

Balochistan UET, Khuzdar PROSPECTUS
2021-22







DISCLAIMER

Every effort has been made to ensure that the information in this prospectus is correct. The Balochistan University of Engineering & Technology Khuzdar, however, reserves the right to change any rule and regulation applicable to students whenever it is deemed appropriate or necessary. In the event of inconsistency between the information contained in the prospectus and the Institute's regulations or programs, or where an interpretation of the prospectus is required, the decision of the Institute shall be final.

PREFACE

Balochistan University of Engineering and Technology Khuzdar is a well-known public sector university providing a technical base for development of country. The Graduates passed out from this institution are contributing their due share in development of country by serving in different public and private organizations.

The establishment of Balochistan Engineering College Khuzdar was announced in 1973 and its administrative approval by ECNEC was granted in 1977. After passing through different phases of construction, the college was in a position to start its first year engineering classes in 1988. After the successful performance of just seven years, the Institution was raised to the level of university in 1994.

Under the patronage of Prof. Dr. Ehsanullah Khan Kakar as Vice Chancellor, Balochistan University of Engineering and Technology Khuzdar has achieved important milestones and gained immense significance as an institution of higher education in Pakistan. The University produces professionals and researchers of very high calibre, capable of developing indigenous technologies to meet the growing demands of the 21st century.

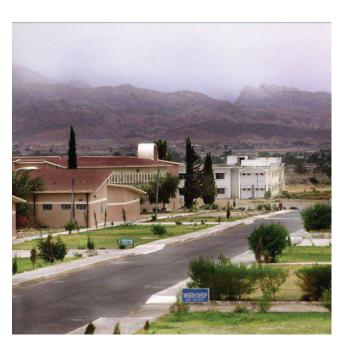




We are one of the first engineering university in the province with over 3,516 graduates serving in different organizations all over the globe.

ABOUT THE UNIVERSITY

The project of Balochistan UET Khuzdar (initially Balochistan Engineering College Khuzdar) was initiated by Federal Government of Pakstan in 1973/74, and its Administrative approval by ECNEC was passed in 1977. The construction work was completed in 1987 and First Year Engineering Classes were commenced in 1987-88 with only 90 students on its rolls, divided equally in groups of 30 in each of the (03) disciplines i.e. Civil, Mechanical and Electrical Engineering. The institution was subsequently upgraded to the level of University after seven (07) years of its successful performance in the public



Balochistan UET is located on the outskirts of Khuzdar, one of the leading cities of Balochistan at a distance of about 380 km from Karachi and 320 km from the Provincial Capital – Quetta. The University stands spread over an area of 200 acres of land in the environs of the surrounding sloping hills of Khuzdar. Its aesthetically charming buildings created by the architect, in an area, which is pollution free amidst peaceful environs, shows an ideal place for growth and nurture of physical and intellectual potentials.

BUET is a fully residential institution with all allied functions, housing (20) disciplines of Engineering, Sciences & Technology & Educationy, each following guideline of HEC and relevant acridation bodies including PEC & CEAC, NTC. All laboratories of the programs are fully equipped with Modern Scientific Equipment for practical training in different subjects.

The university was established with a mission to provide quality academic environment, catering to the challenging global perspective expectations. The need of the hour felt by the emerging industries in Pakistan and to the needs of the current millennium, in order to blend right away with today's demanding job market. The Balochistan UET Khuzdar has to recently established sub-campuses at Turbat & Uthal

BUET provides a interdisciplinary Engineering, Sciences, Technology & Education Program for cutting edge education by both national & foreign qualified faculty members to make a significant impact on society and for the future development of local and international industries. Therefore, students from all the Provinces are facilitated to take admissions in any of the modular all programs at BUET.





To become a world class higher education Institute leading to socio-economic development of the region and beyond.



MISSION

To impart quality education and research with professional excellence on strong ethical foundation to serve the region and beyond.







Provide an attractive campus environment and the resources to promote learning throughout the University.

