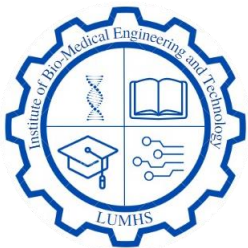# INSTITUTE OF BIO-MEDICAL ENGINEERING & TECHNOLOGY

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

INSTITUTE OF BIO-MEDICAL ENGINEERING & TECHNOLOGY
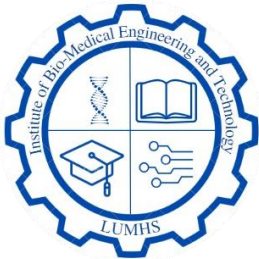
Message from the Head of the Department

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

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

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

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

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

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

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.

- Engr. Murk Rehman
  Lecturer, I.B.E.T,
  LUMHS, Jamshoro.

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

- Engr. Murk Saleem
  Lecturer, I.B.E.T,
  LUMHS, Jamshoro.

- Engr. 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.

Visiting Faculty

- Dr. Sadia Effindi
  Lecturer, Anatomy,
  LUMHS, Jamshoro.

- Dr. Javeria
  Lecturer, Physiology,
  LUMHS, Jamshoro.

- Dr. Ali Raza
  Lecturer, Biochemistry
  LUMHS, Jamshoro.

- Ms. Sana Zulfiqar
  Islamic Studies/Ethics

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 micro-electromechanical systems, molecular engineering, nanotechnology and development of signal processing and control algorithms of artificial parts of the body.

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

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.

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 AI.
- **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.

ELIGIBILITY CRITERIA FOR BUSINESS AND INFORMATION TECHNOLOGY

The criteria for students seeking admission to program are as follows:
- 50% in Intermediate or equivalent examination.

- Pass the Admission Aptitude Test.
- Candidate for admission in Business and Information Technology must be domicile holders and Permanent Resident of Sindh Province.

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.

In Paper out of 70 Marks

No. of Questions	Marks	Time
20 SBQs	20	30 minutes
10 Short Essay	50	1 hours & 30 minutes

Practical / Viva voce   50 Marks

Out of 50 Marks:
- 30 Marks on Lab 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
A	70% - 84%	3.50
B	60% - 69%	3.00
C	50% - 59%	2.00
D	Below 50%	1.00

POLICY FOR FAILED COURSES

1. **Failed Course:**
   1.1. If a student gets 'F' grade, he/she will be required to repeat the course or its recommended alternate, as per curriculum requirements or recommendations of curricular review committee of the program. However, "F" grade obtained earlier will also be recorded on the transcript.
2. **Remedial Classes during the semester:**
   2.1. Since there are two regular semesters (Fall, Spring) in an academic year. However, Remedial Classes may optionally be offered during the semester after the regular classes or in the summer semester.
   2.2. The remedial classes offered in the summer semester, consisting of 8 weeks of concentrated study for completing any failed/remedial course work in subjects that are failed/not pass by candidates upon request to the Director/HOD.
   2.3. A student who has either failed or has been stopped to take the examination due to shortage of class attendance is allowed to register in these remedial classes, whenever offered during the academic year, and appear in the next attempt, with the registration of that course and full payment of fees for that course.
   2.4. It is the responsibility of the student to keep track of his/her courses and complete the degree requirements within the maximum duration of the degree program (as per the policy of the accreditation council).
3. **Fee:**

3.1. The student has to pay a fee of Rs. 3000/- per credit hour for each course he/she is going to registered as remedial course

3.2. The fee of the course should be submitted before the commencement of classes.

3.3. If student failed to submit the fee within the due date the registration of the course will stand cancel.

4. **Registration of course**

4.1. Student has to inform in writing to the Academic Coordinator of the department at the end of the semester whether he or she is going to register for failed/remedial course in the upcoming semester.

4.2. The minimum number of students required to offer a remedial course in the Spring/Fall semester is 2, and in summer semester is 4.

