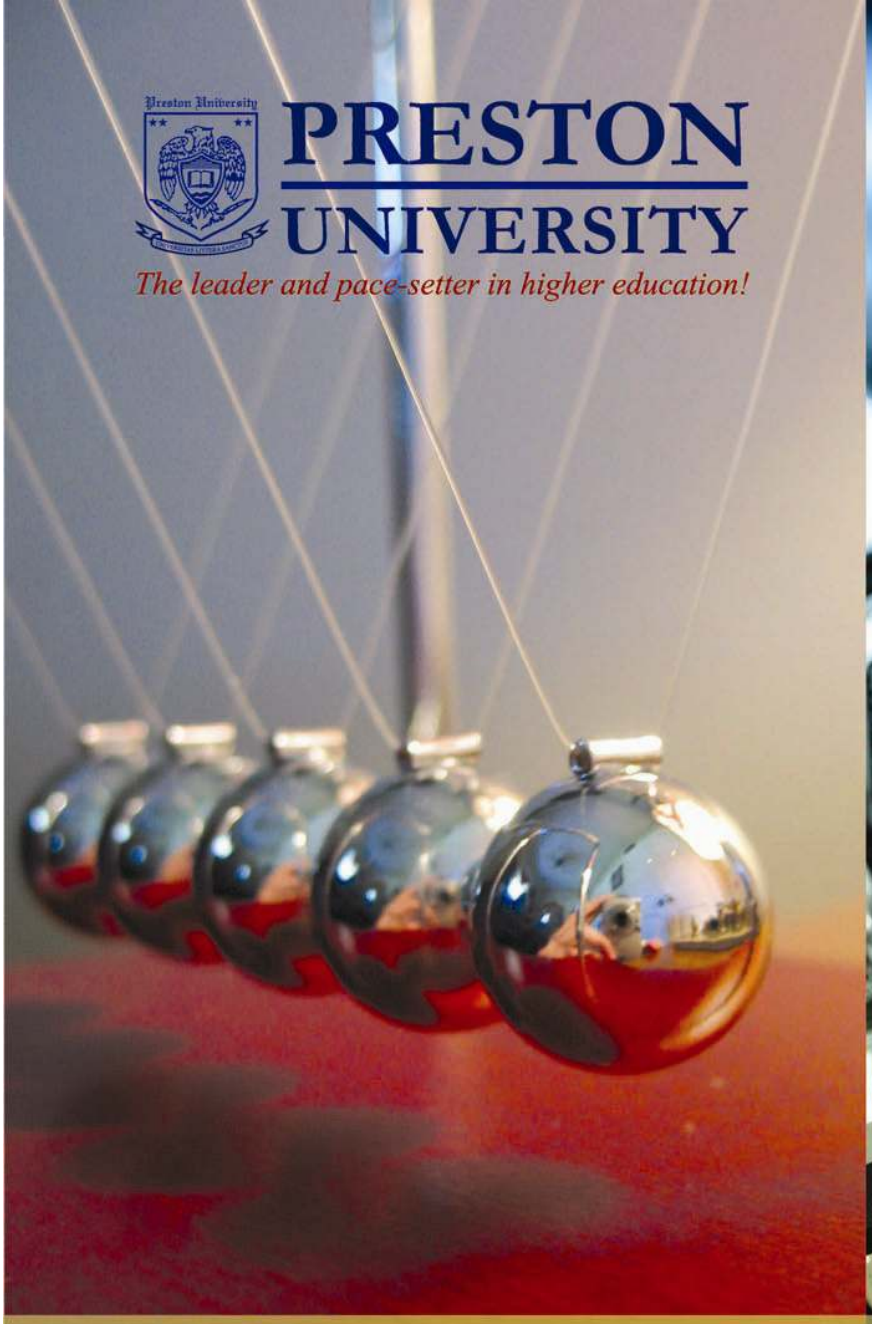
PRESTON UNIVERSITY

The leader and pace-setter in higher education!



BS PHYSICS ELECTRONICS TELECOM

PRESTON UNIVERSITY

Introduction

Preston University, Pakistan was established as School of Business and Commerce in 1984 to foster academic excellence. Preston University is seriously committed to improving the quality of technology and business education in Pakistan. Preston University is managed by a group of dedicated professionals and academicians who have committed their lives to the cause of higher education in Pakistan. Since its inception in 1984, Preston Network has imparted knowledge and skills to numerous individuals through many teaching programs. The experience at this university has played an important role in the professional and personal development of our students. The university will continue to fulfill its responsibilities to the society by creating and providing facilities for personal and professional growth of individuals who wish to make a career in the field of business, science and technology.