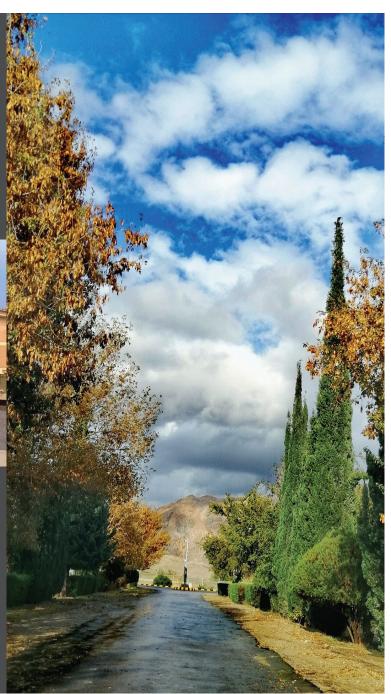


Table of Content











Message from the Vice Chancellor Dr. Ehsan Ullah Kakar

Administrarive Head of the University

Academics Programs Engineering, Sciences, Technology & Education

> Message from the Dean of Engineering & Technologi Dr. Syed Ali Raza Shah

Message from the Dean of Sciences Dr. Shabbar Naqvi

Department of Civil Engineering Programs, Faculty, Courses

Department of Electrical Engineering Programs, Faculty, Courses

Department of Mechanical Engineering Programs, Faculty, Courses

Department of CSE&S Programs, Faculty, Courses

Department of Electronics Engineering Programs, Faculty, Courses

72	Department of Energy Systems Engineering Programs, Faculty, Courses
78	Department of Basic Sciences Programs, Faculty, Courses
86	Undergraduate Admission Policy Engineering Programs
104	Undergraduate Admission Policy Sciences and Education Programs
106	Undergraduate Admission Policy Technology Programs
108	Semester Rules & Regulations Postgraduate Studies
118	Semester Rules & Regulations Undergraduate Programs
130	Facilities Laboratoies, Hostels, Sports & Etc
134	Students Life at University University Life is committed to student growth
126	We're Making Differents

to obtain higher education and excel in all fields

message from The Vice Chancellor



The role of Universities in leading the nations to an incandescent position is undeniable. The universities are the sole plate form of research, creativity, innovation and professionalism. I believe that a university education does not merely confines to produce potential Engineers.

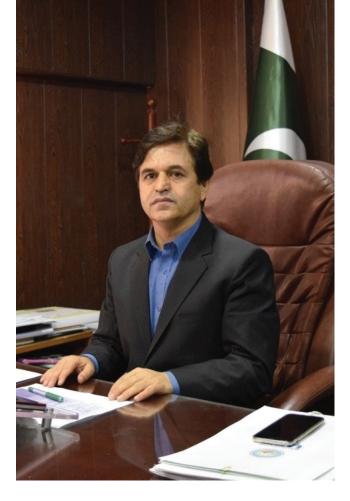
Dr. Ehsanullah Kakar, Vice Chancellor Balochistan UET, Khuzdar

Balochistan University of Engineering and Technology (BUET) Khuzdar is the second oldest and a leading Engineering University of the province providing quality education to youngster of the nation.

The role of Universities in leading the nations to an incandescent position is undeniable. The universities are the sole plate form of research, creativity, innovation and professionalism. I believe that a university education does not merely confines to produce potential Engineers. Besides imparting Technical education, we cultivate the minds to be free from all kinds of prejudices. Our pedagogical culture at BUET broadens the minds, enlarges the vision, encourages intellectual independence and develops impartial judgments. Although the expansion of BUETK has been stagnant but academically it has developed lustrously and is known as a beacon of merit and quality education. Since last three years, BUET has achieved important milestones and gained immense significance as an institution of higher education in Pakistan.

The university produces professionals and researchers of very high calibre, capable of developing indigenous technologies to meet the growing demands of the 21st century. All these developments were possible with the help and support of the dedicated and high caliber faculty, talented students & competent staff.

I welcome you to BUET Khuzdar, where our degree programs are designed to help you build professional skills in Engineering, Sciences, Technology & Education. BUET Khuzdar has a team of devoted and both national & foreign qualified faculty, state of the art laboratories, well-furnished central and departmental Libraries, students' hostels and other basic facilities of life.



Coming to BUET Khuzdar could be one of the most rewarding experiences of any student's life after getting admission on the basis purely of merit in the discipline for which he or she applies.

As Vice Chancellor, my efforts and focus is on academic excellence and would try that the University may prove its distinction imparting quality education, learning, research and other academic activities.



Administrative

Heads of Balochistan UET Khuzdar

Vice Chancellor



PhD (Structural Design), Russia

Ph:+(92) 848 41 2834 Em: vc@buetk.edu.pk

Registrar of the University



PhD (Software Engineering), Universiti Teknologi Malaysia.

Ph:+(92) 848 41 2524

Em: registrar@buetk.edu.pk

Dean Faculty of Engineering





PhD (Quality Engineering), UTM Malaysia.

Ph:+(92) 848 550271 Em:dean@buetk.edu.pk

Dean Faculty of Sciences

Dr. Shabbar Naqvi



PhD (Artificial Intelligence) University of Nottingham UK

Ph:+(92) 848 521110

Em:dean.sciences@buetk.edu.pk



Mr. M. Anwar Sarparah **Controller Examination**

Ph: +(92) 848 41 2526

.....

