

UNDERGRADUATE **PROSPECTUS** ACADEMIC SESSION 2024-25 BS[DEGREE PROGRAMMES]

Doctor of Physical Therapy

Pharmacy

- Nursing
- Technology Degree Programmes
- Molecular Biology & Genetics
- Biomedical Engineering

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- Business & Information Technology
- Health Informatics & Management System
- Bachelor's of Physician Associate

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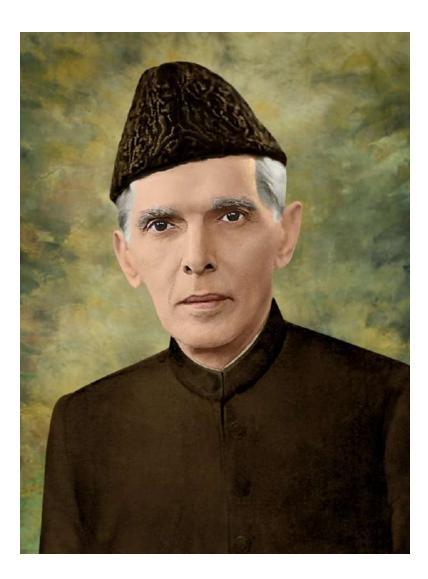
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QUAID E AZAM MUHAMMAD ALI JINNAH



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



Liaquat University of Medical & Health Sciences, Jamshoro _



Message of Vice Chancellor

It is with great pleasure that I address this message to the new generation of aspiring students seeking higher education. Liaquat University of Medical and Health Sciences (LUMHS) stands as a proud pioneer in Pakistan's medical education sector. Established in 1881 as an institute and later recognized as a medical college in 1956, LUMHS achieved the esteemed status of a Medical University in 2001. Over the years, our contributions to the medical profession have been immense, and we continue to lead the way in shaping healthcare education.

LUMHS's journey has evolved beyond medical degrees. Recognizing the growing demand for skilled professionals in allied health sciences, and keeping in view of international job market we have expanded our academic offerings to include a variety of programs that are highly sought after not only in Pakistan but globally. These include bachelor's degrees in Pharmacy, Nursing, Physiotherapy, Biomedical Engineering, Molecular Biology and Genetics, along with a range of technological courses, diplomas, and more. Each year, we add new programs to keep pace with emerging fields and industry demands.

Our academic programs are designed with a modern curriculum that meets international standards, placing significant emphasis on both academic excellence and personal development. At LUMHS, we are committed to promoting gender equality, in line with the United Nations Sustainable Development Goal (SDG) 5, offering equal opportunities to both male and female students.

We also recognize the importance of global exposure in shaping well-rounded professionals. To this end, we have established strong partnerships with universities in the United States, the United Kingdom, China, Turkey, and Azerbaijan, offering our students opportunities for international collaboration and learning.

At LUMHS, our primary focus is on nurturing the personal growth of each student. We provide an exceptional learning environment, highly qualified faculty, a modern curriculum, and state-of-the-art facilities. Every student is treated as an individual, with their personal strengths and aspirations guiding their educational experience. As you explore this prospectus, I encourage you to discover the unique academic opportunities, advanced facilities, and the dedicated faculty that make LUMHS a center of excellence. Our team is here to support you every step of the way, ensuring you acquire the knowledge, skills, and resilience necessary to excel in your chosen profession.

I invite you to take this exciting opportunity to become part of our dynamic academic community. As you plan your educational journey, know that LUMHS is committed to providing you with the tools, support, and guidance needed to succeed.

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

Prof. Ikram Din Ujjan



UNDERGRADUATE PROGRAMS

DEGREE PROGRAMS

S. #	Program	Period of Study
01	Doctor of Physical Therapy (DPT)	05 Years
02	Doctor of Pharmacy (Pharm-D)	05 Years
03	BS. Nursing	04 Years
04	BS Molecular Biology & Genetics (BSMBG)	04 Years
05	BS Radiologic Technology (BSRT)	04 Years
06	BS Medical Laboratory Technology (BSMLT)	04 Years
07	BS Forensic Science in Forensic Biology (BSFB)	04 Years
08	BS. Biomedical Engineering	04 Years
09	BS Business and Information Technology	04 Years
10	BS Health Informatics and Management System	04 Years
11	Bachelors of Physician Associate	04 Years



IPRS

INSTITUTE OF PHYSIOTHERAPY & REHABILITATION SCIENCES

LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES, JAMSHORO







INTRODUCTION

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 excess to improve their education & training. Hence there was dire need of establishing the Institute of Physiotherapy in order to impart quality medical education and 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.

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.

This Institute is equipped with modern and state of 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.



Liaquat University of Medical & Health Sciences, Jamshoro

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.

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ADMINISTRATIVE & ACADEMIC SUPPORT OF INSTITUTE OF PHYSIOTHERAPY & REHABILITATION SCIENCES LUMHS JAMSHORO.

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 Muqeem	Computer Operator		
07	Mr. Altaf Ahmed Larik	Senior Clerk		
08	Mr. Shahmir Mallah	Junior Clerk		
09	Mr. Bashir Ahmed Memon	Store Keeper		
	ACADEMIC SUPPO	RT		
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	Ms. Fakhra Safdar	Lecturer		



COURSE CURRICULUM DOCTOR OF PHYSICAL THERAPY SCHEME OF STUDIES FOR 5-YEARS DPT PROGRAM

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

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	Pathology & Microbiology-II	3(2-1)
	Pharmacology-II	2(2-0)
SIXTH	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	
	Medicine-I	3(3-0)
	Surgery-I	3(3-0)
	Radiology & Diagnostic Imaging	3(2-1)
SEVENTH	Musculoskeletal Physical Therapy	3(2-1)
	Human Growth Development & Community Based Rehabilitation	2(2-0)
	Supervised Clinical Practice-III	3(0-3)
		17
	Medicine-II	3(3-0)
	Surgery-II	3(3-0)
	Neurological Physical Therapy	3(2-1)
EIGHT	Evidence Based Practice	3(2-1)
	Prosthetics & Orthotics	2(2-0)
	Supervised Clinical Practice-IV	3(0-3)
		17
	FIFTH PROFESSIONAL YEAR	
	Cardiopulmonary Physical Therapy	3(2-1)
	Emergency Procedure & Primary Care in Physical Therapy	2(2-0)
	Clinical Decision Making & Differential Diagnosis	3(3-0)
NINTH	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
	Obstetrics & Gynecological Physical Therapy	2(2-0)
	Pediatric Physical Therapy	2(2-0)
	Gerontology & Geriatric Physical Therapy	2(2-0)
TENTH	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 will be absorbed for period of one **(01)** year House Job in Hospital(s) affiliated with the Liaquat University of Medical & Health Sciences. After successfully completion of House Job they will have the certificates of House Job.

EVALUATION SYSTEM:

Log Book:

- For Theory
- For Practical / Clinical

Internal Evaluation

(After 6th or 12th week of every semester)

- Semester Examination Marks
 - SBQs
 80
 - Attendance
 10
 - Internal Evaluation 10
 - Viva Voce/ Practical 100
 - Supervised Clinical Practice ____100
 - Research Project _____100

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RULES OF EXAMINATIONS:

- (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 least 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 1stSemesteror 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 $1^{st} / 2^{nd}$ 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.



Liaquat University of Medical & Health Sciences, Jamshoro _

College of Pharmacy



MESSAGEOF 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



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.



Liaquat University of Medical & Health Sciences, Jamshoro

TEACHING FACULTY College of Pharmacy



Prof. Dr. Naheed Memon Ph. D (Pharmaceutics) Principal



Dr. Raheela Afzal Shaikh Ph.D (Pharmaceutics) MBA (General Management) Assistant Professor



Dr. Syed Shafquat Ali Shah M.Phil (Pharmaceutics) Ph.D (Pharmacognosy) Lecturer



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. Maira Ahsan Memon

(Pharmacy Practice)

Lecturer

M.Phil (Pharmaceutics) Ph.D



Dr. Sadaf Hayat Laghari M.Phil, Ph.D* (Pharmaceutics), Assistant Professor



Dr. Izhaar Mirani M.Phil (Pharmacology) Assistant Professor

Sciences, France)



Dr. Bilal Mustafa Memon PhD (Pharmaceutical Sciences France), M.Phil (Health



Dr. Hetesh Kumar Ph.D (Pharmaceutics) MBA (Marketing) Lecturer

Dr. Komal Zaman M.Phil(Pharmaceutics), Ph.D* (PharmacyPractice) Lecturer



Dr. Danish Patoli Post-doc(France),PhD (Life Sciences,France)



TEACHING FACULTY College of Pharmacy

NAME

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

Dr. Lareb Fatima Pharm-D Teaching Assistant



ACADEMIC PROGRAM

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.

ATTENDANCE OF THE STUDENTS:

- 1) The University is determined to improve its teaching standards.
- 2) The record of attendance is essential to determine eligibility of students for her/ his appearing the examination.
- 3) 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.
- 4) 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".
- 5) 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

- For award of degree, students must pass all the courses taught during five yearseducation Pharm-D with minimum CGPA 2.0
- Promotion from one academic year to next higher academic year
- Policy of conducting re-sit (repeat) examination
- (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 willfall 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



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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 willcontinue in third semester.
- Students who failed in first or second semester or both examinations shall be revertedi-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 willfall 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 willcontinue 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 Seven 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 willfall 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 i-e termed back 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 Eighthsemester.

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 Eighthsemester simultaneously while they remain under study process of Ninth semester.



Liaquat University of Medical & Health Sciences, Jamshoro _

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 willcontinue 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 Seventhand 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 beDeclared to have passed Pharm-D examination and shall be awarded degree.
- 2) However in case of failures in either Ninth of tenth semester they will be allowed to appear in re-sit examination will continue to repeat failure subjects with junior batch till the completely pass Pharm-D examination.

Cash award ceremony for top ten position holders

The award money will be disbursed in accordance with the University's rules and regulations.



