation of plants and animals for desired phenotypic traits. The study of living things at molecular and genetic levels have undergone tremendous development and expansion in the last two- three decades, and as a result undergraduate education in topics such as molecular cell biology, molecular genetics and genomics are becoming of higher interest.

Genetics and Molecular Biology program at LUMHS offers a Bachelor of Science degree upon completion of a 4-year curriculum taught in English. Students will be mainly educated in molecular biology and various fields of genetics that are designed to train students for post graduates studies in the related fields. In addition, optional courses include other fields of biology such as immunology, Physiology, Microbiology, Pharmacology, Epidemiology and Bioinformatics.



Goal:

Students will be introduced to general and foundation courses of Genetics and Molecular biology. The specialized courses provide in-depth knowledge in various aspects of genetics and molecular biology, both in theory and in practice through laboratory experience. Students will also be offered several elective options in order to further develop themselves according to their own interests, such as in fields of Stem cells, Gene Therapy, Forensic Biology and Endocrinology.

Students of the Genetics and Molecular Biology program will benefit from the state of the art laboratories of LUMHS, computer and audio-visual technology facilities, University library to follow the latest developments in the biological sciences and other relevant fields. Students of the program will be offered the opportunity to take part in projects carried out by the department academic staff. This will enhance their ability to understand the genomics revolution that is changing the face of all biological and biomedical areas of the science.

Objectives:

The objectives of 4 year BS in Genetics and Molecular Biology are:

- To provide students with a solid foundation through coursework and practical training.
- To develop skilled human resource with basic understanding of the subject of molecular biology and fundamentals of classical as well as modern molecular genetics.

Career Opportunities

Following the successful completion of the 4-year undergraduate studies, program graduates will receive a Bachelor of Science (B.S.) degree in Genetic and Molecular Biology. Upon receiving this degree, graduates will have the necessary foundation for further education in post-graduate programs. In addition graduates will have the opportunity to find employment in variety of fields including teaching, clinical genetics, bioinformatics, pharmaceutical and biotechnology industries, private diagnostic laboratories and research institutes.

Lead Faculty



Prof. Dr. Ali Muhammad Waryah (M.phil, PhD)
Professor / Head of Department
Department of Molecular Biology & Genetics
Liaquat University of Medical & Health Sciences
Jamshoro



Dr. Shakeel Ahmed Shaikh (MBBS, PhD)
Associate Professor
Department of Molecular Biology & Genetics
Liaquat University of Medical & Health Sciences
Jamshoro



Dr. Feriha Fatima Khidri (MBBS, PhD)
Associate Professor
Department of Molecular Biology & Genetics
Liaquat University of Medical & Health Sciences
Jamshoro



Dr. Suleman Peerzado (MBBS, PhD)
Assistant Professor
Department of Molecular Biology & Genetics
Liaquat University of Medical & Health Sciences
Jamshoro



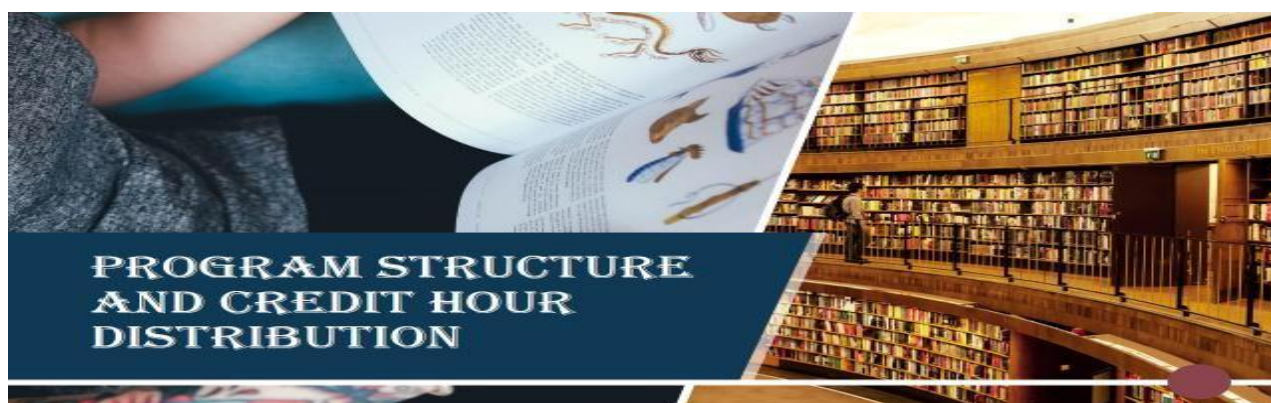
Dr. Mahesh Kumar (MBBS, PhD)
Assistant Professor
Department of Molecular Biology & Genetics
Liaquat University of Medical & Health Sciences
Jamshoro



Dr. Ali Raza Rao, PhD
Department of Molecular Biology & Genetics
Liaquat University of Medical & Health Sciences,
Jamshoro



Dr. Hina Shaikh, PhD
Department of Molecular Biology & Genetics
Liaquat University of Medical & Health Sciences
Jamshoro



Sr.	Courses	No of courses	Cr. Hr.
1	Compulsory courses	09	25
2	General courses	09	27
3	Discipline specifies courses	10	30
4	Major courses	13	42
5	Elective within the Major	04	12
	Total	45	136

Scheme of Studies for BS Molecular Biology & Genetics (4 Years Programme)

Semester / Year	Course	Code	Subject	Credits
First	Compulsory-I	MBG101	English-I (Functional English)	03
	Compulsory-II	MBG102	Pakistan Studies	02
	Compulsory-III	MBG103	Mathematics	03
	General I	MBG104	Biochemistry-I	2+1
	General II	MBG105	Human Physiology-I	2+1
	Foundation-I	MBG106	Molecular Biology-I	2+1
				17

Second	Compulsory IV	MBG201	English-II (communication English)	03
	Compulsory V	MBG202	Islamic Studies	02
	Compulsory VI	MBG203	Biostatistics	03
	General III	MBG204	Biochemistry-II	2+1
	General-IV	MBG205	Human Physiology-II	03
	Foundation-II	MBG206	Molecular Biology II	03
				17
Third	Compulsory VII	MBG301	Introduction to Computer Sciences	03
	Compulsory VIII	MBG302	English-III (Technical Writing and Presentation Skills)	03
	General-V	MBG303	Cell Biology	2+1
	General-VI	MBG304	Basic Microbiology	2+1
	Foundation-III	MBG305	Essentials of Genetics	2+1
	Foundation-IV	MBG306	Biotechnology	2+1
				18
Fourth	Compulsory XI	MBG401	English-IV/Foreign Language Univ. Optional	2+1
	General-VII	MBG402	Basic Immunology	2+1
	General-VIII	MBG403	Basic Epidemiology	2+1
	Foundation-V	MBG404	Human Genetics and Chromosomal Disorders	2+1
	Foundation-VI	MBG405	DNA Damage and Repair	2+1
	Foundation-VII	MBG406	Biosafety and Risk Management	2+1
				18
Fifth	General-XI	MBG501	Molecular Pharmacology	2+1
	Foundation-VIII	MBG502	Cancer Biology	2+1
	Foundation-IX	MBG503	Cell & Tissue Culture	2+1
	Major- I	MBG504	Epigenetics	2+1
	Major- II	MBG505	Cell Signaling	3+0
	Major- III	MBG506	Immunogenetics	2+1
				18
Sixth	Foundation- X	MBG601	Bioinformatics	1+2
	Major- IV	MBG602	Genomics	2+1
	Major- V	MBG603	Molecular Virology	2+1
	Major- VI	MBG604	Bio Molecule Diagnostics	1+2
	Major- VII	MBG605	Molecular to the Market	3.0
	Major-VIII	MBG606	Recombinant DNA Technology	2+1
				18