Em:controllerexam@buetk.edu.pk



Dr. Ayaz Hussain **Director Post Graduate Studies**

..... Ph: +(92) 848 41 3108

Em:directorpg@buetk.edu.pk



Engr. Liaquat Ali Lehri Director General OEC

Ph:+(92) 848-413049

Em: director@qec.buetk.edu.pk



Engr. Hamid Tarig Khan Director General Planing & Works

Ph: +(92) 848 521028

Em:directorpd@buetk.edu.pk



Engr. Raza Zehri **Director Administration**

Ph:+(92) 848 550120

Em: directoradmin@buetk.edu.pk



Mr. Syed Jahangir Zafar Director IT

Ph: +(92) 848 550276

Em: director.it@buetk.edu.pk



Eng. M. Bashir Jattak Project Director

Ph: +(92) 848 521028 Em:pd@buetk.edu.pk



Engr. Waqar Hazoor **Director Sports/Provost**

Ph:+(92) 848 550274

Em: directorsports@buetk.edu.pk



Mr. Shoaib Jamaldini Librarian

Ph: +(92) 848 41 2524 Em:info@buetk.edu.pk



Abdul Qadeer Deputy Registrar

Ph: +(92) 848 41 2524

Em: deputy.registrar@buetk.edu.pk



Mr. Mohammad Hussain **Deputy Treasurer**

Ph: +(92) 848 41 2880

Em:deputy.teasurer@buetk.edu.pk



Abdul Rehman Gungaw **Deputy Director QEC**

Ph: +(92) 848 41 2834

Em:d.director@qec.buetk.edu.pk



Mr. Hidayat Shahwani PS to Vice Chancellor

Ph: +(92) 848 412834 Em:psvc@buetk.edu.pk



Mr. Nouman Mirza **Deputy Controller**

Ph: +(92) 848 412526

Em:d.controller@qec.buetk.edu.pk



Mr. Ejaz Ahmed Protocol Officer

Ph: +(92) 848 412834 Em: pro@buetk.edu.pk



Study Programs







Engineering

Postgraduate Programs

- Master of Civil Engineering
- Master of Electrical Engineering
- Master of Mechanical Engineering
- Master of Computer Engineering

Undergraduate Programs

- Bachelor of Engineering (Civil)
- Bachelor of Engineering (Electrical)
- Bachelor of Engineering (Mechanical)
- Bachelor of Engineering (Computer Systems)
- Bachelor of Engineering (Electronic)
- Bachelor of Engineering (Energy Systems)