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 & writhing 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	Pharmaceutícal 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	



Liaquat University of Medical & Health Sciences, Jamshoro

College of Pharmacy

CURRICULUM

2ND PROFESSIONAL PHARM-D

1 ST Semester			2 ND Semester		
Course #	Subject	Cr. Hr.	Course.#	Subject	Cr. Hr.
IS	Islamic Studies	3	PS 403	Pakistan Studies	2
Pharm- 410	Pharmaceutics-IIA (Dosage form sciences) Th.	3	Pharm- 420	Pharmaceutics-IIB (Dosage form sciences) Th.	3
Pharm	Pharmaceutics-IIA (Dosage form sciences) Lab.	1	Pharm- 421	Pharmaceutics-IIB (Dosage form sciences) Lab.	1
Pharm	Pharmaceutics-IIIA (Pharmaceutical Microbiology and Immunology) Th.	3	Pharm- 422	Pharmaceutics-IIIB (Pharmaceutical Microbiology and Immunology) Th.	3
	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) Tł	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-IIIA (Pharmaceutical Analysis) Th	3	Pharm- 523	Pharmaceutical Chemistry IIIB (Pharmaceutical Analysis) Lab.	1	
Pharm-513	Pharmaceutical Chemistry-IIIA (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.	Total Cr. Hr.	20		Total Cr. Hr.	19	



Liaquat University of Medical & Health Sciences, Jamshoro

College of Pharmacy

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-VIII B Pharmaceutical Management & Marketing) Th.	3
Pharm-718	Pharmaceutical Chemistry- IVA (Medicinal Chemistry) Th.	3	Pharm-728	Pharmaceutical Chemistry-IVA (Medicina Chemistry) Th.	3
Pharm-719	Pharmaceutical Chemistry- IVA (Medicinal Chemistry)Lab.	1	Pharm-729	Pharmaceutical Chemistry-IVA (Medicina Chemistry)Lab.	1
	Total Cr. Hr.	18	Total Cr.Hr.	Total Cr. Hr.	18

Pharm-D Five Year Credit Hours Summary

Pharm-D	1 ST Semester	2 nd Semester	Total
Professional	Cr. Hr.	Cr. Hr.	Cr. Hr.
1ST	22	20	42
2ND	22	21	43
3 RD	20	19	39
4 TH	19	19	38
5 TH	18	18	36
Total Credit Hours	101	97	198



Liaquat University of Medical & Health Sciences, Jamshoro

ADMINISTRATION & ACADEMIC SUPPORT

Prof. Dr. Ikram Din Ujjan Vice Chancellor / Chairman, LUMHS Jamshoro

Member Prof Dr. Munawar Alam Ansari Dean Faculty of Basic Medical 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 Admissions LUMHS, Jamshoro

Dr. Sajjan Halepoto Director Student Affairs LUMHS, Jamshoro





TEACHING FACULTY OF PEOPLE'S NURSING SCHOOL Director Nursing Ms. Parveen Akhter MPH People's Nursing School (PNS)

Ms. Husan Bano Channar Assistant Professor PNS, LUMHS

Ms. Rubina Dean Senior Lecture Mr. Manzoor Ali Janveri Lecturer, PNS, LUMHS

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

Ms. Amber Halepoto Lecturer, PNS, LUMHS

Mr. Abdul Hameed Bhachoo Lecturer (Contract) PNS, LUMHS Mr. Amanullah Rind Senior Lecturer/Deputy Director PNS,LUMHS

Mr. Muhammad Bakhsh Lecturer, PNS, LUMHS

Ms. Fatima Soomro Lecturer, PNS,LUMHS

Mr. Mairaj Hafeez Lecturer, PNS,LUMHS

Ms. Khushboo Chandio Lecturer (Contract) PNS, LUMHS

Ms. Husna Bano Ujjan Lecturer (Contract) PNS, LUMHS



Liaquat University of Medical & Health Sciences, Jamshoro _

PEOPLE'S NURSING SCHOOL UMHS, 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:

- a. To prepare highly qualified nurses to meet the future challenges to provide thehighest quality nursing care.
- b. To provide leadership in nursing education, administration and research.
- c. 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, offer four years course of study which leads to 4 Years BS Nursing (Generic) Degree Program.

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 asper their Rules &Regulations

GENERIC BSN (04 YEARS DEGREE PROGRAM)

Qualification:

a. Matric Science (Physics, Chemistry & Biology as compulsory subjects)

- b. FSc (Pre-Medical) with 50% marks minimum (Physics, Chemistry & Biology as compulsory subjects)
- c. Age Limit -(14 35 Years).





COURSE OUTLINE

1 ST YE	1 ST YEAR (SEMESTER-I)					
S.No.	Course	Category	Theory	Clinical	Skills/Lab	Credits
1	Microbiology	GE(NS)	1.5	-	0.5	02
2	Biochemistry	GE	1.5	-	0.5	02
3	English – Functional English	GE	03	-	-	03
4	Fundamentals of Nursing – I	Major	02	-	01	03
5	Anatomy & Physiology–I	Major	2.5	-	0.5	03
6	Ideology and Constitution of Pakistan	GE	02	-	-	02
7	Information and Communication Technology	GE	01	-	01	02
	Total Credits = (17)					

1 ST YE	AR (SEMESTER-II)					
S.No.	Course	Category	Theory	Clinical	Skills/Lab	Credits
1	Fundamentals of Nursing – II	Major	02	01	01	04
2	Quantitative Reasoning–I	GE	03	-	-	03
3	Anatomy & Physiology–II	Major	2.5	-	0.5	03
4	Applied Nutrition	ID	02	-	-	02
5	Theoretical Basisof Nursing	GE(AH)	02	-	-	02
6	Islamic Studies/ Ethics	GE	02	-	-	02
	Total Credits = (16)					

2 ND YE	AR (SEMESTER-III)					
S.No.	Course	Category	Theory	Clinical	Skills/Lab	Credits
1	Professional Communication Skills	GE	03	-	-	03
2	Clinical Pharmacology Drug Administration–I	Major	02	-	-	02
3	Medical Surgical Nursing – I	Major	03	03	01	07
4	Health Assessment–I	Major	01	-	01	02
5	Pathophysiology – I	Major	02	-	01	03
	Total Credits = (17)					



Liaquat University of Medical & Health Sciences, Jamshoro

PEOPLE'S NURSING SCHOOL

2 ND YE	AR (SEMESTER-IV)					
S.No.	Course	Category	Theory	Clinical	Skills/Lab	Credits
1	Applied Psychology	ID	03	-	-	03
2	Medical Surgical Nursing – II	Major	03	03	01	07
3	Health Assessment– II	Major	01	-	01	02
4	Pathophysiology – II	Major	02	-	-	02
5	Clinical Pharmacology and Drug Administration–II	Major	02	-	-	02
6	Professional Ethics for Nurses	Major	02	-	-	
					Total	Credits = (18)

3 RD YEAR (SEMESTER-V)						
S.No.	Course	Category	Theory	Clinical	Skills/Lab	Credits
1	Civics and Community Engagement	GE	02	-	-	02
2	Pediatric Health Nursing	Major	03	03	01	07
3	Maternal, Neonatal and Child Health	Major	02	01	-	03
	Nursing					
4	Epidemiology	ID	02	-	-	02
5	Infectious Diseases	ID	02	-	-	02
	Total Credits = (16)					

3 RD YEAR (SEMESTER-VI)						
S.No.	Course	Category	Theory	Clinical	Skills/Lab	Credits
1	Principles of Teaching & Learning	ID	03	-	-	03
2	Public Health Nursing	Major	02	02	-	04
3	Mental Health Nursing	Major	03	02	01	06
4	Introduction to Biostatistics(QRII)	GE	03	_	-	03
5	Culture, Health & Society	GE	02	-	-	02
					Total	Credits = (18)

4 TH YE	AR (SEMESTER-VII)					
S.No.	Course	Category	Theory	Clinical	Skills/Lab	Credits
1	Leadership & Management	ID	02	01	-	03
2	Critical Care Nursing	Major	02	04	01	07
3	Introduction to Nursing Research	Major	03	-	-	03
4	Entrepreneurship	GE	02	-	-	02
5	Elective	Major	02	-	-	02
	Total Credits = (17)					



4 TH YE	AR (SEMESTER-VIII)					
S.No.	Course	Category	Theory	Clinical	Skills/Lab	Credits
1	Geriatric Nursing	Major	1.5	1.5	-	03
2	TrendsandIssuesin Health Care	Major	02	-	-	02
3	Expository Writing	GE	03	-	-	03
4	Elective	Major	-	-	-	03
5	Clinical Practicum	CP	-	04	-	04
Total Credits = (15)						

UNIFORM

- **a)** White apron with maroon color piping in campus Name of People's Nursing School & LUMHS Logo
- **b)** Pakistan Nursing Council's prescribed Uniforms during the clinical practice in the wards

GENDER	UNIFORM
GIRLS	White Shirt, White Shalwar,
	White Dopata, White Apron, Black Shoes
BOYS	White Shirt, White Paint,
	White Apron, Black Shoes



Liaquat University of Medical & Health Sciences, Jamshoro _

PEOPLE'S NURSING SCHOOL

Academic Policies and Procedures

GENERAL INSTITUTIONAL REGULATIONS

- a) All the candidates must present themselves in the institute on the first day of first semester, i.e. Orientation Week.
- b) Class schedule / time table will be posted on bulletin / Notice board).
- c) 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 for appearing in the semester examination.
- 10% waiver (5% by Vice Chancellor & 5% by waiver Committee) can be given onmedical 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 academicsession 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, if the academic session in on thestudent will cover the remaining course work by themselves.
 - c. No student is allowed to remain absent during clinical experiences.
 - d. Leave of absence for special reasons must be obtained from theHead of Institution or Cocoordinator of the Class.

3. 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.





FREESHIP:

(ONLY STUDENTS OF PEOPLE'S NURSING SCHOOL 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. Freeship 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.
 - HEC Scholarship
 - Ehsas Scholarship
 - NEST Scholarship
- 9. Student is studying in Self-Finance basis will not be eligible.

ELIGIBILITY CRITERIA:

- a) Orphan Student or Single Parent
- b) Poor Cum Merit-Basis
- c) High Percentage or GPA₃+ (EXCEPT TOP TEN POSITION HOLDERS)
- d) Parent/Guardian's income should be up to Rs.50,000/=per month.
- e) Sibling basis free-ship cases will be entertained



LIAQUAT UNIVERSITY OF MEDICAL & HEALTH SCIENCES, JAMSHORO

2024-2025

Undergraduate Degree programs in multiple disciplines to prepare the best graduates to compete locally, nationally and globally

we would be able to commence more programs to provide excellent teaching and training along with a clinical environment of the highest standard.

DIRECTOR PROF. DR. MUNAWAR HUSSAIN

www.lumhs.edu.pk

COLLEGE OF TECHNOLOGY



PROFILE

PROF. DR. MUNAWAR HUSSAIN MBBS, MCPS, FCPS, 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-ofthe-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.

PROSPECTUS 2024-25



VISION

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 programs in Diagnostic Radiology, Medical Laboratory Technology, Forensic Science.

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.

FACULTY

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.