Charter and Recognition

Preston University, Kohat, NWFP has been chartered by the Govt. of NWFP through Ordinance No. LII of 2002, and is recognized by the Higher Education Commission (HEC), Government of Pakistan.
Preston University, Karachi, has been chartered by the Government of Sindh through Sindh Act V of 2004, and is recognized by the Higher Education Commission (HEC), Government of Pakistan.

Bachelor of Science in Physics
(BS Physics)

Bachelor of Science in Electronics
(BS Electronics)

Bachelor of Science inTelecommunication Systems
(BS Telecom)

4 Years Honors
(Eight Semesters)

The objective of the BS Programs in Physics, Electronics and Telecommunication Systems is to let the students understand the fundamental principles of Physics, Electronics and Telecommunications and their applications to real world problems. The students will also learn Mathematical techniques and principles and their applications in Physics, Electronics and Telecommunications. The students will be exposed to design and conduct of experiments and learn to analyze the experimental data. Students will develop critical and rational reasoning so as to be able to work on complex problems and be able to develop careers in teaching, research, industry and government.

Requirements:

A student must achieve 144 semester credits for the award of a bachelors degree. Out of this total requirement, at least 60 credits must be completed in general education including sciences, mathematics, social sciences, language and humanities; minimum 48 credits in core subjects related to the degree program of the student.

Eligibility:

Holders of any of the following qualifications:

- High School graduation (12 years of school education)
- Higher Secondary School Certificate or Intermediate (FSc)
- International Baccalaureate
- Minimum seven 'O' levels and two 'A' levels

Must have studied Physics for BS Physics and must have studied Mathematics and / or Physics for BS Electronics and Telecommunication Systems.

In addition to the minimum qualification, candidates are required to qualify Written Test and Interview for admission to the BS program.

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Credit Requirements for BS Physics, Electronics and Telecommunication Systems Programs:

- General Education: 60 Credit Hours
- Core Courses: 48 Credit Hours
- Optional Courses: 24 Credit Hours
- Bachelors Project: 06 Credit Hours
- Internship: 06 Credit Hours
- Total: 144 Credit Hours

All elective courses are determined by the University at the beginning of each semester and are offered to the entire class. Students may not deviate from the block of optional courses offered by the University in any given semester.

In addition to the requirements for earned credits, a cumulative grade point average (GPA) of minimum 2.0 on a scale of 0.0 – 4.0 must be attained.

BS Physics/Electronics/Telecommunication Systems Programs

BS: 4 years; 144 semester credit hours
Eligibility: FSc or Equivalent with Physics / Maths

GENERAL EDUCATION - BS Physics, Electronics, Telecom

(60 Semester Credits)

Mathematics and Social Sciences

- Mathematics-I
- Mathematics-II
- Mathematics-III
- Mathematics-IV
- Statistics-I
- Statistics-II
- Introduction to Psychology
- Introduction to Sociology
- Basic Management
- Introduction to Business
- Computer Applications

Language and Humanities

- English Grammar
- English Composition
- Business Communication-I
- Business Communication-II
- Public Speaking
- Ethics
- Effective Presentations
- Pakistan Studies or Commercial Geography
- Islamic Studies or Ethics

CORE COURSES - BS Physics Program (48 Semester Credits)

- Physics-I
- Physics-II
- Electricity and Magnetism-I
- Electricity and Magnetism-II
- Basic Electronics
- Principles of Electronics
- Mechanics-I
- Mechanics-II
- Statics-I
- Statics-II
- Waves and Oscillations
- Thermodynamics-I
- Thermodynamics-II
- Optics
- Atomic and Molecular Physics
- Solid State Physics

ELECTIVE COURSES - BS Physics Program (24 Semester Credits)

- Classical Mechanics
- Quantum Mechanics-I
- Quantum Mechanics-II
- Electromagnetic Theory
- Mathematical Physics
- Nuclear Physics
- Thermal Physics
- Computational Physics
- Instrumentation and Measurement
- Industrial Electronics-I
- Industrial Electronics-II
- Analog and Digital Communications
- Microelectronics

CORE COURSES - BS Electronics Program (48 Semester Credits)

- Physics-I
- Physics-II
- Electricity and Magnetism-I
- Electricity and Magnetism-II
- Basic Electronics
- Principles of Electronics-I
- Principles of Electronics-II
- Electronic Circuits-I
- Electronic Circuits-II
- Integrated Electronics
- Electronic Circuit Design
- Systems and Signals
- Waves and Oscillations
- Microprocessors
- Digital Logic Design
- Computer Programming