Sciences **Postgraduate Programs**

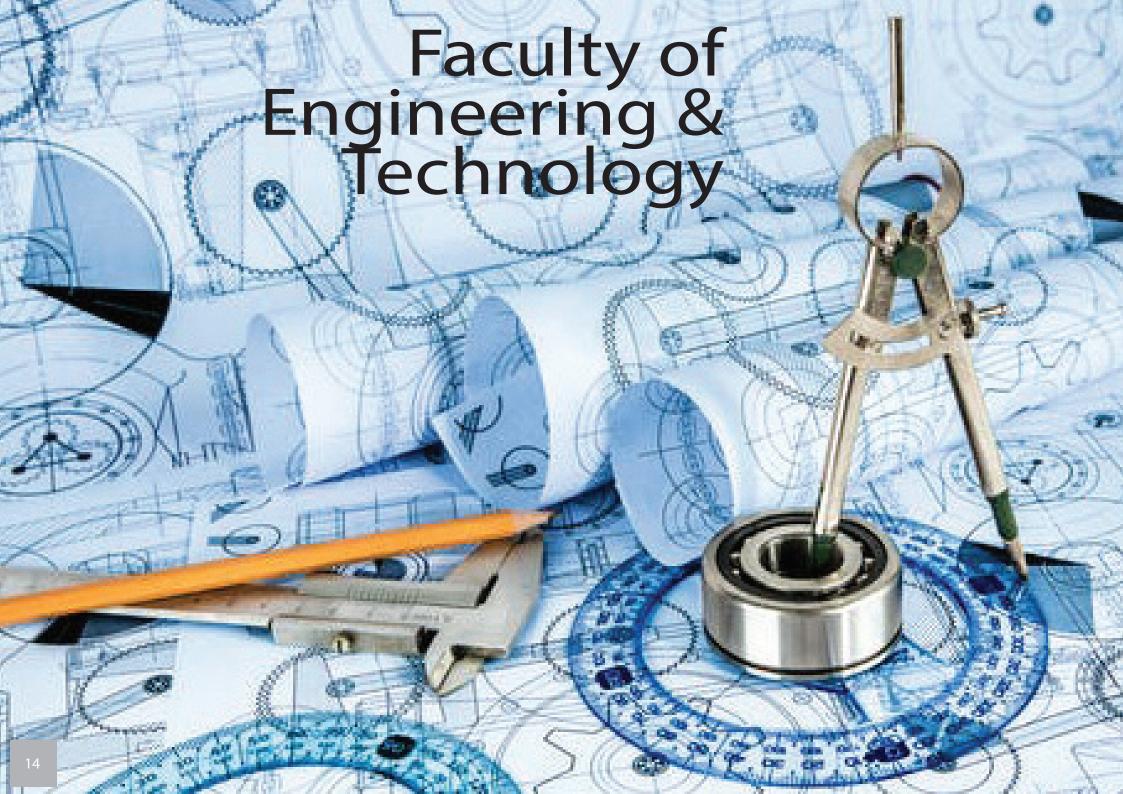
Master of Computer Science

Undergraduate Programs

- Bachelor of Science (Computer Science)
- Bachelor of Science (Information Technology)
- Bachelor of Science (Software Engineering)
- Bachelor of Science (English-Language & Litrature)
- Bachelor of Education (B.Ed)

Technology Undergraduate Programs

- **B.Sc Civil Engineering Technology**
- **B.Sc Electrical Engineering Technology**
- **B.Sc Mechanical Engineering Technology**
- **B.Sc Computer Systems Engineering Technology**



message from

Dean Faculty of Engineering & Technology



The BUETK is a renowned institute across the globe. Its graduates are contributing their knowledge and skills towards the socio-economic development of the country, and also committed to solving the diverse challenges faced by the industry and academia.

Dr. Ali Raza Shah,

Dean Faculty of Engineering & Technology

Welcome to the Balochistan University of Engineering and Technology, Khuzdar (BUETK), which is one of leading public-sector universities in Pakistan that providing quality education in the field of engineering and technology. It is really a great moment for me to work as dean, faculty of engineering in this prestigious institute, where I started my career as a lecturer in 1999.

The BUETK is a renowned institute across the globe. Its graduates are contributing their knowledge and skills towards the socio-economic development of the country, and also committed to solving the diverse challenges faced by the industry and academia.

The BUETK is expanding its global reach to provide more opportunities and exposures for collaboration. In this regard, the several MOUs have been signed with some renowned universities of different countries such as the Malaysia, Turkey, China, Jordan, and Germany.

Our university is equipped with state-of-the-art equipments, library, and other facilities in order to achieve the academic excellence and meet international academic standards.

With the active involvement of all stakeholders such as administration, students, faculty, and employees, working with the true spirit and motivation.



We believe that sharing good ideas and respect for each other is essential for the studies..

To this end, I urge all our stakeholders to play their roles collectively in a strong academic standard of this university with their utmost dedication.

Together, we will make it as one of the top universities in the world.



message from

Dean Faculty of Sciences



Its aim is to provide higher education opportunities to the extremely talented youth of Pakistan in general and Balochistan in particular in various fields of sciences ranging from Computer Sciences, Software Engineering, and Information Technology.

Dr. Shabbar Naqvi
Dean Faculty of Sciences

Faculty of Sciences is a relatively newly established faculty at Balochistan University of Engineering and Technology Karachi. Its aim is to provide higher education opportunities to the extremely talented youth of Pakistan in general and Balochistan in particular in various fields of sciences ranging from Computer Sciences, Software Engineering, and Information Technology.

Besides that, the faculty also offers bachelor's degree programs in English Language and Literature and Education among others. We also provide teaching facilities of natural sciences, economics, and humanities courses to all the Engineering, technology, and sciences programs of the University.

The faculty has highly qualified teachers and all programs are as per HEC guidelines. The faculty also provides research opportunities to the students with the help of the ORIC department of the University. To provide maximum financial benefits to the students, various scholarships on merit are available.

We at BUET Khuzdar under the dynamic leadership of the Worthy Vice Chancellor Prof Dr. Ehsanullah Khan are committed to provide maximum latest teaching aids to our students.

We also provide our graduates career counselling so that they achieve their dreams of becoming useful and productive



members of society substantially contributing the socio-economic development of Pakistan linked with the Sustainable Development Goals (SDGs).

We cordially welcome our potential students and their respected parents at Balochistan UET Khuzdar.

Department of Civil Engineering



Introduction

The Department of Civil Engineering is devoted to produce quality engineers with abilities to design, manage and operate Civil Engineering projects. Experienced and highly qualified, dedicated faculty, state-of-theart laboratories, well-equipped classrooms, excellent book bank in library, and allied facilities in a purpose-built campus express about quality and encouraging educational environment of the department and the institute.