COLLEGE OF TECHNOLOGY

ADMINISTRATIVE BLOCK COLLEGE OF TECHNOLOGY, LUMHS



Ms. Sehrish Bhurgari Senior Office Assistant, Student Coordinator

Tehzeen Noor Memon

Office superintendent



Mr. Abdul Waheed Office Assistant



Mr. Majid Ali Computer Operator



Muhammad Tariq Khan Office Attendant

PROSPECTUS 2024-25



ACADEMIC PROGRAMS

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

ACCREDITATION:

College of Technology, LUMHS is registered with Allied Health Professionals Council of Pakistan where most of our Degree programs are accredited with AHPCP while accreditation of few programs is in process.



COLLEGE OF TECHNOLOGY

LIST OF FACULTY MEMBERS

S.#	SUBJECT	NAME OF TEACHER	DESIGNATION	Department
1	Hematology (BSMLT)	Prof, Dr. Kiran Amir	Professor	Professor
2	- Human Anatomy (All BSRT,	Dr. Shagufta Qureshi	Assistant Professor	BMC, LUMHS
3	BSMLT, AASRT Programs	Dr. Pashmina Shaikh	Assistant Professor	Anatomy Department
4		Dr. Lal Bux (BS Program)	Assistant Professor	BMC, LUMHS
5	General Pathology (BSRT)	Dr. Muhammmad Ali Soomro	Lecturer	BMC, LUMHS
6		Dr. Aamir Hussain	Associate Professor	BMC, LUMHS
7	Physiology (BSRT, BSMLT Programs)	Dr. Shamsunisa	Lecturer	BMC, LUMHS
8		Dr. Javed Bajeer	Lecturer	BMC, LUMHS
9		Dr. Afsheen Abro	Lecturer	BMC, LUMHS
10	Pakistan Study (BSRT) & (BSMLT)	Mr. Muhammmad Bux	Lecturer	PNS, LUMHS
11	Sociology (BSRT) & BSMLT	Mr. Manzoor Janwari	Lecturer	PNS, LUMHS
12	English (BSRT, BSMLT Programs)	Ms. Bakhtawar	Lecturer	BMC, LUMHS
13	Computer Skills, (BSRT, BSMLT Programs)	Mr. Faheem Ahmed Soomroo	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 BSRT)	Dr. Mir Khuda Bux	Assistant Professor	ADC/BMC, LUMHS
19	Calculaus & Lab Mathematics (BS Forensic Science)	Mr. Noor Ahmed	Visting Tutor	Hyderabad
20	General Pharmacology (BSRT)	Dr. Qamar Zaman	Assistant Professor	BMC, LUMHS
		Dr. Hammad	Lecturer	
22	Clinical Chemistry (BSMLT)	Dr. Aisha Waqas	Lecturer	BMC, LUMHS
23	Microbiology, BSMLT & BSRT	Dr. Zahida	Assistant Professor	Pathology Dept: LUMHS
24	Biochemistry & Microbiology (BSMlT)	Dr. Farhatullah Kandhro	Assistant Professor	College of Technology
25	Clinical Chemistry-II (BSMLT)	Dr. Aamir Ramzan	Assistant Professor	Pathology Department of LUMHS





26	Microbiology-III (BSMLT)	Dr. Rameez	Lecturer Lecturer	BMC, LUMHS
27	Clinical Chemistry-II (BSMLT)	Dr Aisha Waqas	Lecturer	BMC, LUMHS
28	Histopathology-1 (BSMLT)	Dr. Sorath Sindhu	Lecturer	Pathology Dept: LUMHS
29	Radiation science & Technology BSRT)	Dr. Yousaf	Senior Scientist	NIMRA,LUMHS
29		Dr. Zubair Soomro	Senior Scientist	NIMRA, LUMHS
30	Surgery (BSRT)	Dr. Rafique Pathan	Assistant Professor	LUMHS, JAMSHORO
31	Forensic Psychology, Forensic Anthropology (BS Forensic)	Dr. Isharat Bibi Syed	Assistant Professor	Depart. of Forensic Medicine, LUMHS
32	Radiobiology & radiation Protection (BSRT)	Mr Fasail Ali	Senior Scientist	NIMRA, LUMHS
33	Islamiyat	Ms. Aisha Junejo	Visiting Tutor	Jamshoro
34	ECG & ECHO (BSRT)	Dr. Maria Qazi	Senior Registrar	BMC, LUMHS
35	ANGIOGRAPHY (BSRT)	Dr. Maria Qazi	Senior Registrar	BMC, LUMHS
36	SONOLOGY & RADIOLOGICAL PATHOLOGY (BSRT)	Dr. Zafarullah Shaikh	Senior Registrar	RADIOLOGY DEPARTMENT
37	Interventional Radiology (BSRT)	Dr. Abid Ali Sahito	Assistant Professor	ADC/BMC, LUMHS
38	CT Procedures and Clinical Practice (BSRT)	Dr. Asma Jatoi	Assistant Professor	Radiology Department LUMHS
39	Clinical Sonography (BSRT)	Dr. Saima Zafar	Assistant Professor	Radiology department LUMHS
40	Microbiology (BSRT & BSMLT)	Dr. Shabnum	Senior Lecturer	Pathology Departmen ⁻ LUMHS
41	Homicide scene investigation, Forensic Toxicology, Forensic Science In Court Room (BS Forensic)	Prof. Dr. Waheed Ali Nahyoon	Professor	Depart. of Forensic Medicine, LUMHS
42	Forensic Medicine, Medical Jurisprudence (BS Forensic)	Dr. Abdul Samad Memon	Assistant Professor	Depart. of Forensic Medicine, LUMHS
43	Forensic Serology, Immunology (BS Forensic)	Dr. Aisha Khalid	Assistant Professor	Depart. of Forensic Medicine, LUMHS
44	Medical Physiology (BS Forensic)	Dr. Mahira Kazi	Lecturer	Depart. of Forensic Medicine, LUMHS
45	Human Anatomy (BS Forensic)	Dr. Nadia Zafar	Lecturer	Depart. of Forensic Medicine, LUMHS



COLLEGE OF TECHNOLOGY

46	Molecular Biology (BS Forensic)	Dr. Memona	Lecturer	Depart. of Forensic Medicine, LUMHS
47	Medical Biochemistry (BS Forensic)	Dr. Ali Raza Memon	Associate Professo	Depart. of Biochemistry, LUMHS
48	Medical Pharmacology (BS Forensic)	Dr. Sadat	Assistant Professor	Pharmacology depart. LUMHS
49	Forensic Entomology, Biosecurity & Microbial Forensic (BS Forensic)	Dr. Abdul Ghani Lanjar	Visiting Faculty	Hyderabad
50	Analytical Chemistry, Instrumental Analysis (BS Forensic)	Dr. Yawar Latif	Technical Staff	Depart. of Forensic Medicine, LUMHS
51	Principles of Forensic Science Forensic DNA Analysis (BS Forensic)	Ms. Rizwana Khanzada	Technical Staff	Depart. of Forensic Medicine, LUMHS
52	Principles of Chemistry Organic Chemistry (BS Forensic)	Dr. Zahid Ali Zounr	Technical Staff	Depart. of Forensic Medicine, LUMHS
53	English (BS Forensic)	Mr. Masroor Ahmed Soomro	Visiting Faculty	Hyderabad
54	Digital Evidence Analysis, (BS Forensic)	Mr. Saqib Hussain Baloch	Manager I.T Network	Dept. of I.T LUMHS
55	Forensic Photography (BS Forensic)	Ms. Shazma Tahseen	Program Coordinaotor I.T	Dept. of I.T LUMHS
56	Research Methodology and Biostatistics (BSRT & BSMLT)	Dr. Shariq Abid	Assistant Professor	Medical Research Center, LUMHS
57	MRI Procedures and Clinical Practice (BSRT)	Dr. Parkash	Assistant Professor	ADC/BMC, LUMHS
58	Nuclear Medicine (BSRT)	Dr. Kareem Khan	Senior Scientist	NIMRA, Jamshoro
59	Pharmacology (AASRT)	Dr. Aziz Ahmed	Lecturer	ВМС
60	Pharmacology (BSRT & BSMLT)	Dr. Shafqat Ali Shah PhD,MPhil, Pharm-D	Lecturer	LUMHS, Jamshoro
61	Research Methodology and Biostatistics (BSRT	Dr. Sikander Memon (PhD)	Assistant Professor	HOD & Incharge Department of community Dentistry, LUMHS
62	CT Procedures and Clinical Practice (BSRT)	Dr. Rakesh Kumar	Assistant Professor	ADC/BMC, LUMHS



Liaquat University of Medical & Health Sciences, Jamshoro



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



MR. NOOR AHMED NAHYOON Visiting Faculty, Environmental Forensic



MR. FAISAL ALI, Master in Medical Physics, Pakistan Institute of Engineering and Applied Sciences (PIEAS)



DR. ZAHIDA SHAIKH Assistant Professor MBBS, DCP(Diploma in clinical pathology), M.Phil Microbiology





Liaquat University of Medical & Health Sciences, Jamshoro



DR. MUHAMMAD MUSLIM KHAHRO 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. AISHA KHALID M.B.B.S, DGO, MD Assistant Professor Dept. of Forensic Medicine & Toxicology, LUMHS



DR. RAMEEZ IQBAL MEMON MBBS, M. Phill Haematology Lecturer, Pathology Department LUMHS



DR. ISHRAT BIBI MD Forensic Medicine Assistant Professor Dept. of Forensic Medicine & Toxicology, LUMHS



DR. ABDUL SAMADMEMON

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

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Liaquat University of Medical & Health Sciences, Jamshoro



DR. NADIA ASLAM MBBS, DMJ Lecturer, Department of ForensicMedicine & Toxicology, LUMHS



DR. MEMONA NAZ

MBBS, Masters (Moleculer Diagnosis & Genetic diseases) UK Lecturer, Department of Forensic Medicne & Toxicology, LUHMS.



DR. MAHIRA KAZI MBBS, DGO Lecture Dept. of Forensic Medicine & Toxicology, LUMHS



DR. YAWAR LATIF Ph.D. (Analytical Chemistry). Medical Technologist Dept. of Forensic Medicine Toxicology, LUMHS



MR. ZAHID ALI ZOUNR Ph.D. (Chemistry) Medical Technologist Dept. of Forensic Medicine & Toxicology LUMHS



RIZWANA KHANZADA M.Phil Microbiology Ph.D. Fellow (Molecular Biology) Medical technologist/ Forensic DNA Analysts Dept. of Forensic Medicine Toxicology, LUMHS

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DR. ALI RAZA MEMON Associate Professor Dept. of Biochemistry, LUMHS



COLLEGE OF TECHNOLOGY

DR. ABDUL LANJAR Professor (Visiting) S. A University Tando Jam



MR. SAQIB HUSSAIN BALOCH M.Phil (I.T) Ph.D. fellow Manager I.T LUMHS



MR. MASROOR AHMED SOOMRO Visiting Faculty



DR. RANA GUL. HASSAN Sr. WMO, Consultant, Sonologist



DR. FARHAN AHMED SHAIKH Lecturer Dept. of Pathology, LUMHS



Liaquat University of Medical & Health Sciences, Jamshoro



MUHAMMAD YOUSUF ZAMAN PhD Physics (Italy), Principal Scientist, Nimra, Jamshoro



DR. AISHA WAQAS Lecturer in Pathalogy Department, BMC, LUMHS



DR. SHARIQ ABID Associate Professor. Research Methodology and Biostatistics, Medical Research Center, LUMHS.