Seventh	Major- IX	MBG701	Genetically Modified Organisms	2+1
	Major- X	MBG702	Proteomics	2+1
	MajorXIII	MBG703	Bionanotechnology	2+1
	Elective-I	MBG704	Molecular Toxicology	2+1
	Elective-II	MBG705	Vaccinology	2+1
				15
Eighth	Major- XI	MBG801	Stem Cell and Gene Therapy	2+1
	Major-XII	MBG802	Transcriptomics	2+1
	Elective-III	MBG803	Forensic Biology	03
	Elective-IV	MBG804	Plant Molecular Genetics	2+1
	Major-XIII	MBG805	Research Project / Internship	2+1
				15
	Total	Credit Hours		136



Fees Structure for Merit

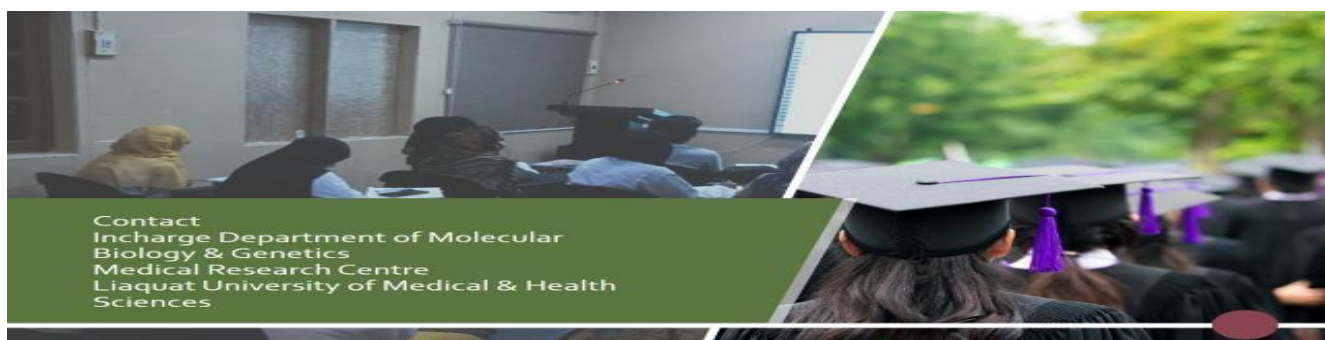
Year	Semester	Admission Fee	Tuition Fee	Transport fee	Sports Fee	Total Per Year
1 st	1 st	20,000	50000	15000	2000	137,000
	2 nd	-	50000			
2 nd	3 rd	-	50000	15000	1000	116,000
	4 th	-	50000			
3 rd	5 th	-	50000	16000	1000	116,000
	6 th	-	50000			
4 th	7 th	-	50000	16000	1000	116,000
	8 th	-	50000			

Fees Structure for Self Finance

Year	Semester	Admission Fee	Tuition Fee	Transport fee	Sports Fee	Total Per Year
1 st	1 st	40,000	75,000	15000	2000	207,000
	2 nd	-	75,000			
2 nd	3 rd	-	75,000	15000	1000	166,000
	4 th	-	75,000			
3 rd	5 th	-	75,000	15000	1000	166,000
	6 th	-	75,000			
4 th	7 th	-	75,000	15000	1000	166,000
	8 th	-	75,000			

NOTE:

- I. 5% Advanced Tax will be applicable as per Govt. Rules only for(Self Finance)
- II. Security Deposit (Refundable) Rs.10,000 will be charged (Once only) at the time admission in first year in all programs
- III. Document Verification Fees Rs.2500/ will be applicable (Once only) at the time of admission in first year in all programs.
- IV. RFID charges Rs.1,000 will be applicable (Once only) at the time of admission.



Contact
Incharge Department of Molecular
Biology & Genetics
Medical Research Centre
Liaquat University of Medical & Health
Sciences

ALLOCATION OF ADMISSIONS SEATS

S #:	NAME OF DISTRICT	ADMISSIONS CATEGORIES			TOTAL SEATS
		DISTRICT MERIT	SELF-FINANCE	OVERSEAS	
1.	Badin	01			
2.	Dadu	01			
3.	Ghotki	01			
4.	Hyderabad	02			
5.	Jacobabad	01			
6.	Jamshoro	02			
7.	Karachi	02			
8.	Kashmore @ Kandhkot	01			
9.	Khairpur Mirs	02			
10.	Larkana	02			
11.	Matiari	01			
12.	Mirpurkhas	01			
13.	Naushahro Feroz	01			
14.	Qamber @ Shahdadkot	01			
15.	Sanghar	01			
16.	Shaheed Benazirabad	02			
17.	Shikarpur	01			
18.	Sujawal	01	18	02	Fifty(50) Seats
19.	Sukkur	01			
20.	Tando Allahyar	01			
21.	Tando Mohammad Khan	01			
22.	Tharparkar	01			
23.	Thatta	01			
24.	Umerkot	01			
TOTAL		30	18	02	50

NOTE: UNIVERSITY RESERVES THE RIGHTS TO CHANGE ALLOCATED SEATS

MESSAGE



I am extremely pleased to have this opportunity to introduce you to the Department of Diagnostic & Research Institute of Gastroenterology & Hepatology at LUMHS, Jamshoro. It will serve as a teaching department for the people of Sindh.

Department of Diagnostic & Research Institute of Gastroenterology & Hepatology, Liaquat University of Medical & Health Sciences is one of newly Established advance Institute of undergraduate and postgraduate studies in Pakistan, affiliated with the Liaquat University Hospital Jamshoro/Hyderabad. This hospital has large number of specialists, consultants and academicians which are providing extensive and excellent services in terms of research, academics and community health care to masses.

The Institute was established in 2017 as Diagnostic & Research Institute of Gastroenterology & Hepatology at Liaquat University of Medical & Health Sciences, Jamshoro. Currently, the Institutes comprises teaching rooms with latest Endoscopy suite, seminar rooms, laboratory, research facilities, library and research-integrated OPD clinics.

The institute is affiliated with CPSP for CPSP training in the sub-specialty of Gastroenterology. This institute as highly qualified faculty members which are working very hard to facilitate Postgraduate and Undergraduate Students.