Civil engineers plan, design, supervise the construction and maintenance of many of the facilities and systems that are essential to modern life in both the public and private sectors. The civil engineering profession is one of the most stable and most diverse of the engineering disciplines. Civil engineers today are designing methods and facilities to cope with many of world's most serious problems.

The Profession of Civil Engineering is broadly based and the young graduate may be employed with a contractor on the construction of buildings roads etc., or with a consultant for the planning and design of a variety of structures or in the various government departments concerned with the design and construction of Civil Engineering works. The courses of study have been designed with a view to train the young civil Engineers to meet the challenges of modern construction practices and to be able to take advanced studies and research in the related fields. The theoretical curses are supplemented by laboratory practice filed works seminars and projects

Vision

Education which innovates civil engineering practices locally and globally.

Mission

To provide theoretical and practical civil engineering knowledge, skills, ethics and to acquaint our graduate with advancement in professional practices to enable them to contribute in socio-economic growth locally and across the world.

message from

Chairman of the Department



On behalf of our faculty and staff, I welcome you to the Department of Civil Engineering. We are constantly striving to improve our educational and research programs.

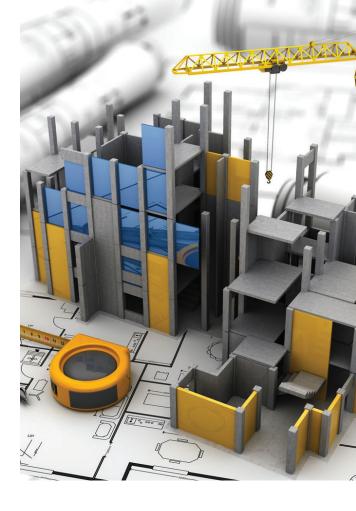
Dr. Qudoos Baloch,
Chairman Civil Engineering Department
chairmancivil@buetkedupk

On behalf of my faculty, staff, alumni, undergraduate, and postgraduate students, I welcome you to the Department of Civil Engineering Balochistan University of Engineering and Technology.

Civil Engineering is one of the oldest engineering disciplines and has been playing a fundamental role in planning, designing, and managing the projects in the fields of structure, water resources, transportation, and geotechnical engineering. The design and construction of complex engineering structures would not have been possible without the continued research and development on innovative materials and methods of construction and design.

Our curriculum focuses on analysis and creative thinking and our educational programs are aligned with the needs of the industry in the 21st century. Our curriculum also strikes a balance between fundamental science, engineering science and design and further integrates the use of information technology.

Our graduates play a vital role in all development plans of the country and hold key positions in all governmental and private sectors. They are involved in different engineering projects that include different engineering disciplines such as, structural analysis and design, site construction, design and planning of transportation systems, design and managing water resource systems, environmental engineering, project management and geotechnical engineering.



Despite limit resources, the department of Civil Engineering has promoted quality education with determination and strength.

By the grace of Almighty, we have succeeded in building traditions of discipline, hard work and determination on quality and excellence.

Our students have been upholding the norms of meaningful acquisition of knowledge and unprejudiced endeavor to excel.

Faculty



Dr. Qudoos Baloch
Chairman

MS-PHD Hanyang University, South Korea. Ph:+(92) 848 550273

Em:aqbaloch@buetk.edu.pk



Dr. Salah Uddin Associate Professor (On Leave)

Ph.D (Civil) University of Nottingham UK.

Ph:+(92) 848 550273

Em:salahuddin@buetk.edu.pk



Dr. M. Haroon Lecturer

Ph.D Hanyang University, South Korea. Ph:+(92) 848 550273 Em:m.haroon@buetk.edu.pk



Dr. Nadar Hussain
Assistant Professor
Ph.D., Civil & Environmental
Engineering Hanyang University,

Seoul, South Korea Ph: +(92) 848 550273

Em: nadarkhokhar@buetk.edu.pk



Dr. Salahuddin Panwar Assistant Professor

Ph.D., Environmental Engineering Mehran, UET, Jamshoro

Ph:+(92) 848 550273

Em: panhwarsallahuddin@buetk.

edu.pk



Dr. Syeda Maria Zaidi

Assistant Professor Ph.D., Environmental Management University Malaysia Pahang, Malaysia

Ph:+(92) 848 550273

Em: mariazaidi@buetk.edu.pk



Engr. Sharfuddin Memon Assistant Professor M.E MUET, Jamshoro.