DR ABID ALI SAHITO MBBS, DMRD, FCPS Assistant Professor Radiology BMC, LUMHS, Jamshoro



FARHATULLAH KANDHARO Assistant Professor College of Technology, LUMHS



DR. ARSHI NAZ Assistant Professor PHD Biochemistry & Haemostasis, Hematology, Moleculer Biology, Genetics, Healthcare Management, Quality Control, Biosafety, CHPE, MBA(ongoing). Department of Pathology/College of Technology, LUMHS, Jamshoro

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DR PASHMINA SHAIKH Associate Professor Anatomy Lumhs



COLLEGE OF TECHNOLOGY



DR RAKESH KUMAR Senior Registrar Diagnostic Radiology, BMC, ADC LUHMS JAMSHORO



DR AISHA WAQAS Lecturer, Clinical Chemistry, Quality Assurance, Cytology & Cytogenetics BMC/COT, LIMHS, Jamshoro



DR. SHAFQAT ALI SHAH PhD, MPhil, Pharm-D Lecturer



PROF. SALMA SHAIKH

Head of Department of Paediatrics Bilawal Medical college for Boys LUMHS, Jamshoro



DR. MUHAMMAD NADEEM CHOHAN Associate Professor Pediatric

Associate Professor Pediatric Department of Paediatrics Bilawal Medical college for Boys LUMHS, Jamshoro



DR. DILAWAR KHAN JOKHIO

Senior Registrar Department of Paediatrics Bilawal Medical college for Boys LUMHS, Jamshoro

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DR. FAREENA SAQIB

Senior Registrar Department of Paediatrics Bilawal Medical college for Boys, LUMHS, Jamshoro



MR. NISAR AHMED BALOCH

B.com , DIT,LLB, MSc.Crimnology Computer Operator /Course Coordinator Department of Paediatrics Bilawal Medical college for Boys, LUMHS, Jamshoro



DR. YUSRA SHAFQUAT

MBBS, FCPS (Microbiology) Assistant Professor, Department of Pathology, Liaquat University of Medical and Health Sciences



DR PARKASH Senior Registrar at BMC Jamshoro Working in ADC Jamshoro



DR. SIKANDER MEMON Assistant Professor HOD & Incharge Department of community Dentistry, LUMHS, Jamshoro



MISS. BAKHTAWAR B.S, M. Phil English Literature, University of Sindh Lecturer (sub: English) College of Technology, LUMHS, Jamshoro





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) PROGRAM.



Dr. Mir Khuda Bux Course Coordinator BSRT Program



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. <u>JOIN US</u> 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		
	BSRT-411	Biochemistry – I	3+1
	BSR -412	Human Physiology – I	3+1
FIRST	BSRT-413	Human Anatomy – I	3+1
TIRST	BSRT-414	English – I	2+0
	BSRT-415	Pak Studies	2+0
	BSRT-416	Computer Skills	1+1
		Total	18
	BSRT-421	Biochemistry – II	3+1
SECOND	BSRT-422	Human Physiology – II	3+1
SECOND	BSRT-423	Human Anatomy – II	3+1
	BSRT-424	English – II	2+0
	BSRT -425	Islamic Studies	2+0
		Total	16
SECOND PROFESSION	AL YEAR		
	BSRT-431	Regional And Radiological Anatomy – I	2+1
	BSRT-432	General Radiology	2+1
THIRD	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	17
	BSRT-441	Clinical Medicine – I	1+1
	BSRT-442	Regional And Radiological Anatomy – II	2+1
FOURTH	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	17
THIRD PROFESSIONAL	YEAR		
	BSRT-451	Computed Tomography (CT)	2+2
	BSRT-452	Mammography & Special Radiological Techniques	2+1
FIFTH	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	17



	BSRT-461	Radiological & Cross Sectional Anatomy	2+1
	BSRT-462	Computed Tomography (CT) Procedures & Clinical Practice	2+1
SIXTH	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	18
FOURTH PROFESSIO	ONAL YEAR		
	BSRT-471	Clinical Sonography	2+2
	BSRT-472	Angiography and Cardiac Imaging	2+2
SEVENTH	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	17
	BSRT-481	Patient Care & Management	2+0
	BSRT-482	Medical Sociology	2+0
EIGHTH	BSRT-483	Research Project	0+6
	BSRT-484	Bio-Ethics	2+0
			10
		Total	12



COLLEGE OF TECHNOLOGY

BS MEDICAL LABORATORY TECHNOLOGY (BSMLT)



Dr. Kiran Aamir Course Coordinator BSMLT Program

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						
	BSMLT-311	Anatomy	2+1			
	BSMLT-312	Biochemistry	3+1			
FIRST	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			
	BSMLT-321	Clinical Pathology I	3+2			
	BSMLT-322	Microbiology I	3+2			
SECOND	BSMLT-323	English II	2+0			
	BSMLT-324	Laboratory Mathematics	2+0			
	BSMLT-325	Islamiat	2+0			
		Total	16			
SECOND PROFESSIONA	L YEAR		1			
	BSMLT-331	Clinical Pathology-II	3+1			
T	BSMLT-332	Microbiology-II	3+1			
THIRD	BSMLT-333	Clinical Chemistry-I	3+1			
	BSMLT-334	Clinical Pharmacology	2+1			
	BSMLT-335	Sociology	2+0			
		Total	17			
	BSMLT-341	Haematology-I	3+1			
	BSMLT-342	Histopathology-I	3+1			
FOURTH	BSMLT-343	Clinical Chemistry-II	3+1			
	BSMLT-344	Microbiology-III	2+2			
		Total	16			



COLLEGE OF TECHNOLOGY

THIRD PROFESSIONAL YEAR					
	BSMLT - 351	Quality Assurance	2+1		
	BSMLT - 352	Hematology-II	3+1		
FIFTH	BSMLT - 353	Histopathology-II	3+1		
	BSMLT - 354	Immunology -I	3+1		
	BSMLT - 355	Body Fluid Analysis	1+1		
		Total	17		
	BSMLT – 361	Immunology / Serology-II	3+2		
SIXTH	BSMLT – 362	Immunohematology	3+1		
	BSMLT - 363	Research Methodology	2+2		
	BSMLT – 364	Biostatics	2+1		
		Total	16		
FOURTH PROFESSION	IAL YEAR	1	1		
	BSMLT - 371	Transfusion Medicine	3+2		
SEVENTH	BSMLT - 372	Molecular Biology	2+2		
SEVENIA	BSMLT - 373	Advance Clinical Pathology	2+1		
	BSMLT - 374	Cytology	3+1		
EIGHTH		Total	16		
	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





Prof. Dr. Waheed Ali Nahyoon

<u>Chairman</u> 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 analyses 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

PROSPECTUS 2024-25



COLLEGE OF TECHNOLOGY

BS FORENSIC SCIENCE IN FORENSIC BIOLOGY (BSFB)

SCHEME OF STUDIES FOD 1-VEADS RSER DDOGDAM

SEMESTER/YEAR	Course #	Name of Subject	Credit
FIRST PROFESSIONAL	YEAR		
	ENG-300	English	3(3+0)
	FRNSC-310	College Algebra	3(3+0)
FIRST	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.	18
	ENG-301	English II	3(3+0)
	FRNSC-320	Calculus	3(3+0)
SECOND	FRNSC-321	Organic Chemistry	3(3+0)
	FRNSC-322	Human anatomy-ll	3(2+1)
	FRNSC-323	Medical Physiology-II	3(2+1)
	FRNSC-324	Principles of Forensic Science	3(3+0)
	- 0- 1	Semester Cr.Hr	18
SECOND PROFESSION.	AL YEAR		
	IS-402	Islamiyat	2(2+0)
	EB-402	Ethics[1]	
THIRD	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.	18
	PS-403	Pakistan Studies	2(2+0)
	FRNSC-420	Forensic Photography	3(3+0)
FOURTH	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	18
THIRD PROFESSIONAL	YEAR		
	Course #	Subject	Cr.Hr.
	FRNSC-511	Medical Pharmacology-I	3(3+0)
	FRNSC-512	Forensic Serology	3(2+1)
FIFTH	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)
	111100 01/	Semester Cr. Hr.	18



Liaquat University of Medical & Health Sciences, Jamshoro

	Course #	Subject	Cr.Hr.
	FRNSC-521	Medical Pharmacology-II	3(3+0)
SIXTH	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 PROFESSIO	ONAL YEAR		
	Course #	Subject	Cr.Hr.
	FRNSC-610	Principles of toxicology	3(3+0)
SEVENTH	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
	Course #	Subject	Cr.Hr.
	FRNSC-620	Forensic Toxicology	3(3+0)
EIGHTH	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



COLLEGE OF TECHNOLOGY

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





FRAME WORK FOR BS Radiologic Technology





COLLEGE OF TECHNOLOGY

BS MEDICAL LABORATORY TECHNOLOGY (BSMLT)

INTRODUCTION:

AIMS

Bachelor of Science in Medical Laboratory Technology (BSMLT) is 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











COLLEGE OF TECHNOLOGY

FORENSIC SCIENCE PROGRAMS

B.S. (Four Year/Eight Semester Program) in B.S in FORENSIC BIOLOGY

Introduction

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



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
- ✓Duration
- ✓ Semester duration
- ✓Semesters
- ✓Course Load per Semester Number of courses per

124-140 4 years (8 Semesters) 16-18 weeks 08 15-18 Cr hr 4-6 (not more than 3 lab / Practical





COLLEGE OF TECHNOLOGY





Forensic Museum





INSTITUTE OF MOLECULAR BIOLOGY & GENETICS



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.

MOLLECULAR BIOLOGY & GENETICS



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



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



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





Program Structure and Credit Hour Distribution

Sr.	Courses	No of courses	Cr. Hr.
			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 (04 YEARS PROGRAM)

Semester / Year	Course	Code	Subject Credits	
	Compulsory-I	MBG101	English-I (Functional English)	03
FIRST	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)	17 03
SECOND	Compulsory IV Compulsory V	MBG201 MBG202		
SECOND			English)	03
SECOND	Compulsory V	MBG202	English) Islamic Studies	03 02
SECOND	Compulsory V Compulsory VI	MBG202 MBG203	English) Islamic Studies Biostatistics	03 02 03
SECOND	Compulsory V Compulsory VI General III	MBG202 MBG203 MBG204	English) Islamic Studies Biostatistics Biochemistry-II	03 02 03 2+1

MOLLECULAR BIOLOGY & GENETICS



Liaquat University of Medical & Health Sciences, Jamshoro

THIRD	Compulsory VII	MBG301	Introduction to Computer	03
			Sciences	
	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
	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	Plant Physiology	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
		. 12 4/05		18
EIGHT	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
	MajorXIII	MBG805	Research Project / Internship	2+1
				15
	Total	Credit		136
		Hours		0.