MEDIUM OF INSTRUCTIONS

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

ALLOCATION OF SEATS FOR BS BIOMEDICAL ENGINEERING

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

ALLOCATION OF SEATS FOR BUSINESS AND INFORMATION TECHNOLOGY

S. No.	Category	Seats
01	Merit cum Self Finance	40
	TOTAL	40

FEE SCHEDULE

OPEN MERIT

S. No.	Description	Fee		TUITITON FEE YEAR WISE	
1.	Admission	25,000/-(once)		1st Year Tuition	100,000/-
2.	Tuition Fee	50,000/- (Per Semester)		2nd Year Tuition	110,000/-
3.	Transport	15,000/ (Per Year)		3rd Year Tuition	121,000/-
4.	Documents Verification Fee	2,500/ (once)		4th Year Tuition	133,100/-
5.	Sports Fee 1st year	2000/			
6	Sports Fee (2nd year onwards)	1000/ (Per Year)			
Total Rs.		94,500/-			

SELF FINANCE

S. No.	Description	Fee		TUITITON FEE YEAR WISE	
1.	Admission	25,000/-(once)		1st Year Tuition	252,000/-
2.	Tuition Fee	126,000/- (Per Semester)		2nd Year Tuition	277,200/-
3.	Transport	15,000/ (Per Year)		3rd Year Tuition	304,920/-
4.	Documents Verification Fee	2,500/ (once)		4th Year Tuition	335,410/-
5.	Sports Fee 1st year	2000/			

6	Sports Fee (2nd year onwards)	1000/ (Per Year)
Total Rs.		**170,500/-**

MERIT CUM SELF FINANCE

S. No.	Description	Fee
1.	Admission	25,000/-(once)
2.	Tuition Fee	80,000/- (Per Semester)
3.	Transport	15,000/ (Per Year)
4.	Documents Verification Fee	2,500/ (once)
5.	Sports Fee 1st year	2000/
6	Sports Fee (2nd year onwards)	1000/ (Per Year)
Total Rs.		**124,500/-**

TUITITON FEE YEAR WISE	
1st Year Tuition	160,000/-
2nd Year Tuition	160,000/-
3rd Year Tuition	160,000/-
4th Year Tuition	160,000/-

REFUND POLICY

% of tuition fee	Timeline for Semester
Full 100% fee refund	Up to 7th day of convene of classes
Half 50% fee refund	Up to 15th day of convene of classes
No refund 0%	From 16th day of convene of classes

% of Self-Finance fee	Timeline for Refund
20% Penalty	Up to 7th day of convene of classes
40% Penalty	From 8th to 15th day of convene of classes
100% Penalty – No refund	From 16th day of convene of classes

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

f) this purpose. (On Special request by students).

g) A student will not be allowed to enter the class after 10 minutes of the start of the Class.

h) Theory and Practical are integrated in the courses where needed. Students must acquire both theoretical and practical competencies.

ELIGIBILITY OF THE CANDIDATES

BIO-MEDICAL ENGINEERING

ENTRY TEST

i. Candidates who have passed Secondary School Certificate examination (SSC) or equivalent examination from any other board or institution recognized by IBCC.

ii. Candidates who have passed Intermediate Sciences (Pre-Medical or Pre-Engineering) with at least 60% marks or any equivalent examination of any other Board / Body recognized by IBCC with at least 60%. Candidates obtaining less than 60% Marks in HSSC or equivalent examination are not eligible. A-Level examination either in with minimum 60% marks shall be eligible to appear in the

Entry Test. The candidates who have passed A-level Examination should submit transcript and equivalence certificate from IBCC Islamabad.

iii. The entrance test shall be conducted from the prescribed intermediate syllabus of Board of Intermediate and Secondary Education, Karachi, Hyderabad, Mirpurkhas, Larkana and Sukkur.

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

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

The time allotted to solve the paper will be 100 minutes, and the exam shall be of 100 marks.
There will be negative marking for incorrect answer.
Each answer shall be awarded 01 (One) mark and there will be 0.25 negative mark for each incorrect answer.

FORMULA FOR WORKING OUT OVER ALL MERIT

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

Example:

If a Candidate has obtained the following marks:

a	HSC/A-Level Equivalent marks	660/1100 or 60.00%
b	Entry Test Marks	80/200 or 40.00%

His/her Merit will be calculated as follows:

i	HSC/A-Level Equivalent marks	60.00% x 0.5= 30.000
ii	Entry Test Marks	40.00% x 0.5= 20.000
OVER ALL MERIT OF THE CANDIDATE		**A+B=30.000+20.0000 = 50.000**

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

Marks shall be added from the total marks of the candidate in his/her HSC (Pre- Medical or Pre-Engineering) qualifying examination in order to adjust the marks.

No deduction in gap of year

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