Ph:+(92) 848 550273

Em:sharfuddin@buetk.edu.pk



Engr. Zulfiqar Jattak
Assistant Professor
ME (Civil) UTM Malaysia

Ph:+(92) 848 550273

Em : zulfiqar@buetk.edu.pk



Engr. Abdul Majeed

Assistant Professor M.E (Geotech) NED University,

Karachi

Ph:+(92) 848 550273

Em:amajeed@buetk.edu.pk



Engr. Gohar Nadeem
Assistant Professor (On-Study Leave)

M.E (Structure) MUET, Jamshoro

Ph: +(92) 848 550273

Em : goharnadeem@buetk.edu.pk



Engr. Shakeel Ahmed

Lecturer

 $\hbox{M.E Construction Management, NED}\\$

UET Karachi.

Ph: +(92) 848 550273

Em:shakeel.baloch@buetk.edu.pk



Engr. Zahoor Ahmed

Lecturer

M.E (Civil) Balochistan UET,

Khuzdar

Ph:+(92) 848 550273

Em:zahoor.ahmed@buetk.edu.

Faculty



Engr. Sohail Akhter Lecturer (On-Study Leave)

B.E (Civil) Balochistan UET, Khuzdar Ph:+(92) 848 550273 Em:sohail.akhter@buetk.edu.pk



Engr. Naveed Ahmed

M.E UTM Malaysia

Ph:+(92) 848 550273

Em:naveed.ahmed@buetk.edu.pk



Engr. Naeem Akhtar

Master of Geotech engineering, NED UET Karachi Ph:+(92) 848 550273

Em:naeem.akhtar@buetk.edu.pk



Engr. Abdullah Shah Lecturer M.E (Construction Management), MUET Ph: +(92) 848 550273

Em:abdullahshah@buetk.edu.



Engr. Summayyah Lecturer Master of Engineering (Civil), BUET Khuzdar Ph: +(92) 848 550273

Em : summayyah@buetk.edu.pk



Engr. Burhanuddin

Lecturer M.E (Transportation Engineering), NED UET Karachi

Ph:+(92) 848 550273

Em: burhanuddin@buetk.edu.



Engr. Nisar Ahmed Lecturer Master of Geotech Engineering, NED UET Karachi

Ph:+(92) 848 550273

Em: engineernisar@buetk.edu.



Engr. Bushra Qazi

Lab Engineer Bachelor of Engineering (Civil), BUET Khuzdar

-- (--)

Ph:+(92) 848 550273

Em: bushra.qazi@buetk.edu.pk



Engr. Muid Ahmed

Lab Engineer Bachelor of Engineering (Civil),

BUET Khuzdar

Ph:+(92) 848 550273

Em: muidahmed@buetk.edu.pk



Engr. Shayak Jamaldini Lab Engineer

Bachelor of Engineering (Civil), BUET Khuzdar

Ph:+(92) 848 550273

Em: shayak jamaldini@buetk.



Engr. Amir Hanif

Lab Engineer

Bachelor of Engineering (Civil), BUET Khuzdar

Ph:+(92) 848 550273

Em:amirhanif@buetk.edu.pk



Engr. Rani Naz Lab Engineer

Bachelor of Engineering (Civil), BUET Khuzdar

Ph:+(92) 848 550273

Em : raninaz@buetk.edu.pk

Postgraduate Program

Master of Civil Engineering

To satisfy the growing demand for relevant advanced technological education, the department of Civil Engineering at Balochistan UET Khuzdar offers a two years M.E degree program in Civil Engineering.

The course contains a balance of analytical and professional aspects and is designed to suit the needs of fresh graduates and those with professional experience. Most of the postgraduate students belong to the construction industry and act as a bridge for university-industry linkage that makes research in the department to be practical and useful for the country.

Master of Engineering program is being conducted in the weekend to cater the demands of working professionals. The students enrolling in the evening programs come from a variety of professional backgrounds and establishments, particularly government and semi-government organizations, as well as practicing engineers from private sector.



Program Courses

	First Semester									
S. No	Subject	Credit Hrs								
1	Structural Dynamics	03								
2	Project Management Frame-	03								
	work and Tools									
3	Advanced Engineering	03								
	Materials									
	Total Credit Hours	09								

	Second Semester									
S. No	Subject	Credit Hrs								
1	Foundation Engineering	03								
2	Research Methodology	03								
3	Repair, Maintenance and	03								
	strength-ening of concrete									
	structure									
	Total Credit Hours	09								

S. No Subject Credit Hrs 1 Pavement Analysis & Design 03 2 Open Channel Flow 03 Total Credit Hours 06

Fourth Semester									
S. No	Subject	Credit Hrs							
1	Design of Hydraulic Struc-	03							
	tures								
2	Rock Mechanics	03							
	Total Credit Hours	06							