IBET

INSTITUTE OF BIO-MEDICAL ENGINEERING & TECHNOLOGY







IBET

Director's Message

"Desire sets the goal, decision creates the plan, but it is unwavering determination that achieves the ultimate success."

It is great pleasure that I announce the commencement of the B.S Biomedical Engineering program at institute of Biomedical engineering and Technology (IBET), LUMHS for the 2025 academic session. Selecting the right institution for your education is a pivotal decision, and I am confident that IBET will be a choice you cherish, especially if you are driven and committed to excellence.

Our institute has undergone remarkable growth over the past 14 years, evolving into a hub of innovation and excellence. We combine state-of-the-art facilities with a passionate and skilled faculty dedicated to nurturing your intellectual curiosity and practical skills. At IBET, we emphasize a holistic approach to learning, blending rigorous academic training with hands-on experience to prepare you for the dynamic field of biomedical engineering.

We are devoted to supporting you in your academic journey and beyond, offering a range of opportunities to excel both in the classroom and in extracurricular activities. Success in this field demands vision, perseverance, hard work, and discipline—qualities we believe are cultivated here at IBET.

As you embark on this exciting path, we are confident that, after four years, you will emerge as a capable and innovative Biomedical Engineer. We look forward to witnessing your growth and achievements and are here to support you every step of the way.

Welcome to IBET, where your future in biomedical engineering begins.

Engr. Muhammad Ali Bohyo Director IBET LUMHS





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 IBET





INSTITUTE OF BIOMEDICAL ENGINEERING & TECHNOLOGY (IBET)

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.

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.

The Institute started the B.S program in Biomedical Engineering from 2012, under the recognition of Higher Education Commission (HEC) and Pakistan Engineering Council (PEC). This program 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



IBET

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

Mr. Muhammad Siddique Raza

Lecturer, I.B.E.T, LUMHS, Jamshoro.

Engr. Muhammad Furqan

 Lecturer, I.B.E.T, LUMHS, Jamshoro.

Visiting Faculty

Dr. Sadia Effindi

• Lecturer, Anatomy, LUMHS, Jamshoro

Dr. Javeria

• Lecturer, Physiology, LUMHS, Jamshoro.

Engr. Murk Rehman Lecturer. I.B.E.T.

- Lecturer, I.B.E. I , LUMHS, Jamshoro
- Engr. Natasha Mukhtiar
- Lecturer, I.B.E.T, LUMHS, Jamshoro.

Engr. Murk Saleem

Lecturer, I.B.E.T, LUMHS, Jamshoro.

Engr. Sasuee Khatoon

Lecturer, I.B.E.T, LUMHS, Jamshoro.

Engr. Laraib Kehar Lecturer, I.B.E.T, LUMHS, Jamshoro.

- Engr. Asad Rajpar
- Lecturer, I.B.E.T, LUMHS, Jamshoro.
- Engr. Saleha Lecturer, I.B.E.T, LUMHS, Jamshoro.

Dr. Ali Raza Lecturer, Biochemistry LUMHS, Jamshoro.

> Ms. Sana Zulfiqar Islamic Studies/Ethics

IBET



THE PROGRAMME AT IBET

The Institute of Biomedical Engineering and Technology (IBET) offering following program at undergraduate level.

- 1. BS Biomedical Engineering
- 2. Business and Information Technology
- 3. Postgraduate program
 - i. Master of Philosophy in Biomedical Sciences (M.Phil. BMS)
 - ii. Master of Science in Biomedical Engineering (MS BME)
 - iii. Doctor of Philosophy in Biomedical Engineering (PhD BME)
 - iv. Doctor of Philosophy in Biomedical Sciences (PhD BMS)

The Institute of Biomedical Engineering and Technology (IBET) at LUMHS aspires to be a premier global institution, driving progress through cutting-edge technology and engineering knowledge to improve healthcare outcomes. The program aims to equip students with a robust foundation in biomedical engineering, offering them the expertise needed to excel in both local and international contexts.

Through this postgraduate initiative, LUMHS seeks to address the educational and research gaps between advanced countries and Pakistan, providing students with comprehensive knowledge and practical skills. The curriculum covers a range of advanced topics in biomedical engineering, preparing graduates to lead, innovate, and contribute effectively to the healthcare industry. This endeavor reflects LUMHS's dedication to The institute ensure to update the courses on regular basis to keep abreast with new knowledge and development. Therefore, students who underwent with the latest technological knowledge and practical excel after the graduation from the institute.

BS 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

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 microelectromechanical 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.





PROGRAM EDUCATIONAL OBJECTIVES

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 BS 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.



6. 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.

BUSINESS AND INFORMATION TECHNOLOGY

Bachelor of Business and Information Technology program, this innovative four-year degree is designed to equip students with a unique blend of skills in both business management and cutting-edge information technology. Here's a brief overview of what you can expect:

PROGRAM OVERVIEW

The Bachelor's in Business and Information Technology program integrates core principles of business management with advanced technological training. This interdisciplinary approach ensures that graduates are well-prepared to navigate and lead in today's rapidly evolving digital landscape.

Throughout the program, students will engage in a curriculum that integrates management theory, organizational behavior, strategic planning, and technological innovation. They will have opportunities to work on real-world projects, participate in internships, and gain hands-on experience with emerging technologies. The program aims to produce versatile professionals who are adept at leveraging technology to solve business challenges and drive organizational success.

IBET



KEY FEATURES

- **Comprehensive Curriculum:** The program covers a wide range of subjects, including business strategy, finance, marketing, information systems, data analytics, emerging technologies, cloud computing, Block Chain and Al.
- Hands-On Learning: Students engage in practical projects, internships, and collaborative assignments that provide real-world experience and enhance problem-solving skills.
- Industry-Relevant Skills: The curriculum is designed in consultation with industry experts to ensure that students acquire the skills most in demand by employers.
- **Global Perspective:** Courses emphasize global business practices and technological trends, preparing students for careers in a diverse and interconnected world.

CAREER OPPORTUNITIES

Graduates of this program are well-positioned for a variety of career paths, including:

- Business Analyst
- IT Project Manager
- Data Scientist
- Technology Consultant
- Operations Manager
- Product Manager
- Data Analyst
- Digital Transformation Specialist
- Strategic Planning Manager
- Technology Implementation Specialist
- Innovation Manager

WHY CHOOSE THIS PROGRAM?

- Interdisciplinary Approach: Gain expertise in both Business management and information technology, making you a versatile and valuable asset in any organization.
- **Cutting-Edge Knowledge:** Stay ahead of the curve with the latest technological advancements and business strategies.
- **Networking Opportunities:** Connect with industry leaders, alumni, and peers through various events, workshops, and seminars.

Embark on a journey that combines the best of both worlds—business management and information technology. This program is your gateway to a dynamic and fulfilling career in the modern business environment.

MISSION STATEMENT

Our mission is to develop innovative leaders who are adept at integrating management principles with cutting-edge technology. We strive to provide a dynamic educational experience that fosters critical thinking, problem-solving, and strategic decision-making. By blending rigorous academic training with practical, hands-on experience, we prepare our graduates to excel in diverse professional environments and contribute meaningfully to the future of business and technology.



PROGRAM EDUCATIONAL OBJECTIVES (PEO)

Consistent with the Department Vision and Mission, the Program Educational Objectives of the study program Business and Information Technology are to educate individuals with interdisciplinary and practical knowledge who:

PEO-1: Possess a thorough understanding of business and information technology.

PEO-2: Will be able to comprehend, identify, discuss, and offer fixes for business and technological issues.

PEO-3: Contribute to society by coming up with creative ways to manage different technologies and encouraging the ongoing advancement of professional and technical knowledge in decision-making.

PROGRAM LEARNING OUTCOMES (PLO)

The Bachelor's in Business and Information Technology program is designed with the following key Learning outcomes:

1. MANAGEMENT AND TECHNOLOGY KNOWLEDGE

Provide students with a comprehensive understanding of management theories and technological innovations, enabling them to effectively address and solve complex business challenges.

2. INTERDISCIPLINARY EXPERTISE:

Equip students with a solid foundation in both business management and technology, fostering a comprehensive understanding of how these fields intersect and complement each other.

3. ANALYTICAL AND PROBLEM-SOLVING SKILLS:

Train students to analyze complex business problems and develop innovative technological solutions, using data-driven decision-making and critical thinking.

4. LEADERSHIP AND TEAMWORK:

Cultivate leadership qualities and teamwork skills, preparing students to effectively manage and collaborate within diverse and dynamic organizational settings.

5. TECHNOLOGICAL PROFICIENCY TOOLS:

Ensure students are proficient in the latest technological tools and platforms, enabling them to leverage technology to drive business success and innovation.

6. ETHICAL AND SOCIAL RESPONSIBILITY:

Instill a strong sense of ethics and social responsibility, guiding students to make decisions that are not only profitable but also socially and environmentally sustainable.

7. GLOBAL BUSINESS ENVIRONMENT:

Provide a global perspective on business and technology, preparing students to operate and compete in an international marketplace.





8. LIFELONG LEARNING AND PROFESSIONAL DEVELOPMENT:

Encourage continuous learning and professional growth, equipping students with the skills and mindset needed to adapt to evolving industry trends and challenges.

9. PRACTICAL EXPERIENCE:

Offer hands-on learning opportunities through internships, projects, and industry collaborations, ensuring students gain real-world experience and practical skills.

By achieving these objectives, the program aims to produce graduates who are well-rounded, innovative, and ready to lead in the ever-evolving landscape of business and technology.

INTEGRATED TEACHING, SEMESTER SYSTEM, CURRICULUM, EXAMINATIONS AND MEDIUM OF INSTRUCTIONS

The BS Programs at IBET consists of four-year academic duration comprising of eight semesters including Theory and practical courses on the latest 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 Program of their study.

SEMESTRIAL DURATION

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.

IBET

In Paper out of 70 Marks

<u>No. of Questions</u>	<u>Marks</u>	<u>Time</u>
	20	ao minuta

20 SBQs
10 Short Essay
50
30 minutes
1 hours & 30 minutes

Practical / Viva voce 50 Marks

Out of 50 Marks:

- 30 Marks on Lab Manual/Weekly Tasks
- 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
А	70% - 84%	3.50
В	60% - 69%	3.00
С	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.