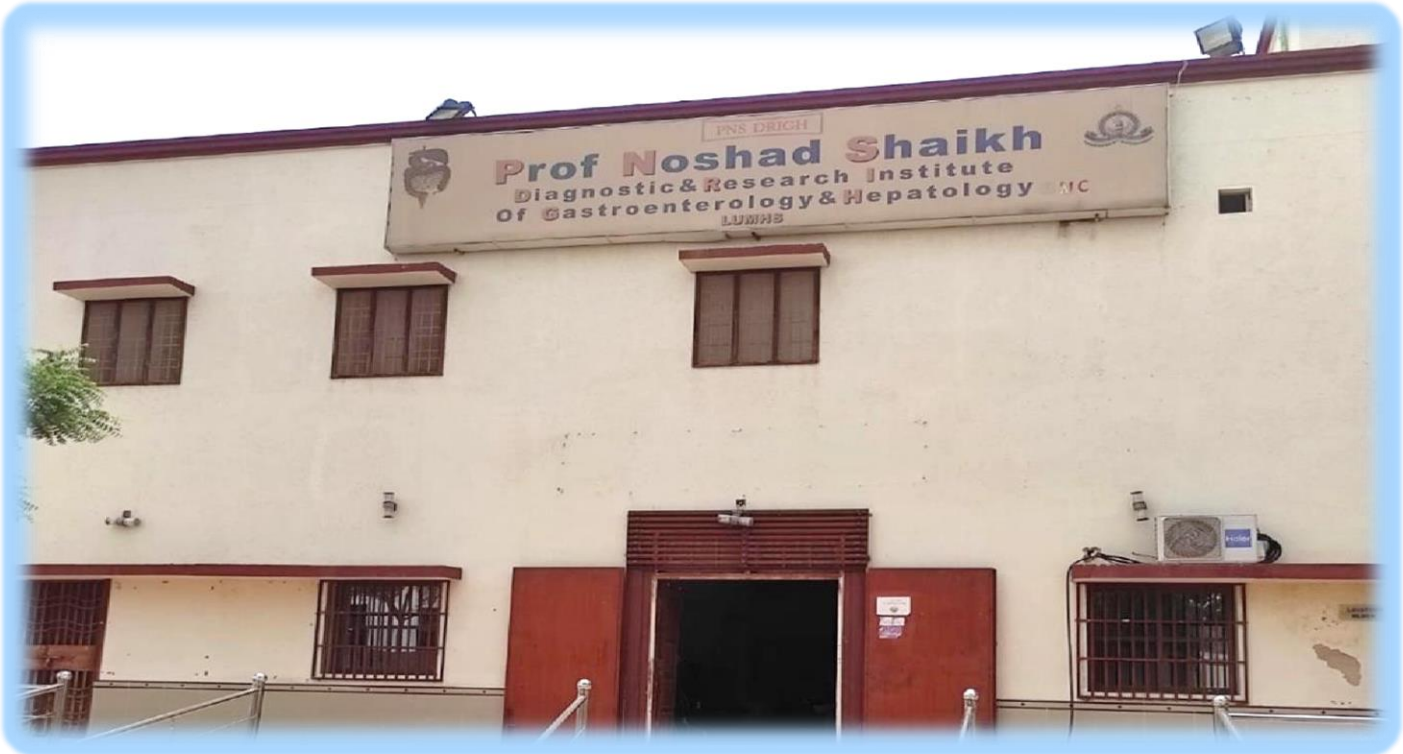
The Department of Diagnostic & Research Institute of Gastroenterology & Hepatology, Liaquat University of Medical & Health Sciences Jamshoro is struggling hard for commencement of MD Gastroenterology Course, developing 50 bedded ward and establishment of liver transplant unit.

The Diagnostic & Research Institute of Gastroenterology & Hepatology offers a friendly environment for Diploma in General Endoscopy training. I hope you will join our academic community and I look forward to welcoming you.

DR. MUHAMMAD AKRAM BAJWA
ASSOCIATE PROFESSOR / INCHARGE
PNS-DRIGH LUMHS, JAMSHORO



DIAGNOSTIC & RESEARCH INSTITUTE OF
GASTROENTEROLOGY AND HEPATOLOGY
LIAQUAT UNIVERSITY OF MEDICAL
& HEALTH SCIENCES, JAMSHORO



FACULTY MEMBERS:

- **DR. MUHAMMAD AKRAM BAJWA**
Associate Professor
MBBS, MD (Gastroenterology) PhD (Gastroenterology)
- **DR. RIAZ HUSSAIN AWAN**
Associate Professor
MBBS FCPS, (Gastroenterology)
- **DR. NAND LAL SEERANI**
Assistant Professor
MBBS FCPS, (Gastroenterology)

AIMS AND OBJECTION OF THE COURSE

DIPLOMA IN ENDOSCOPY TECHNICIAN (DET)

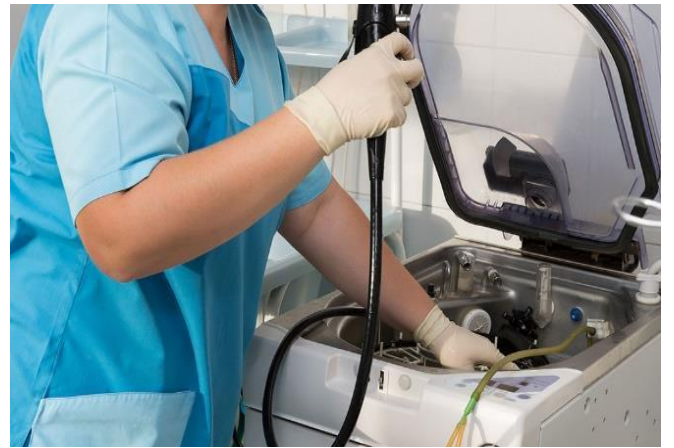
AIMS

Diploma in Endoscopy Technician (DET) 02 years diploma program designed to train students, show to operate endoscopy devices, use of accessories and cleansing and washing of all endoscopic devices.

FRAME WORK FOR ENDOSCOPY

TWO YEARS PROGRAM

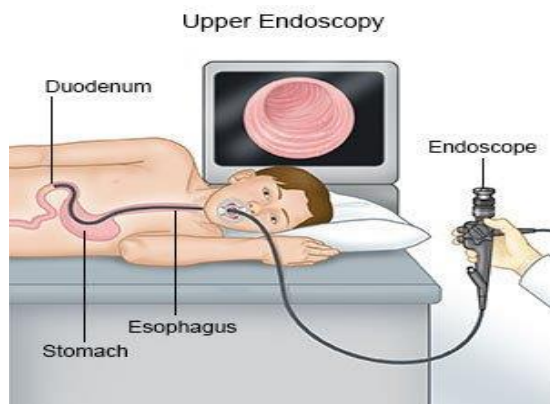
- ☒ Total Number of credit hours 80
- ☒ Duration two years
- ☒ Semester duration 24 weeks
- ☒ Semester 04
- ☒ Course Load per semester 20 credits
- ☒ Number of Courses per semester 04



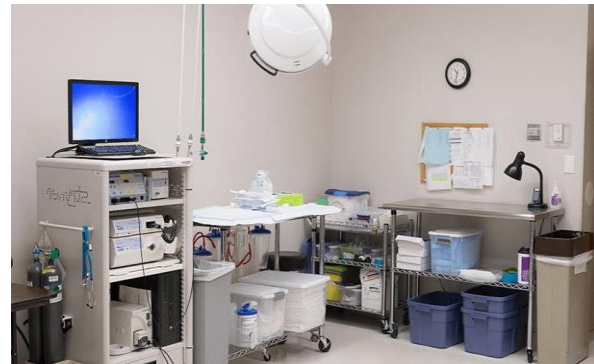
ENDOSCOPY TECHNICIAN

Endoscopy technician is a two years diploma program is directed towards medical endoscopy technician who would like to improve their qualifications. The integration of these courses will provide the students with comprehensive knowledge to meet the educational needs of students who can be employed as endoscopy technician in endoscopy suite in tertiary care hospitals. The aim of this program is to equip the students with relevant professional knowledge, skills, techniques and ethical values to enable them to apply the reacquired expertise at level between the clinicians and the patient for efficient health service delivery, to develop skills and further to produce high quality Professionals for organizations in various specialized and emerging area.