Core Courses

S No	Code	Subjects	Total Credit Hours
1.	CE-501	Structural Dynamics	3
2.	CE-502	Foundation Engineering	3
3.	CE-503	Pavement Analysis & Design	3
4.	CE-504	Open Channel Flow	3
5.	CE-505	Design of Hydraulic Structure	es 3
6.	CE-601	Dissertation	6

Elective Courses

S No	Code	Subjects Total Credit H	lours
1	CE-511	Advanced Soil Mechanics	3
2	CE-512	Geometric Design of Highways	3
3	CE-513	Rock Mechanics	3
4	CE-514	Advanced Engineering Materials	3
5	CE-515	Advanced Irrigation Engineering	3
6	CE-516	Operational Research	3
7	CE-517	Research Methodology	3
8	CE-518	Soil Foundation Dynamics	3
9	CE-519	Repair, Maintenance and strengthening	
		of concrete structure	3
10	CE-520	Computer Applications in Geo-technical	
		Engineering	3
11	CE-521	Project Management Framework and Tools	3

Undergraduate Program

Bachelor of Civil Engineering

Civil Engineering is one of the oldest engineering disciplines and has been playing a pivotal role in planning, designing, and managing the projects in the fields of structure, water resources, transportation, and geotechnical engineering. The design and construction of complex engineering structures would not have been possible without the continued research and development on innovative materials and methods of construction and design.

The Bachelor of Engineering (Civil) is a four years degree program based on taught courses and laboratory work. A student opting for Bachelor's degrees has to complete the requisite number of credit hours for course work as laid down in Higher Education Commission regulations for the mentioned degree. The courses of study leading to the Degree of B.Sc. Civil Engineering have been planned to offer a broad spectrum of Civil Engineering subjects. The curriculum lays emphasis on subjects of structures, irrigation, geotechnical, transportation engineering, environmental engineering, and hydraulics. These courses include laboratory and design work. In addition to course work, the final year students are required to work on a project under the guidance of a senior faculty members.

Study tours and extension lectures are also arranged during the session for the benefit of the students. Second or third year students during their summer break and final year students after passing the final examination in Civil Engineering may work with some recognized organizations, registered with PEC or government department or semi-government department.

Department of Civil Engineering at Balochistan UET Khuzdar strives to provide the latest Outcome Based Education (OBE) system so that graduates can contribute towards betterment of the society in professional and ethical manners. Both theoretical and practical skills are instilled in students in an encouraging environment

Program Objectives

PEO-1

PEO-2

PEO-3

To provide knowledge and advanced
To impart graduates with techniques skill for betterment of society

and modern engineering tools necessary for engineering

To enable graduates to understand impact of engineering solutions in a economical, environmental, societal learning

Program Learning Outcomes (PLOs)

PLO-01: Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: 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.

PLO-04: Investigation: 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.

PLO-05: Modern Tool Usage: Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: 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.

PLO-07: Environment and Sustainability: Ability to understand the impact of professional engineering solutions in societal and environmental contexts, demonstrate knowledge of, and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.

PLO-09: Individual and Teamwork: Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.

PLO-10: Communication: 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 documentations, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: 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.

contexts and to engage them in lifelong PLO-12: Lifelong Learning: Ability to recognize importance of and pursue lifelong learning in the broader context of innovation and technological developments.

Program Courses

	First Semester		(Second Semeste	er	Third Semester			Fourth Semester		r
S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs
1	Civil Engineering Materials	03	1	Engineering Surveying	03	1	Concrete Technology	04	1	Quantity & Cost Estimation	03
2	Islamic Studies	02	2	Engineering Geology	03	2	Civil Engg: Drawing & Graphics	03	2	Structural Analysis-I	03
3	Engineering Drawing	04	3	Numerical Analysis	03	3	Advanced Engg: Surveying	03	3	Soil Mechanics	04
4	Applied Calculus	03	4	Differential Equation	03	4	Mechanics of Solids-I	03	4	Fluid Mechanics-I	04
5	Pakistan Studies	02	5	Engineering Mechanics	04	5	Human Resource Management	02	5	Engineering Economics	03
6	Computer Programming	03				6	Functional English	02			
	Total Credit Hours	17		Total Credit Hours	16		Total Credit Hours	17		Total Credit Hours	17