Academic Instructions

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



IHMRS

BACHELORS OF SCIENCES IN HEALTH INFORMATICS AND MANAGEMENT SYSTEM (BS-HIMS)

INTRODUCTION

The Bachelors of Sciences in Health Informatics and Management System (BS-HIMS) is a 4-year evening program offered through Institute of Health Management and Research Sciences (IHMRS), LUMHS which represent an interdisciplinary realm of study with the primary objective of harnessing technology to effectively structure, analyze, administer, and interpret health-related data, all with the overarching aim of enhancing the quality of healthcare services. Its central objectives encompass the acquisition, classification, management, and utilization of health-related information to elevate healthcare standards, practices, policies, and clinical care guidelines.

In Pakistan, the healthcare industry has exhibited a relatively sluggish pace in adopting technological advancements. However, in the context of the burgeoning potential for economic and clinical benefits through health information technology, the adoption of information technology, especially electronic health records, has become an imperative necessity.

The field of health informatics and management is experiencing rapid expansion, driven by the growing integration of big data analytics in the healthcare sector. This surge in growth is projected to amplify the demand for jobs in Health Informatics and Management System over the coming decade. These career opportunities extend to various domains, including biomedical research, nursing, physical therapy, dentistry, clinical pharmacy, allopathic and alternative medicine, occupational therapy, and public health.

Graduates may enter a variety of roles such as:

- Faculty Member at a College or University
- Chief Medical Information Officer (CMIO)
- Health Information Specialist
- Clinical Informatics Analyst
- Health Informatics Consultant
- Health Information Technology Project
 Manager
- Health Administrator

MISSION STATEMENT

BS in Health Informatics and Management System (BS-HIMS) program at IHMRS, LUMHS aims to empower students with interdisciplinary skills to leverage technology effectively in healthcare resulting in bridging the gap between technology and healthcare, preparing graduates to drive innovation, elevate standards, and improve patient care in Pakistan's healthcare sector.

PROSPECTUS 2024-25

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- Clinical Research Manager
 Medical Coding Specialist
 - Medical Coding Specialist
 Healthcare Clinic Manager
 - Records Manager in the Biotech Industry
 - Pharmacy or Nutrition Informaticist
- Informatics Nurse





FACULTY

S.No.	Name	Qualification	Area
1.	Dr. Mohsin Shafi	PhD	Management Sciences
2.	Dr. Saleem Raza	PhD	Management Sciences
З.	Dr. Zia Ahmed	MS, PhD	Information Technology
4.	Dr. Shazma Kamran	MS, PhD	Information Technology
5.	Engr. Shazeem	MPhil	Information Technology
6.	Saqib Baloch	MPhil	Information Technology
7.	Samiullah Soomro	MPhil	Information Technology
8.	Humaira Shams	MS	Information Technology

PROGRAM OBJECTIVES

BS in Health Informatics and Management System (BS-HIMS) program at IHMRS, LUMHS have the following program objectives:

- 1. Equip students with interdisciplinary skills in Health Informatics and Management System to revolutionize healthcare through technology.
- 2. Develop students' abilities to acquire, classify, manage, and leverage health-related information effectively to enhance healthcare quality.
- 3. Ensure proficiency in electronic health records and other innovative solutions essential for modern healthcare delivery.
- 4. Lead the transformation of Pakistan's healthcare landscape by integrating technology into healthcare practices, improving clinical outcomes, and advancing healthcare standards nationwide.
- 5. Prepare graduates to meet the increasing demand for skilled professionals in health informatics and management across various career opportunities.
- 6. Provide students with the necessary tools and expertise to excel in health informatics research, clinical practice, public health, and other related fields.
- 7. Foster leadership qualities and a commitment to innovation among students, shaping them into future leaders who will drive positive change in the healthcare industry.
- 8. Offer real-world exposure through internships, providing practical experience in diverse healthcare settings. We prioritize robust industrial liaisons to ensure internships meet industry standards, fostering students' professional growth for careers in Health Informatics and Management System.



ADMISSION CRITERIA

- Applicants must meet the minimum eligibility criteria in order to be considered for admission to the Bachelors of Sciences in Health Informatics and Management System (BS-HIMS) program.
- Admission is purely merit-based and rests solely on the following criteria:
- At least 50% marks in Intermediate (Pre-Medical, Pre-Engineering, Arts, Humanities) (HSSC) examination or equivalent qualification certified by IBCC.

Admission Test intends to test candidates on certain Analytical, Quantitative, Verbal, and Reading

Skills in English for BS (Health Informatics and Management System) program

PART – I | VOCABULARY 20 Marks

- PART II | STRUCTURE AND WRITTEN EXPRESSION 20 Marks
- PART III | READING COMPREHENSION | Section-A 10 Marks, WRITING ABILITY | Section-B 10

Marks

- PART IV | PROBLEM SOLVING 20 Marks
- PART V |NUMBER / LETTER SERIES 20 Marks

CORE CURRICULUM

The BS (Health Informatics and Management System) program requires a minimum 136 credits of coursework, labs including project of 6 credit hours divided in two semesters.

FIRST YEAR

1 st Semester	
Course Title	Credit Hours
Introduction to Health Informatics	3
Introduction to ICT	2
Introduction to ICT Lab	1
English Language and Communication Skills	3
Basic Biology	3
Programming Fundamentals	3
Programming Fundamentals Lab	1

IHMRS



2 nd Semester	•
Course Title	Credit Hours
Technical and Business Writing	3
Basic Mathematics	3
Human Physiology and Histology-I	2
Human Physiology and Histology-I Lab	1
Entrepreneurship	3
Object Oriented Programing	3
Object Oriented Programing Lab	1
Introduction to Healthcare Management	3

SECOND YEAR

3 rd Semester	
Course Title	Credit Hours
Accounting Principles and Health Economy	3
Human Physiology and Histology-II	2
Human Physiology and Histology-II Lab	1
Medical Terminologies	2
Linear Algebra and Differential Equations	3
Probability and Statistics	3
Data Structure and Algorithms	3
Data Structure and Algorithms Lab	1

Credit Hours
2
1
2
1
3
3
3
3



THIRD YEAR

5 th Semester	
Course Title	Credit Hours
Legal and Ethical Issues in Health Informatics	2
Modern Programming Languages	2
Modern Programming Languages Lab	1
Database Systems	3
Database Systems Lab	1
Introduction to Digital Health	3
Clinical Informatics	2
Clinical Informatics Lab	1
Public Health Informatics	2
Public Health Informatics Lab	1

6 th Semester	
Course Title	Credit Hours
Machine Learning in Healthcare	2
Machine Learning in Healthcare Lab	1
Principles of Nursing Informatics	3
Image Informatics	2
Healthcare Decision Making and Support Systems	3
Healthcare Procurement and Supply Chain	3
Management	
Human Resource Management in Healthcare	3

FOURTH YEAR

7 ^h Semester	
Course Title	Credit Hours
Healthcare Project Management	3
Healthcare Strategy and Policy	3
Elective Course-I	3
Elective Course-II	3
Final Year Project-1	3





8 th Semester	
Course Title	Credit Hours
Health Data Analytics	3
Health Information Management in Crisis	3
Elective Course-III	3
Elective Course-IV	3
Final Year Project-2	3

LEARNING OUTCOMES

Upon completion of the program, the students will have

- 1. **Proficiency in Interdisciplinary Skills:** Graduates will demonstrate proficiency in interdisciplinary skills essential for revolutionizing healthcare through technology.
- 2. Mastery of Health Information Management: Students will master the acquisition, classification, management, and leverage of health-related information to enhance healthcare quality.
- 3. Competence in Healthcare Technology: Graduates will exhibit competence in utilizing electronic health records and other modern healthcare solutions effectively.
- 4. Leadership in Technology Integration: Students will develop the ability to lead the integration of technology into healthcare practices, resulting in improved clinical outcomes and enhanced healthcare standards nationwide.
- 5. Preparedness for Diverse Career Paths: The program will prepare graduates to meet the increasing demand for skilled professionals in various career opportunities within health informatics and management.
- 6. Aptitude for Specialized Fields: Graduates will demonstrate aptitude for excelling in specialized areas such as health informatics research, clinical practice, public health, and related fields.
- **7.** Development of Leadership Qualities: The program will foster the development of leadership qualities and a commitment to innovation, enabling graduates to drive positive change in the healthcare industry.



ASSESSMENT MECHANISM

The assessment mechanism for this program may include various methods to evaluate students' learning and proficiency in the defined learning outcomes. Possible assessment methods could include:

- 1. Examinations: Regular exams, both written and practical, could be administered to assess students' understanding of theoretical concepts and their ability to apply them in real-world scenarios.
- 2. Assignments and Projects: Assignments and projects could be assigned to students to assess their ability to analyze, synthesize, and apply knowledge gained throughout the program. These could include research papers, case studies, software development projects, or data analysis tasks related to healthcare informatics.
- 3. Internship Evaluations: Performance evaluations during internships could provide valuable feedback on students' practical skills, professionalism, and ability to apply classroom knowledge in real healthcare settings.
- 4. Presentations and Reports: Students could be required to deliver presentations or write reports on topics related to health informatics and management, demonstrating their communication skills and depth of understanding
- 5. Peer and Self-Assessment: Incorporating peer and self-assessment components can encourage students to reflect on their own learning and provide constructive feedback to their peers, promoting collaborative learning and self-awareness.
- 6. Practical Demonstrations: Practical demonstrations, such as simulations or hands-on exercises, could be used to assess students' ability to navigate health informatics systems, troubleshoot technical issues, and effectively utilize healthcare technology tools.
- 7. Capstone Projects or Thesis: A culminating capstone project or thesis could be required for students to demonstrate their comprehensive understanding of health informatics and management concepts, integrating knowledge from various courses and applying it to solve real-world problems or contribute to research in the field.
- 8. Continuous Assessment: Continuous assessment methods, such as quizzes, class participation, and online discussions, can provide ongoing feedback on students⁻ progress and engagement throughout the program.





By utilizing a combination of these assessment methods, the program can ensure comprehensive evaluation of students' knowledge, skills, and competencies in Health Informatics and Management System. Additionally, assessments should be aligned with program objectives and learning outcomes to ensure that students are adequately prepared for careers in the field.



BSHINS fall session class in progress

BACHELOR'S OF PHYSICIAN ASSOCIATE



4 YEAR DEGREE PROGRAM



Message from the Director Prof. Dr. Binafsha Manzoor Syed

Medical Research Center & ORIC

It is my privilege to welcome aspiring healthcare professionals to the Bachelor of Science in Physician Assistance program at Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro. This groundbreaking program is designed to meet the growing demand for highly skilled physician assistants who play a vital role in modern healthcare systems worldwide.