Upper GI Endoscopy



Endoscopy Suite



WASHING AREA



ERCP



ENDOSCOPY TECHNICIAN PROGRAMGET (TWO YEAR/FOUR SEMESTER PROGRAM)

INTRODUCTION

ENDOSCOPY TECHNICIAN

Our program offers a concentration in endoscopy technicians, in which you take courses that focus on the Upper and Lower Endoscopy Procedures of broad knowledge ranging from endoscopy cleansing, washing of all accessories and equipment related to endoscopic procedures.



DIPLOMA IN ENDOSCOPY TECHNICIAN

Diploma in endoscopy technician consists 02 years having 04 semesters'. Technician will be trained in all aspects of operating and assisting endoscopic procedures and communicating with patients and doctors for clinical application. At the end of course technician will be able to assist all diagnostic and therapeutic endoscopic procedure.

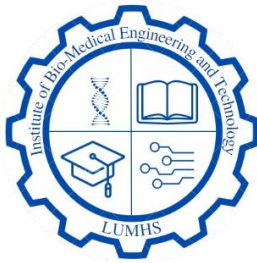
Fees Structure for Diploma In Endoscopy Technician

Year	Semester	Admission Fee (Once)	Fees Per Semester	Documents Verification	Sports Fees Per Year	Total
1 st	1 st	Rs-40000	Rs-20000	Rs-2500	Rs-2000	Rs-64500
	2 nd	=	Rs-20000	=	=	Rs-20000
2 nd	3 rd	=	Rs-20000	=	Rs-1000	Rs-21000
	4 th	=	Rs-20000	=	=	Rs-20000

FINAL MESSAGE

ENDOSCOPY TECHNICIAN DIPLOMA LUMHS endeavors to promote distinctive, world-class academics in General Endoscopy. It also strive to prepare students global competence by developing in each of them a high level of expertise and refined sensibilities needed to tackle the challenges of the 21st Century while playing an active role in the fields of gastroenterology throughout the world. We strive hard for the fulfillment of this mission and help in improving overall healthcare through quality Diagnostic Services and Academics.

INSTITUTE OF BIO-MEDICAL ENGINEERING & TECHNOLOGY



Director's Message



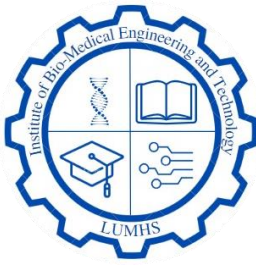
It gives me immense pleasure to announce the new admission of B.S Biomedical engineering at institute of Biomedical engineering and Technology at LUMHS for the session 2023-24. Choosing where to continue your education is a major decision and I believe that IBET, LUMHS will be a choice you will not regret, especially if you are ambitious and determined to succeed.

The evolution of the institute over the past 13 years has witnessed strong blend of state-of-the-art infrastructure and intricately intertwined human resource committed to provide professional education with thrust on creativity and innovation. The academic activities concentrate on helping the students to gain an excellent theoretical knowledge base and in the development of skills to implement them.

We wish the best for all our students, and the members of the institution who reiterate their aims at providing the best in academic and extra-curricular fields. We must believe that success is inevitable where these exist- foresightedness, firm determination, hard work and discipline. You are assured that you will be proud of yourself as a confident and successful Biomedical Engineer after Four years at IBET, LUMHS.

Engr. Muhammad Ali Bohyo
Director Institute of Biomedical Engineering
LUMHS, Jamshoro

INSTITUTE OF BIO-MEDICAL ENGINEERING & TECHNOLOGY



Message from the Head of the Department



Biomedical engineering is an emerging field of the future that utilizes engineering principles, analytical practices, and design concepts for the healthcare industry which in result improves the quality of human life.

Keeping in view the future need of the nation, HEC initiate the BME workshop in LUMHS, which grows by time and become an institute of Biomedical Engineering that become a house for more than 150 students and 15 highly skilled and qualified faculty members.

The field of Biomedical Engineering is becoming more popular due to the high demand for health care experts, scientists, technical staff, and engineers during pandemic COVID-19. Biomedical Engineers are the experts that develop devices like Ventilators, respirators, Vital Sign monitors, and SpO2 monitors to help Doctors in their diagnoses.

Currently, the Institute of Biomedical Engineering offers a BS in Biomedical Engineering. I invite you to visit the institute and get in touch with the most diverse and energetic students and faculty members and learn more about the Biomedical Engineering program and future research activities. If you have any questions or wish to explore more, please do not hesitate to search out to the department. We look forward to hearing from you.

Engr. Dr. Sarmad Shams (Ph.D.)
Head of the Department
Department of Biomedical Engineering
IBET, LUMHS, Jamshoro

VISION OF THE IBET

To contribute as a worldwide leading institution, committed to develop and implement the advanced technology using engineering knowledge to transform the healthcare system of Pakistan.

MISSION STATEMENTS OF THE IBET

- To provide the fundamental knowledge, skills and professional experience education that prepares students to lead, innovate, and self-educate throughout their careers in bio-engineering and biomedical professions and industries.
- To contribute towards society through the pursuit of education, and to bridge the gap of skill, learning and research between advance countries and Pakistan.

PROGRAM EDUCATIONAL OBJECTIVES FOR BIO-MEDICAL ENGINEERING

The three program educational objectives (PEOS), as given below, form the basis of the B.S Biomedical Engineering Program at Institute of Biomedical Engineering and Technology LUMHS. The PEOS were formulated in the consultation with the members of faculty and were adapted by the institute of biomedical engineering for the implementation of outcome-based education (OBE).

Within the period of the graduation, the students with Bachelor's in Biomedical engineering are expected to attain the following objectives:

PEO-1: Apply the knowledge of mathematics, science, engineering fundamentals and create enabling technologies for the improvement of human health and health sciences.

PEO-2: Enhance students' intellectual and analytical abilities in taking initiative and/or developing innovative ideas for technological and professional growth in the field of Biomedical Engineering.

PEO-3: Work effectively as a team member or lead multidisciplinary teams while demonstrating the interpersonal and management skills, ethical, social, and environmental responsibilities.

PROGRAM LEARNING OUTCOMES (PLO)**1. ENGINEERING KNOWLEDGE**

An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

2. PROBLEM ANALYSIS

An ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

3. DESIGN / DEVELOPMENT OF SOLUTIONS

An ability to design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

4. INVESTIGATION

An ability to investigate complex engineering problems in a methodical way including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.

5. MODERN TOOL USAGE

An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations.

THE ENGINEER AND SOCIETY

An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solution to complex engineering problems.

7. ENVIRONMENT AND SUSTAINABILITY

An ability to understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

8. ETHICS

Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

9. INDIVIDUAL AND TEAMWORK

An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.