ELECTIVE COURSES - BS ELECTRONICS

(24 Semester Credits)

- Electromagnetic Field Theory
- Mechatronics
- Solid State Electronics
- Analog and Digital Communications
- Satellite Communications
- Optical Fiber Communication
- Instrumentation and Measurement
- Industrial Electronics-I
- Industrial Electronics-II
- Microcontrollers

CORE COURSES - BS Telecom

(48 Semester Credits)

- Physics-I
- Physics-II
- Electricity and Magnetism-I
- Electricity and Magnetism-II
- Basic Electronics
- Principles of Electronics
- Signal Processing-I
- Signal Processing-II
- Systems and Signals
- Introduction to Telecommunication
- Electronic Circuit Design
- Data Communication
- Microwave Systems
- Telecom Networks and Protocols
- Digital Logic Design
- Computer Programming

ELECTIVE COURSES - BS TELECOM

(24 Semester Credits)

- Electromagnetic Field Theory
- Analog and Digital Communications
- Satellite Communications
- Wireless Communications
- Optical Fiber Communication
- Instrumentation and Measurement
- Cellular Communication
- Video Conferencing
- Radar Communication
- Fields, Waves and Antennas

PRESTON UNIVERSITY

Class Attendance

Regular class attendance is expected of all students. It is mandatory to maintain a minimum 70% attendance in all courses at the university. In case of excessive absences a student will not be allowed to sit for the final examination.

Textbooks

All students registering for courses must obtain the textbooks recommended by the faculty from the Preston bookstore or from the general bookstore whichever is convenient.

Availability of Courses

Preston University does not guarantee that the courses listed in this prospectus will be offered in any given term or year. The University also reserves the right to cancel any course or section for which enrolment is insufficient and to change the Instructor and / or classes without advance notice.

Academic Facilities and Services

Each campus location of Preston in Pakistan, has extensive academic facilities including classrooms, computers laboratories, libraries, workshops, and abundant space for administrative and teaching staff, common areas for students, canteen etc. All classrooms and major facilities are fully air-conditioned. Modern audiovisual aids, including video equipment, slide projectors, overhead projectors and multimedia are available for the faculty to use in the classrooms. The students also use these facilities for making presentations of their research projects and term papers.

Library Resources

Each Preston campus in Pakistan has its own library stocked with latest editions of leading textbooks, reference books, periodicals, journals, videos, audio cassettes, and CDs. The total holdings exceed 70,000 volumes. Books and journals are continuously added to the library collections.

Financial Assistance / Scholarships

Preston provides a variety of financial assistance according to the needs of the students who are unable to meet the full cost of their education. Preston also provides a specific scholarship (25% on admission fee and monthly tuition fee) to serving or retired military personnel belonging to Pakistan's Armed Forces or the Police Department and to the employees of the Federal and Provincial Governments.

All scholarships are provided after an assessment based on the needs and merit of the applicant. No candidate can claim automatic award of scholarship on any basis. Scholarship once awarded to a student may be cancelled if the student is unable to maintain satisfactory academic performance. Scholarship application must be submitted on prescribed forms on or before the deadline for submission of application for admission.

PRESTON UNIVERSITY

http://www.facebook.com/Preston.University

http://twitter.com/prestonuni

http://preston-uni.blogspot.com/

ISLAMABAD CAMPUS
85, Street 3,
Sector H-8/1
Tel: 051-4430597-8

KOHAT CAMPUS
OTS Road, Near Eidgah,
Kohat City
Tel: 0922-518511-3

KARACHI MAIN CAMPUS
15, Bangalore Town,
Shahrah-e-Faisal
Tel: 021-34534663-4

NORTH NAZIMABAD CAMPUS
F-92, Block F, North Nazimabad,
(Near Ziauddin Hospital)
Tel: 021-36643374, 36706546-7

CCMIT-MALIR CAMPUS
Majlis-e-Taleem-e-Milli,
Jamia Millia, Malir
Tel: 021-34508563

PESHAWAR CAMPUS
Old Jamrud Road,
University Town
Tel: 091-5845540-2

LAHORE CAMPUS
16, Abubakar Block,
New Garden Town,
Ferozepur Road
Tel: 042-35858745-8
042-35913244-5

KORANGI CAMPUS
LS-1, Sector 15,
Main Korangi Industrial
Area Road
Tel: 021-35121291-2

GULSHAN CAMPUS
D-4, Block-6,
Gulshan-e-Iqbal
Tel: 021-34994544-5

SITE CAMPUS
Plot No. 25,
Industrial Park,
F-53 Hub River Road
Tel: 021-35432905-6

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preston.edu.pk **UAN: 111-707-808**