Physician assistants serve as key members of healthcare teams, bridging the gap between patients and physicians while providing essential support in clinical settings. Our program is tailored to equip students with a strong foundation in medical knowledge, clinical skills, and ethical practice, ensuring they are well-prepared to contribute meaningfully to patient care.

At LUMHS, we are committed to providing a dynamic learning environment where students receive both theoretical and hands-on training. With access to cutting-edge facilities, experienced faculty, and practical exposure in diverse healthcare settings, students will gain the competencies needed to excel in this rewarding field.

The Bachelor of Science in Physician Assistance is not just a degree—it is a gateway to a fulfilling and impactful career in healthcare. Graduates of this program will find themselves well-positioned to address the evolving needs of the healthcare industry, both nationally and internationally.

I encourage all prospective students to approach this journey with enthusiasm and dedication, embracing the opportunity to learn, grow, and make a difference in the lives of others. Together, let us build a brighter future for healthcare.

Warm regards, Prof. Dr. Binafsha Manzoor Syed Director, Medical Research Center & ORIC LUMHS, Jamshoro



Medical Research Centre (MRC)



The Medical Research Centre (MRC) at Liaquat University of Medical & Health Sciences (LUMHS) is a cornerstone of the university's commitment to academic excellence through research. It serves as a dynamic hub where faculty members and postgraduate students from both basic and clinical sciences collaborate on impactful research alongside their academic responsibilities.

The Centre's research outputs are regularly published in the Journal of Liaquat University Medical & Health Sciences (JLUMHS) and the LUMHS Medical Research Journal (LMRJ), both of which are recognized by the Higher Education Commission (HEC) and indexed in esteemed international databases.



<u>Core Functions and Contributions</u> Research and Collaboration

The MRC engages in multidisciplinary research and provides technical and advisory support to local and international researchers and organizations. Through its **Clinical Trial Unit**, the Centre facilitates the execution of clinical trials in collaboration with healthcare facilities across Pakistan, driving advancements in treatments and healthcare innovation.

National and International Partnerships

The MRC fosters partnerships with research institutes, academic institutions, and private sector entities to enhance the quality and scope of its research. These collaborations include:

- Developing research proposals
- Grant writing
- Networking with private partners, government agencies, NGOs, R&D industries, and pharmaceutical companies

Compliance and Standards

The MRC adheres to global research standards, ensuring compliance with protocols such as **GCP ICH**, **GCLPs**, **GLPs**, and **GMPs**. This commitment guarantees the integrity and quality of its research activities.

Capacity Building and Education

The Centre organizes mandatory workshops for undergraduate and postgraduate students as well as faculty members. These workshops emphasize:

- Research methodologies
- Biostatistics
- Systematic reviews and meta-analyses

Internship and training opportunities are also available, nurturing young researchers and building capacity for future health research initiatives.

Policy Contributions

Through systematic reviews, meta-analyses, and data-driven research, the MRC contributes to evidence-based policy-making, directly impacting public health outcomes and shaping healthcare strategies.

Infrastructure and Facilities

The Medical Research Centre offers state-of-the-art infrastructure designed to support advanced research and innovation. Its facilities include:

- Medical Research Centre (MRC)
- Offices of Research & Commercialization (ORIC)
- Offices of Global Engagements
- Clinical Trial Units
- Experimental Animal Facility



Departments

1. Basic Science Research Focused on:

- Proteomics and genomics
- Drug discovery
- Animal model research

2. Clinical Science Research

Focused on:

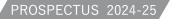
- Clinical trials
- Cell line and stem cell research
- Biomarker discovery

Opportunities and Impact

The MRC is dedicated to empowering the next generation of researchers with:

- Internship and trainee opportunities
- Research-focused classes
- Hands-on experience in cutting-edge research areas

Through its initiatives, the MRC not only advances medical science but also builds a strong foundation for evidence-based healthcare and innovation. Its contributions to public health research and policy-making affirm its pivotal role in shaping the future of medical and health sciences at LUMHS and beyond.





Introduction of the program

The program is designed to prepare health care workers to help doctors. This is an innovative field where Physician associates take medical history, perform clinical examination, take patient notes and analyze reports. They work under observation of a medical doctor. These associate physicians will be a great health care task force in primary health care and in busy out patient departments. They will also be able to make follow-up of patients suffering from chronic illness.

Currently in developed countries especially in Europe and middle east this program is top trend, Liaquat university of Medical & Health is keen to launch the program and produce physician associates of world class standard so that they can be utilized within country or sent abroad.

Objectives

- 1. To produce high quality Physician associates who will be assisting medical doctors in busy medical practices and in rural areas.
- 2. To provide foundation level education for to the physician associates to follow patients who are on medication prescribed by the medical doctor.

Career prospects

The graduates will have a career path as associate physicians in the primary, secondary and tertiary health care system to assist medical doctor in assessment of the patients by taking history, doing medical examination, ordering and assessing medical reports and report to the physician. They can also make follow-up of the patients in the community. This graduates will also be experts to work as community health workers/visitors.

Faculty

- 1. Prof. Binafsha Manzoor Syed
- 2. Dr. Shariq Anwer Abid
- 3. Dr. Suleiman Pirzado
- 4. Dr. Shehzad Ali Mughal
- 5. Dr. Zainab Manzoor
- 6. Dr. Hina Shaikh
- 7. Dr. Saira Baloch

Program Coordinator

1. Dr. Azam Iqbal Memon





Course details

S#	Semester	Subject	Credit hours
1		Anatomy - 1	4 (3+1)
2	1st	Physiology - 1	3 (2+1)
3		Pathology -1	3 (2+1)
4		English (Basics)	3 (3-0)
5		Islamiyat / Ethics	2(2-0)
6		Research Methodology- I	3(3-0)
_			Total = 18
Sen	nester 2		
1		Anatomy - II	4 (3+1)
2	Second	Physiology - II	3 (2+1)
3		Pathology - II	3 (2+1)
4		English (Communication skills)	3 (3-0)
5		Pakistan Studies	2(2-0)
6		Research Methodology - II	3(3-0)
			Total= 18
Sen	nester 3		
1		Anatomy III	4 (3+1)
2	Third	Physiology - III	3 (2+1)
3		Pathology - III	3 (2+1)
4		Fundamental of computer use	3 (2-1)
5		Laboratory techniques	3(2-1)
6		Biostatistics –I	2(2-0)
			Total = 18
Sen	nester 4		
1		Anatomy IV	4 (3+1)
2	Fourth	Physiology - IV	3 (2+1)
3		Pathology - IV	3 (2+1)
4		Social care & Public Health	3 (3-0)
5		Academic general surgery	3(3-0)
6		Biostatistics- II	2(2-0)
			Total = 18
	nester 5		
1		Pharmacology - I	4 (3+1)
2	Fifty	Biochemistry	3 (2+1)
3	-	Clinical Medicine	3 (2+1)
4		Pediatric diseases	3 (3-0)
5		Neoplastic diseases	2(2-0)
6		Clinical practice	3(0-3)



	Total = 18					
Sen	Semester 6					
1		Pharmacology - II	4 (3+1)			
2	Sixth	Clinical Medicine	3 (2+1)			
3		Mental health and behavioral sciences	3 (2+1)			
4		Geriatrics	3 (3-0)			
5		Health Care system (national and global)	2(2-0)			
6		Academic writing	3(3-0)			
		Tota	al = 18			
Sen	nester 7					
1		Clinical medicine	4 (3+1)			
2	Seventh	Emergency care	3 (2+1)			
3		Oncology & Screening programs	3 (2+1)			
4		Renal system diseases	3 (3-0)			
5		Endocrinology	2(2-0)			
6		Clinical practice	3(0-3)			
		Tota	al = 18			
Sem	nester 8					
1		Clinical Medicine	4 (3+1)			
2	Eighth	Radiology	3 (2+1)			
3		Gynaecology & Obsterics	3 (2+1)			
4		Clinical practice	3 (0-3)			
5		Clinical practice	2(0-2)			
6		Clinical practice 3(0-3)				
	Total = 18					
		Total credit hours for four years= 144				

CREDIT HOURS Calculation

- Theory: One Credit Hour shall be equal to one hour of teaching per week per semester.
- Practical: One Credit Hour shall be equal to two hours of lab work per week per semester
- Clinical practice: One Credit Hour shall be equal to three hours of clinical attachment per week per semester.
- Research: One Credit Hour shall be equal to three hours of research work per week per semester.

Examination

At end of each semester there will be examination, 75% attendance in all subjects will be required to appear in the examination

- 1. Theory examination: SBQs: 40%
- 2. Internal evaluation: 10%
- 3. Vice voce/ Practical = 50%

PROMOTION POLICY

Students will be declared pass according to the policy of University, if they fail in first semester they will continue in second semester of the same academic year and appear in the re-sit examination. If a candidate continues to fail three times consecutively will be dealt with the university policy.



ALLOCATION OF SEATS

DETAIL ALLOCATION SEATS IN BS. DEGREE PROGRAMS AT INSTITUTES OF LUMHS JAMSHORO

BS DEGREE / ASSOCIATE DEGREE PROGRAMS (Morning)

		Period		<u>SE</u>	<u>ATS</u>		
S. #	S. # Program		Merit	Self Finance	Oversea s	HEC Scholarshi p	TOTAL
1	Doctor of Physical Therapy (DPT)	05 Years	60	38	2	0	100
2	Doctor of Pharmacy (Pharm-D)	05 Years	50	25	3	2	80
4	BS. Biomedical Engineering	04 Years	30	10	0	0	40
5	BS Business Management & Technology (Merit cum S-F)	04 Years	0	40	0	0	40
6	BS Molecular Biology & Genetics (BSMBG)	04 Years	40	28	2	0	70
7	BS Radiologic Technology (BSRT)	04 Years	60	10	0	0	70
8	BS Medical Laboratory Technology (BSMLT)	04 Years	60	10	0	0	70
9	BS Forensic Science in Forensic Biology (BSFB)	04 Years	47	6	7	0	60
10	Bachelor's of Physician Associate	04 Years	18	5	2	0	25

BS N	BS Nursing (Generic) Morning Program						
S. #	Category	Male	Female	Total			
1	MERIT	25	25	50			
2	SELF FINANCE	20	30	50			
			TOTAL	100			

BS I	BS Nursing (Generic) Evening Program					
S. #	Category	Male	Female	Total		
1	SELF FINANCE	50	50	100		

BS Health Informatics and Management System (Evening) Programs							
S. #	# Category Seat						
1	1 OPEN MERIT 70						

IMPORTANT NOTE:

- I. University Reserves the rights to change allocated seats
- ii. If any seat overseas category falls vacant of DPT, Pharm-D & BSMBG, shall be filled under self-finance category.
- iii. 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) under Overseas / Self-Finance will be converted into Merit Category.