10. COMMUNICATION

An ability to communicate effectively, orally as well as in writing, on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. PROJECT MANAGEMENT

An ability to demonstrate management skills and apply engineering principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

12. LIFELONG LEARNING

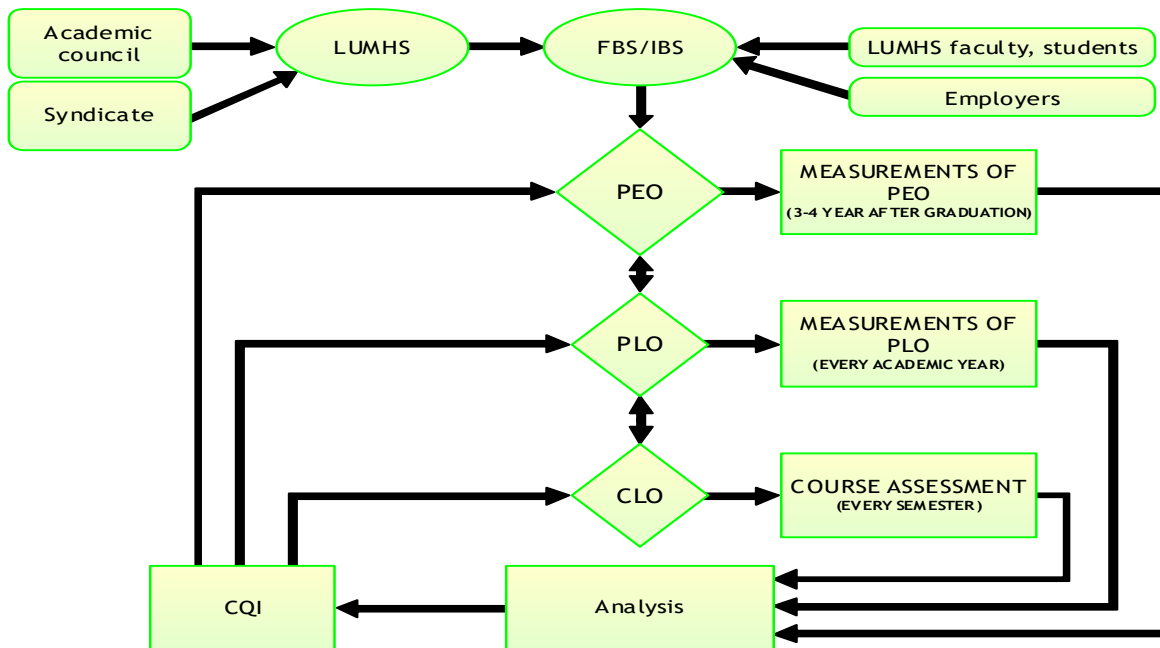
An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

OBE IMPLEMENTATION MODEL

The overall process of assessment and evaluations of PEOS and continuous quality improvement (CQI) is shown in figure: the complete CQI process is based on the three concentric loops for assessment and evaluation. The PLOS (program learning outcomes) and CLOS (course learning outcomes) that are described previously.

Various stakeholders are shown in the flow chart that are participate in the decision-making process. The decision-making process is explained in the following paragraphs.

LUMHS has a syndicate and an Academic council. Institute has faculty board of studies (FBS) and institute board of studies (IBS) to handle various aspects of academic matters. The feedback is also provided by the institute faculty and students as well as by the alumni.



Institute of Biomedical Engineering & Technology

The Institute of Biomedical Engineering & Technology came into existence in March 2009. It was originally sanctioned by Higher Education Commission, Islamabad as Biomedical Equipment Repair Workshop in March, 2006 to provide technical assistance for troubleshooting of Biomedical Equipment's at public sector medical institutions. The need for biomedical experts in Sindh has been felt from a long time. In order to settle this problem, the university decided to take full benefit of the repair workshop by converting the same into Biomedical Institute to utilize its full potential. The idea behind the proposal was to integrate the practical skills with proper academic support, then combine and develop a tool to generate fruitful technical human resource not only to provide benefits of repair but also produce genuine technologist.

The Institute started the B.S programme in Biomedical Engineering from 2012, under the recognition of Higher Education Commission (HEC) and Pakistan Engineering Council (PEC). This programme consists of four (04) Years comprising of two (02) semesters per year.

The aim behind the establishment of this institute was to create diligent and proficient engineers as well as to create job opportunities in public sector organizations including hospitals, universities etc.

FACILITIES AT THE INSTITUTE

- DSP/Microprocessor Lab
- Biomechanics/Fluid Mechanics Lab
- Telemedicine/Computing Lab
- Biomedical Instrumentation Lab
- Electrical & Electronics Lab
- Biomedical Workshop
- Air-conditioned classes with Smart Board
- Seminar Hall
- Library
- Online e-books and journals
- Transport facility
- Tuck Shop

TECHNICAL JOB TRAINING PROGRAMME (6 MONTHS)

The programme is initiated under recognition from Pakistan Engineering Council. The objective of this programme is to produce Biomedical Engineers of International Standards. Institute of biomedical Engineering & Technology is aimed at providing Technical Job Training Programme to all the successful graduates of the institute with a monthly stipend, to give them a hands on experience of their field. The graduates are placed at Liaquat University Hospital Hyderabad and Jamshoro and their effective use is ensured by continuous under supervision of Liaquat University Hospital as well as Liaquat University Administration.

A MoU has been signed with Liaquat University Hospital promoting professional learning and technical skills development for students produced by IBET LUMHS. The objective of this programme is also provide technical support and progressive step towards e-health at LUMHS. MoU is signed for following purpose:

- To introduce advanced and skilled manpower to cover the lack of expertise at LUMHS.
- To provide better health facilities and for the betterment of health sector of Province of Sindh.
- To provide platform for professional learning and working environment for students produced by LUMHS.

THE B.S PROGRAMME

The field of Biomedical Engineering encompasses the knowledge and trainings on electronic circuits, devices and their biomedical applications. The students learn variety of subjects of diverse fields, including, Applied Calculus, Human Anatomy, Computer Applications in Medicine, Biochemistry, Biophysics, Digital Electronics, Computer programming, Database System, Introduction to Physiology, Telemedicine, Signal processing, Biomedical Instrumentation-I & II, Medical Informatics, Biomaterials, Medical Imaging, Prosthetics & Artificial Organs, Medical Automation & Robotics, and Neural Networks.

The courses taught are regularly updated to keep abreast with new knowledge and development. The students also undertake a project during their final year, which helps them to enhance their capabilities as young design engineers.

BIOMEDICAL ENGINEERING

Biomedical engineering is an interdisciplinary area in which engineering expertise and design concepts are applied to problem solving in the life sciences and medicine. This Program focuses on understanding complex living systems and use of technology and advance systems to improve diagnosis and treatment.

Biomedical Engineering Program prepares students for productive careers and diverse profession including medical devices, pharmaceuticals biotechnology as professional education, and research. Biomedical Engineers have developed a number of life-enhancing and life-saving technologies including diagnostics, Therapeutic equipment, life supporting devices, surgical devices and systems, vital sign monitoring devices and prosthetics.

Biomedical Engineers works with a broad range of profession, ranging from other engineering specialties to basic laboratory scientist, to physician and nurses, and have strong communication skills that makes biomedical engineer the general interpreter for such a widely educated individual; the one who knows the language of both engineering and medicine.

THE SCOPE & JOB PROSPECTS IN BIOMEDICAL ENGINEERING

Biomedical Engineering is one of the emerging fields which combines Engineering expertise with the needs in the medical industry for the growth and development of the healthcare sector. It is the unique branch of Engineering in which the concepts, knowledge, expertise and skills are designated and applied to the field of biology and medicine in order to meet the daily challenges. The field of biomedical engineering, as the term implies, includes the mathematical modelling of the biological systems, design and computation of the algorithms which help to analyze biological signals, bioinformatics, biomechanics, applications of micro-electromechanical systems, molecular engineering, nanotechnology and development of signal processing and control algorithms of artificial parts of the body.

- A biomedical engineer carries out various functions within the biomedical engineering industry and other institutions such as hospitals, healthcare organizations and teaching institutions.
- They design the sleek computer systems which help to monitor patients during the different stages of the hospital care. Moreover, they also build the systems to monitor the health aspects of the healthy persons.
- They design and build the complex sensors to measure blood chemistry, such as sodium and pH.
- They design the instruments and devices for the therapeutic uses for example the device for the eye surgery.
- They design clinical laboratories and automate different units within the hospitals and other health care delivery systems using the advanced engineering technologies.
- They design, build and investigate the medical imaging systems based on X-rays (Computer Assisted Tomography), Magnetic Fields (Magnetic Resonance Imaging), Ultrasound or newer modalities.
- They develop and implement the mathematical models of physiological systems for example they design and construct biomaterials and find out the mechanical, transport and biocompatibility properties of implantable materials
- They investigate the Bio - Mechanics of injury and wound healing.
- They develop new horizons in sports engineering in order to restore complicate sports technique and to reduce workload of coaches in efficient way.
- Design systems and products, such as artificial internal organs, artificial devices that replace body parts, and machines for diagnosing medical problems
- Install, adjust, maintain, repair, or provide technical support for biomedical equipment.
- Evaluate the safety, efficiency, and effectiveness of biomedical equipment
- Train clinicians and other personnel on the proper use of equipment.
- Work with life scientists, chemists, and medical scientists to research the engineering aspects of biological systems of humans and animals.

Faculty Members

- Engr. Muhammad Ali Bohyo
Director
I.B.E.T, LUMHS, Jamshoro.
- Dr. Sarmad Shams
Associate Professor
Head of Department
Department of Biomedical Engineering
I.B.E.T, LUMHS, Jamshoro.
- Dr. Muhammad Fahad Shamim
Assistant Professor
I.B.E.T, LUMHS, Jamshoro.
- Engr. Sarfaraz Khan
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Engr. Saeed Ahmed Maitlo
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Engr. Sehreen Moorat Gopang
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Engr. Hiba Parvaiz
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Mr. Muhammad Siddique Raza
Lecturer, I.B.E.T, LUMHS
- Engr. Murk Rehman
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Engr. Natasha Mukhtiar
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Engr. Murk Saleem
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Engr. Muhammad Safwan
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Ms. Bakh Panhwar
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Engr. Sasuee Khattoon
Lecturer, I.B.E.T,
LUMHS, Jamshoro.
- Engr. Laraib Kehar
Lecturer, I.B.E.T,
LUMHS, Jamshoro.

Visiting Faculty

- Dr. Sadia Effindi
Lecturer, Anatomy, LUMHS, Jamshoro.
- Dr. Javeria
Lecturer, Physiology, LUMHS, Jamshoro.
- Dr. Sofia
Lecturer, Biochemistry, LUMHS, Jamshoro.
- Engr. Azar Akbar Memon, Director, I.T, Training
LUMHS, Jamshoro
- Dr. Sikandar Memon
Assistant Professor, Dentistry, LUMHS, Jamshoro.
- Ms. Sana Zulfiqar
Islamic Studies/Ethics
- Mr. Aamir Memon
CAED

Integrated Teaching, Semester System, Curriculum, Examinations and Medium of Instructions

Bachelor's in biomedical engineering Programme consist of four years academic duration comprising eight semesters including teaching, practical on biomedical equipment and trainers.

The semester system is a unique system in which education is delivered into a process where students can learn according to their interest. After evaluation of their performance/progress assessed through different types of tests/assessments, they can acquire degree on their cumulative performance throughout the Programme of their study.

SEMESTRIAL DURATION PER WEEK

Teaching & Training	16 weeks
Examinations	02 weeks
Duration of Semester	18 weeks

ATTENDANCES OF THE STUDENTS

Students after admission are required to attend classes & practical and maintain at least 75% attendance in each Semester before they become eligible to appear in the examination. Any student who fails to maintain the attendance as prescribed by University for appearance of examination, his examination form shall not be forwarded to the Controller of Examinations.

ELIGIBILITY

- Only candidates who have qualified the attendance criteria will be eligible to appear in Semester examinations.
- Attendance should be 75% both for Theory as well as practical sessions.
- If a candidate passes in theory and fail in practical, he will have to reappear in practical only.
- If a candidate passes in practical and fail in theory, he will have to reappear in theory only.

PATTERN OF EXAMINATION

Theory 100 Marks

- Out of 100 Marks: 20 marks mid-semester 10 marks sessional and 70 Marks of theory paper.
- Sessional Marks comprises on Class Tests and Assignment.

In Paper out of 70 Marks

<u>No. of Questions</u>	<u>Marks</u>	<u>Time</u>
• 20 SBQs	20	30 minutes
• 10 Short Essay 50		1 hours & 30 minutes

Practical / Viva voce 50 Marks

Out of 50 Marks:

- 30 Marks on Lab Demonstration
- 05 Marks on Practical Journal
- 05 Marks on Practical Exam test
- 10 Marks on Viva Voce

CRITERIA OF PASSING

- Passing marks in theory will be 50%
- Passing marks in Viva voce/practical will be 50 %

Examiners for Theory: One Internal

Examiners for Practical: One Internal & One External

EXAMINATION AND GRADING

The grading in the examination will be evaluated as under:

Grade	Score	Value
A+	85% - 100%	4.00
A	70% - 84%	3.50
B	60% - 69%	3.00
C	50% - 59%	2.00
D	Below 50%	1.00

POLICY FOR FAILED COURSES

1. Failed Course:

- 1.1. If a student gets 'F' grade, he/she will be required to repeat the course or its recommended alternate, as per curriculum requirements or recommendations of curricular review committee of the program. However, "F" grade obtained earlier will also be recorded on the transcript.

2. Remedial Classes during the semester:

- 2.1. Since there are two regular semesters (Fall, Spring) in an academic year. However, Remedial Classes may optionally be offered during the semester after the regular classes or in the summer semester.
- 2.2. The remedial classes offered in the summer semester, consisting of 8 weeks of concentrated study for completing any failed/remedial course work in subjects that are failed/not pass by candidates upon request to the Director/HOD.
- 2.3. A student who has either failed or has been stopped to take the examination due to shortage of class attendance is allowed to register in these remedial classes, whenever offered during the academic year, and appear in the next attempt, with the registration of that course and full payment of fees for that course.
- 2.4. It is the responsibility of the student to keep track of his/her courses and complete the degree requirements within the maximum duration of the degree program (as per the policy of the accreditation council).