PROCEDURE POLICY / RULES OF ADMISSIONS

- 1. The candidates will be selected as per merit in accordance with allocation of seats.
- 2. The seat vacated by the candidate will be filled-in by next the candidate on meritlist.
- 3. The selected candidate has to deposit fees, all required documents (in original) and join within Three (03) days after the selection, 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 LUMHS, Jamshoro), after joining the course 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), her/his admission will be cancelled and University authorities reserve the right to take legal action against that candidate.
- 6. There is no rule of migration during the studies of course to transfer to any other Public/Private Sector Institute/University of Sindh or transfer from other Public/Private Institute/ University of Sindh.

REQUIREMENT FOR ADMISSION ON OVERSEAS:

- 1) Those candidates whose Parents/ Guardian are working/ residing abroad are eligible to apply for admission in Overseas category.
- 2) Candidate's Parent/ Guardian must have Domicile of Sindh Province.
- 3) Photocopy of Candidate's Residence Certificate of Foreign Country.
- 4) Photocopy of Candidate's and Father's/ Mother's or Guardian Passport & Visa.

NOTE:

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



FEE STRUCURE

FE	FEE STRUCTURE FOR BS DEGREE PROGRAMS								
S <mark>. #</mark>	Course / Program	Category	Admission Fee <mark>(Once</mark>)	Tuition Fee (Per Semester)	Transport Fee (Per Year)	Student Activities (Per Year)	Convocation Fee <mark>(once)</mark>	Document Verificatio n Fee (Once)	TOTAL
		MERIT	50000	70000	15000	10000	5000	5000	155000/
	Doctor of	S-F	75000	140000	15000	10000	5000	5000	250000/
1	Physical Therapy (DPT)	Overseas	US\$ 800	US\$.160 0	15000	10000	5000	5000	US\$.2400/ PKR.35000 /
		MERIT	50000	70000	15000	10000	5000	5000	155000/
	Doctor of	S-F	75000	140000	15000	10000	5000	5000	250000/
2	Pharmacy (Pharm-D)	Overseas	US\$ 500	US\$.300 0	15000	10000	5000	5000	US\$.3500/ PKR.35000 /
		MERIT	40000	75000	15000	10000	5000	5000	150000/
	BS Molecular Biology &	S-F	60000	105000	15000	10000	5000	5000	200000/
3	Genetics (BSMBG)	Overseas	US\$ 800/	US\$.1500 /	15000	10000	5000	5000	US\$.2300/ PKR.35000 /
	BSRT &	MERIT	40000	75000	15000	10000	5000	5000	150000/
4	BSMLT	S-F	60000	105000	15000	10000	5000	5000	200000/
		MERIT	40000	75000	15000	10000	5000	5000	150000/
		S-F	40000	125000	15000	10000	5000	5000	200000/
5	BSFB	Overseas	US\$500	US\$ 2,500	15000	10000	5000	5000	US\$3000 / PKR.35000 /
	BS.	MERIT	40000	75000	15000	10000	5000	5000	150000/
6	Biomedical Engineering	S-F	40000	125000	15000	10000	5000	5000	200000/
7	Business & Information Technology	Merit cum S-F	35000	80000	15000	10000	5000	5000	150000/
0	BS Health Informatics	National students	50000 Non- refundable	125000	15000	10000	5000	5000	PKR.21000 0/
8	and Management System	International students	50000 Non- refundable	US\$.125 0	15000	10000	5000	5000	US\$.1250/ PKR.85000 /
		Merit	40000	75000	15000	10000	5000	5000	150000/
	Bachelor's of	Self Finance	60000	105000	15000	10000	5000	5000	200000/
9	Physician Associate	International / Overseas	US\$ 800/	US\$.1500 /	15000	10000	5000	5000	US\$.2300/ PKR.35000 /
	*The internation tuition fees	onal students		y countries	applying	g through	embassy	will get 50	% waiver on

Fee Structure BS. Nursing Generic							
Category	Admission Fee <mark>(Once)</mark>	Tuition Fee (Per Year)	Transport Fee (Per Year)	Student Activities (Per Year)	Convocation Fee <mark>(once)</mark>	Document Verification Fee <mark> (Once)</mark>	TOTAL
MERIT	30000	30000	15000	10000	5000	5000	95000/
S-F	50000	115000	15000	10000	5000	5000	200000/

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NOTE:

- a) Pre-Registration fee RS.3000/ for BS. Nursing and Rs.1000/ for Pharm-D (Once time)
- b) Misc. Fees will be charge for BS. Nursing and Pharm-D, of Rs.20000/- for merit and Rs.40000/ for Self Finance (Per Year)

HOSTEL Charges

- 1. Allotment Fee -
- Rs.5000/- (Once)
- 2. Rent Fee
- Rs.50000/- (Per Annum)

FEE REFUND POLICY

- 1. Any refund will be paid to the student or his/her parents / guardian sponsoring body.
- 2. Application for a refund of fee can be made by completing the appropriate form and submitted the proffer of payment.
- 3. The refund amount of tuition fee is subject to the following schedule.

Timeline	Percentage of fee
Upto 15 th day of commencement	100% fee refund
Upto 20 th day of commencement	75% fee refund
Upto 30 th day of commencement	50% fee refund
31 st day onwards	Not Refund

• Timeline shall be calculated continuously, covering both weekdays and weekend.

PENALTIES

Candidates who are finally selected on open merit seat, self-finance or any other category in any BS Degree Programs shall have to pledge through an affidavit that they will complete the course period. In case they leave the university before completing the course for any reason, they will submit a pay order Demand Draft, in favor of the respective Department / Institution of LUMHS Jamshoro as a penalty for wasting a precious seat. Detail is as under:-

S. No.	Program / Course	Penalties Amount	Name of Institution / Departments
1	Doctor of Physical Therapy (DPT)	Rs.100000/ (Merit / S-F)	Institute of Physiotherapy & Rehabilitation Sciences, LUMHS
2	Doctor of Pharmacy (Pharm-D)	Rs.250000/ (Merit / S-F)	College of Pharmacy, LUMHS
3	BS. Nursing (Generic)	Rs.100000/ (Merit) Rs.200000/ (S-F)	Peoples Nursing School, LUMHS
4	BS Molecular Biology & Genetics and Bachelors of Physician Associate	Rs.100000/ (Merit / S-F)	Institute of Molecular Biology & Genetics, LUMHS
5	BS Biomedical Engineering / Business and Information Technology	Rs.100000/ (Merit / S-F)	Institute of Biomedical Engineering & Technology, LUMHS
6	BS Degree Programs (BSRT, BSMLT, BSFB)	Rs.100000/ (Merit / S-F)	College of Technology, LUMHS
7	Bachelors of Sciences in Health Informatics and Management System (BS-HIMS)	Rs.100000/ (National & International)	Institute of Health Management and Research Sciences (IHMRS)



RULES FOR PAYMENT OF FEE

- 1. Once fees paid shall not be refunded, if, Provisional Selection in course under any admission category i.e. Merit/UEAP Self-Finance / Overseas is cancelled up to 45 days, fees which is paid by the candidate shall be refunded.
- 2. 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.
- 3. Candidates selected for admission in 1year 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.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. The Controller of Examination U.G will provide the examination record of the students to the Directorate of Finance on semester basis.
- 9. The Directorate of Admission will provide the record of student to the Directorate of Finance for Issuance of notice on demand,
- 10. Late payment of (semester) will be surcharged from those students who fail to pay their prescribedfee (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.
- 11. 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.
- 12. 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.

FEE FOR FAILURE/REPEATER STUDENTS.

- 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.
- > Repeater candidates admitted under regular general merit will be charged full fee.





FREESHIP:

(ELIGIBILITY 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 GPA3+ (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.



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 all the students of Liaquat University of Medical & Health Sciences, Jamshoro.

III. <u>DEFINITIONS:</u>

- 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.

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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.
- 1) 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. <u>PENALTIES:</u>

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 specified 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 specified period or for good.

2) THE DEAN OF A FACULTY MAY:

- a) Fine a student up to $\ensuremath{\text{Rs. 3000/-}}$ 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.



PROGRAMS WISE ELIGIBILITY OF THE CANDIDATES

- > Doctor of Physical Therapy (DPT) & Doctor of Pharmacy (Pharm-D) Programs
- 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).
- 02) The candidate should be permanent Resident of any District of Sindh.

➢ BS. NURSING (Generic) Program

- 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).
- 02) The candidate should be permanent Resident of any District of Sindh.
- 03) Age Limit: (14 35 Years)
- BS Degree Programs (BSMBG, BSRT, BSMLT, BSFB)
 - 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).
 - 2) The candidate should be permanent Resident of any District of Sindh.
- BS. Biomedical Engineering and Business & Information Technology Programs
 - 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.

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

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

Bachelors of Sciences in Health Informatics and Management System (BS-HIMS)

Candidates who have passed Intermediate Sciences (Pre-Medical, Pre-Engineering, Humanities and Art) with at least 50% marks or any equivalent examination of any other Board / Body recognized by IBCC.

Bachelors of Physician Associate Candidates who have passed Intermediate Sciences (Pre-Medical) with at least 50% marks or any equivalent examination of any other Board / Body recognized by IBCC.



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:

а	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:

Α	HSC/A-Level Equivalent marks	60.00% x 0.5= 30.000
b	Entry Test Marks	40.00% × 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.
- 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/-)

l S/o, D/o	
Muslim/Non-Muslim adult R/o	
a candidate for admission in 1 st year	_ for academic session 2024-25
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 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 Open Merit/ Self-Finance or any other category in ()years Degree Program of ______, I shall complete the Course ______ of () years containing (______) semesters. However, in case, I leave the ______ 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 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)

l			Par	ent / Guardian	of				do her	eby
undertake	e and assur	e that	my Son/ Dai	ughter/ Sister/	Brother	/ Wife/	′ Ward wil	l not jo	oin any poli	tical
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 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 Pa	arent / Guardian	
C.N.I.C. No.		
Full Address:		
Contact No:		

ATTESTATION BY JUDICIAL MAGISTRATE. WITH ROUND STAMP / SEAL



Requi	red 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 Pass Certificate / A level transcript certificate
4	HSSC / Intermediate Mark Sheet / A level with IBCC Equivalence.
5	Domicile and PRC form 'C' (Candidate).
6	CNIC or Form "B" of Candidates from NADRA
7	Domicile of Father, if father is not alive then Mother (along-with Death Certificate issued by NADRA)
8	CNIC Father, if father is not alive then Mother
9	Six Passport size photographs of candidate (fresh)
10	Passport / Visa for Foreign National Candidates
11	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)