3. Fee

- 3.1. The student has to pay a fee of Rs. 3000/- per credit hour for each course he/she is going to registered as remedial course
- 3.2. The fee of the course should be submitted before the commencement of classes.
- 3.3. If student failed to submit the fee within the due date the registration of the course will stand cancel.

4. Registration of course

- 4.1. Student has to inform in writing to the Academic Coordinator of the department at the end of the semester whether he or she is going to register for failed/remedial course in the upcoming semester.
- 4.2. The minimum number of students required to offer a remedial course in the Spring/Fall semester is 2, and in summer semester is 4.

MEDIUM OF INSTRUCTIONS

Instruction in all course/Laboratories are carried out in English Language.

ALLOCATION OF SEATS

S. No.	Category	Seats
01	Open Merit	30
02	Self-Finance	10
TOTAL		40

Eligibility Criteria for Admission

- i. Candidates who have passed Secondary School Certificate examination (SSC) or equivalent examination from any other board or institution recognized by IBCC or above only.
- ii. Candidates who have passed Intermediate Sciences (Pre-Medical or Pre-Engineering) with at least 60% marks or any equivalent examination of any other Board / Body recognized by IBCC with at least 60% marks passed only. Candidates obtaining less than 60% Marks in HSSC or equivalent examination are not eligible. A-Level examination either in with minimum 60% marks shall be eligible to appear in the Entry Test. The candidates who have passed A-level Examination should submit transcript and equivalence certificate from IBCC Islamabad.

DOMICILE

Candidate for admission in First Year Biomedical Engineering must be domicile holders and Permanent Resident of Sindh Province.

PAYMENT OF FEE

Payment of Fees Rules

1. All the fees once deposited are non-refundable
2. Fee for the first year should be paid within 03 days of admission
3. Fee for the remaining year shall be paid at the time of start of each session.
4. The fee is subject to revision by the university at any time during the course of study and will be applicable at once for all years.
5. Examination form of any candidate who fails to clear his/her dues within stipulated time period will not be forwarded to Controller of Examination, Liaquat University of Medical & Health Sciences, Jamshoro and he/she shall not be allow to appear examination.

FEE SCHEDULE

OPEN MERIT

S. #	Description	Fee
1.	Admission	25,000/- (once)
2.	Tuition Fee	50,000/- (Per Semester)
3.	Transport	15,000/ (Per Year)
4.	Documents Verification Fee	2,500/ (once)
5.	Sports Fee 1st year	2000/
Total Rs.		94,500/-
6	Sports Fee (2nd , 3rd and 4th year)	1000/ (Per Year)

TUITION FEE YEAR WISE	
1 st Year Tuition	100,000/-
2 nd Year Tuition	110,000/-
3 rd Year Tuition	121,000/-
4 th Year Tuition	133,100

SELF FINANCE			TUITION FEE YEAR WISE	
S. #	Description	Fee		
1.	Admission	25,000/- (once)	1 st Year Tuition	252,000/-
2.	Tuition Fee	126,000/- (Per Semester)	2 nd Year Tuition	277,200/-
3.	Transport	15,000/ (Per Year)	3 rd Year Tuition	304,920/-
4.	Documents Verification Fee	2,500/ (once)	4 th Year Tuition	335,410/-
5.	Sports Fee 1st year	2000/		
Total Rs.		170,500/-		
6	Sports Fee (2nd , 3rd and 4th year)	1000/ (Per Year)		

REFUND POLICY

% of tuition fee
Full 100% fee refund
Half 50% fee refund
No refund 0%

% of Self-Finance fee
20% Penalty
40% Penalty
100% Penalty – No refund

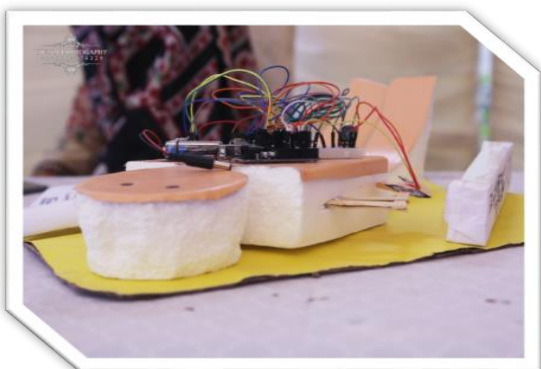
Timeline for Semester
Up to 7 th day of convene of classes
Up to 15 th day of convene of classes
From 16 th day of convene of classes

Timeline for Refund
Up to 7 th day of convene of classes
From 8 th to 15 th day of convene of classes
From 16 th day of convene of classes

Candidate who is finally selected for admission in BS Biomedical Engineering & Technology Program on District Merit/ Self-Finance or any category shall have to pledge, through an affidavit that He/ She shall complete the course of BS Biomedical Engineering & Technology Program. In case He /She leaves the Institute before completing the Course for any reason, He /She will submit a Pay Order/ Demand Draft of Rs.100,000/- (Rupees One Lac Only) payable to the Institute of Biomedical Engineering & Technology, LUMHS, as a penalty for wasting a precious seat.

Academic Instructions

- a) Students after the admission are compulsory required to attend classes and practical and maintain at least 75% attendance in each semester in order to be eligible to appear in the respective Semester examination.
- b) Classes schedule will be pasted on the Notice Board.
- c) Generally, classes are scheduled between 08:00 am to 03:00 pm.
- d) The students who miss classes, assignments and class test are bound to appear in extra classes arranged for this purpose. (On Special request by students).
- e) A student will not be allowed to enter the class after 10 minutes of the start of the Class.
- f) Theory and Practical are integrated in the courses where needed. Students must acquire both theoretical and practical competencies.



ELIGIBILITY OF THE CANDIDATES

ELIGIBILITY FOR ADMISSION IN BIO-MEDICAL ENGINEERING

ENTRY TEST

- i. Candidates who have passed Secondary School Certificate examination (SSC) or equivalent examination from any other board or institution recognized by IBCC.
- ii. Candidates who have passed Intermediate Sciences (Pre-Medical or Pre-Engineering) with at least 60% marks or any equivalent examination of any other Board / Body recognized by IBCC with at least 60%. Candidates obtaining less than 60% Marks in HSSC or equivalent examination are not eligible. A-Level examination either in with minimum 60% marks shall be eligible to appear in the Entry Test. The candidates who have passed A-level Examination should submit transcript and equivalence certificate from IBCC Islamabad.
- iii. The entrance test shall be conducted from the prescribed intermediate syllabus of Board of Intermediate and Secondary Education, Karachi, Hyderabad, Mirpurkhas, Larkana and Sukkur.

There will be 100 multiple choice questions in the test, distributed in the following manner:

S. No.	Subjects	Questions
01	Physics	40
02	Chemistry	40
03	English	20

The time allotted to solve the paper will be 100 minutes, and the exam shall be of 100 marks.

There will be negative marking for incorrect answer.

Each answer shall be awarded 01 (One) mark and there will be 0.25 negative mark for each incorrect answer.

ELIGIBILITY FOR ADMISSION IN DPT & PHARM-D

- 01) Those candidates who have passed the Higher Secondary School Certificate (HSSC) Examinations (Pre-Medical Group) or 'A' level (Pre-Medical) secured at least 60% marks in aggregate from any Board of Higher Secondary Education in Pakistan or any Institution from Foreign Countries duly recognized by Inter-Board Committee of Chairman (IBCC) are eligible to apply for the DPT & PHARM-D.
- 02) The candidate should be permanent Resident of any District of Sindh.

ELIGIBILITY FOR ADMISSION IN BS. NURSING

- 01) Those candidates who have passed the Higher Secondary School Certificate (HSC) Examinations (Pre-Medical Group) or 'A' level (Pre-Medical) secured at least 50% marks in aggregate from any Board of Higher Secondary Education in Pakistan or any Institution from Foreign Countries duly recognized by Inter-Board Committee of Chairman (IBCC) are eligible to apply for the Bs. Nursing.
- 02) Age Limit: (14 – 35 Years)
- 03) Gender Ration: 50% Male and 50% Female

ELIGIBILITY CRITERIA'S FOR ADMISSION IN BS, AAS & DIPLOMA PROGRAMS

Those candidates who have passed the Higher Secondary School Certificate (HSC) Examinations (Pre-Medical Group) or 'A' level (Pre-Medical) secured at least 50% marks in aggregate from any Board of Higher Secondary Education in Pakistan or any Institution from Foreign Countries duly recognized by Inter-Board Committee of Chairman (IBCC) are eligible to apply for the BSMBG, BS.TECHNOLOGY & DIPLOMA IN TECHNOLOGY PROGRAMMES.

FORMULA FOR WORKING OUT OVER ALL MERIT

- a) HSSC/F.Sc or Equivalent. (50%);
- b) Admission test (50%)

Example:

If a Candidate has obtained the following marks:

a	HSC/A-Level Equivalent marks	660/1100 or 60.00%
b	Entry Test Marks	80/100 or 40.00%

His/her Merit will be calculated as follows:

A	HSC/A-Level Equivalent marks	$60.00\% \times 0.5 = 30.000$
b	Entry Test Marks	$40.00\% \times 0.5 = 20.000$
OVER ALL MERIT OF THE CANDIDATE		$A+B=30.000+20.0000 = 50.000$

All calculation in percentages will be rounded up to three decimal points.

Marks shall be added from the total marks of the candidate in his/her HSC qualifying examination in order to adjust the marks.

No deduction in gap of year

In case the overall scores of two or more candidates are equal, the candidate older in age shall be ranked higher in merit for the purpose of admission.

AFFIDAVIT

(TO BE TYPED ON STAMP PAPER OF RS. 200/=)

I _____ S/o, D/o _____
 Muslim/Non-Muslim adult R/o _____
 _____ a candidate for admission in
 1st year _____ for academic session 2023-24 do hereby state on solemn
 affirmation / oath as under:

1. That, I am a holder of **P.R.C.** of District _____ in Province _____
 of National _____, which was issued on the basis of Domicile of District _____
 _____ issued to me / my father / mother, and I have no other PRC / Domicile of
 any other District.
2. That, if, I am allowed admission in 1st Year _____ on District merit / Open
 Merit / Self Finance seat, I shall not seek admission in any other Public/ Private Sector College /
 University of the Country.
3. That, all documents submitted by me along with application form are genuine and correct and no false
 document has been submitted. If any document / information are found to be false, incorrect or
 otherwise I know that my admission is liable to be cancelled.
4. That, after my Final Selection/ Provisional Admission on District Merit/Open Merit/ Self-Finance or any
 other category in (_____)years Degree / Diploma Program of _____, I shall
 complete the Course _____ of (_____) years containing (_____)
 semesters. However, in case, I leave the _____ before
 completion of the Course, I shall be liable to penalty as prescribed in prospectus through Pay Order /
 Demand Draft, else I will not be entitled to issuance of any certificate from the institution.
5. That, I also undertake not to involve myself in any kind of Political Activity throughout tenure in this
 institution as a student and incase, I am found involved in such activities, the authority of the Institute/
 University/College shall be at liberty to expel/ rusticate me and to cancel my admission.
6. That, I also state that I have gone through all the rules, terms and conditions of the admission's, studies
 and my priority of choice for Degree/ Diploma Course is indicated in the Application Form.
7. That, whatever is stated above is true & correct to the best of my knowledge & belief.

 Signature of the Deponent

C.N.I.C. NO. _____

The deponent named above is identified by me to the Commissioner for taking affidavit.

ADVOCATE

Solemnly affirmed on oath this day _____ of _____ 2024 at
 _____ by deponent named above who is identified to me by Mr./
 Ms. _____ Advocate whom I know. The contents were first truly & audibly read over &
 explained to the deponent in _____ language who appears to have understood the same &
 put his / her signature in my presence.

Attestation _____

1st Class Magistrate

UNDERTAKING BY PARENTS / GUARDIANS**(TO BE TYPED ON STAMP PAPER OF RS. 200)**

I, _____ Parent / Guardian of _____ do hereby undertake and assure that my Son/ Daughter/ Sister/ Brother/ Wife/ Ward will not join any political activity directly or indirectly throughout his/ her career as student of _____ Course.

I also understand that if my Son/ Daughter/ Sister/ Brother/ Wife/ Ward found involved in any political activity prejudice to moral character, I shall have no objection to his/ her prior examination rustication from the _____. I also undertake further that after final Selection/ Provisional Admission in _____ Course of my Son/ Daughter/ Sister/ Brother/ Wife/ Ward at the _____, he / she will not be entitled to issuance of any certificate from the Institute under the admission category of District Merit / Open Merit /Self-Finance Course of _____. However in case my Son/ Daughter/ Sister/ Brother/ Wife/ Ward leave _____ discontinues before completion of the Course. He/ She shall be liable to penalty as prescribed in prospectus.

Signature of Parent / Guardian

C.N.I.C. No. _____

Full Address: _____

Contact No: _____

ATTESTATION BY JUDICIAL MAGISTRATE. WITH ROUND STAMP / SEAL

LIST OF REQUIRED DOCUMENTS FOR ADMISSION

S. #	DOCUMENTS
1	SSC / Matric Pacca Certificate / O level transcript certificate
2	SSC / Matric Mark Sheet / O level with IBCC Equivalence certificate
3	HSSC / Intermediate Mark Sheet / A level with IBCC Equivalence.
4	Domicile and PRC form 'C' (Candidate).
5	CNIC or Form "B" of Candidates from NADRA
6	Domicile of Father, if father is not alive then Mother (along-with Death Certificate issued by NADRA)
7	CNIC Father, if father is not alive then Mother
8	Six Passport size photographs of candidate (fresh)
9	Passport / Visa for Foreign National Candidates
10	Affidavit / Undertaking

NOTE:-

Original documents (Matric/O Level Certificate, Matric/O Level Mark sheet, Intermediate/A Level provisional certificate, Intermediate/A Level Mark sheet, Candidate Domicile, Candidate PRC and Father's Domicile) of the selected candidates will remain in the custody of the university / College till the completion of the course or the expulsion of the candidate due to any reason.

FOR ANY QUERIES PLEASE
CONTACT ON TEL NO.022-9213320 - 21
EMAIL (admission.bs@lumhs.edu.pk)