Fifth Semester		Sixth Semester		Seventh Semester			Eighth Semester				
S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs
1	Probability and statistics	03	1	Construction Management	03	1	Environmental Engineering-I	03	1	Environmental Engineering-II	02
2	Fluid Mechanics-II	04	2	Mechanics of Solids-II	04	2	Architecture & Town Planning	03	2	Steel Structures	03
3	Reinforced Concrete Deign-I	04	3	Reinforced Concrete Design -II	04	3	Transportation Engineering-II	04	3	Professional Ethics	02
4	Construction Engineering	03	4	Transportation Engineering -I	03	4	Hydraulics and Irrigation Engg:	04	4	Geotechnical & Foundation Engg	04
5	Structural Analysis-II	03	5	Communication Skills	02	5	Civil Engineering Project-I	03	5	Technical Report Writing & PS	02
6	Organizational Behaviour	02	6	Engineering Hydrology	03				6	Civil Engineering Project-II	03
	Total Credit Hours	19		Total Credit Hours	18		Total Credit Hours	16		Total Credit Hours	16

Undergraduate Program

B.Sc Civil Engineering Technology

Civil Engineering Technology involves the planning, design and construction of roads, bridges, subdivisions, buildings, municipal services, and heavy infrastructure. Civil Engineering Technologists work in a variety of environments including construction, forestry, mining, oil and gas, and transportation. They are an essential member of the engineering team who split their time between office and field work, and, when on-site, may work in urban, rural, and remote settings.

Students will learn relevant theoretical and practical knowledge to support their work within the broad field of Civil Engineering. Courses will be delivered with components of face-to-face classroom instruction, computer-aided design and modelling, field surveying, and experimental laboratory testing. Students will develop an understanding of the engineering principles used to perform structural, hydraulic, municipal, transportation, and construction materials design. Effective technical communication and project management skills will be emphasized throughout the program.

Civil Engineering Technology graduates will be gualified for careers in government departments, consulting firms and construction companies in positions such as designers, estimators, testers, surveyors, inspectors, supervisors, technical writers, and project managers.

Department of Civil Engineering at Balochistan University of Engineering and Technology Khuzdar is planned and developed along the modern technological lines which are specifically made to build up students' practical knowledge and technical skills in Civil Engineering Technology.

The BSc Civil Engineering Technology is a four years degree program and is comprehensively designed and planned in such a way that grooms our students with the ever-needed technical skills and practical knowledge. The students at Department of Civil Engineering are provided with basic techniques, skills and use of modern tools and equipment to perform as professional Civil technologists. This will enable them to master the modern surveying methods for land measurement, construction layouts, and plan to prepare design documents which are considered as most important components of the construction technology.

Program Objectives

PEO-1

PEO-2

PEO-3

PEO-4

provide services to the university, engineering profession and to the public.

To provide knowledge, To impart excellence in civil To enable graduates to use advanced skill, and to technology education for a successful career

the techniques, skills and modern engineering tools necessary for engineering

To exhibit graduates to contribute in engineering solutions in an economic, environmental, societal contexts and to engage them in lifelong learning

Program Learning Outcomes (PLOs)

- Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering PLO 1. fundamentals and an engineering specialization to the solution of complex engineering problems.
- PLO 2. Problem Analysis: An ability to identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- 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.
- 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.
- Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations.
- The Technologist 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.
- 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.
- PLO 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- PLO 9. Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.
- PLO 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.
- PLO 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.
- PLO 12. Lifelong Learning: An ability to recognize importance of and pursue lifelong learning in the broader context of innovation and technological developments.

Program Courses

	First Semester			Second Semester		Third Semester		Fourth Semester			
S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs
1	Islamic Studies /	02	1	Concrete Tech-nology	04	1	Intro to Arch and Town Planning	02	1	Transportation Engineering	04
2	Professional Ethics	03	2	Communication Skills	03	2	Pakistan Studies	02	2	Water Supply & Waste Water Mgt	04
3	Applied	03	3	Applied Mechanics	04	3	Quantity Surveying and CD	03	3	Environmental Management	03
4	Mathematics-I	03	4	Materials and Methods of	04	4	Soil Mechanics	03	4	Theory of Structures	03
5	Introduction to Computer	04		Construction		5	Fluid Mechanics	03	5	Technical Report Writing	03
6	Fundamentals	02	5	Applied Mathematics - II	03	6	Mechanics of Solids	04			
	Total Credit Hours	17		Total Credit Hours	16		Total Credit Hours	17		Total Credit Hours	17

	Fifth Semester		Sixth Semester		Seventh Semester			Eighth Semester			
S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs
1	Hydrology	03	1	Pre-stressed & Pre-cast concrete	03	1	Project (Continue)	03	1	16 Weeks	16
2	Reinforced Concrete Structures	03	2	Geology & Earth-quake Engg:	03					Supervised Industrial /	
3	Construction and Hydraulic Mach	: 03	3	Irrigation and Hydraulic Strutures	03					Field Training	
4	CAB Modeling and Design	03	4	Steel Structures	03					(8x5=40 hrs / Week)	
5	Foundations Engineering	03	5	Project	03						
6	Project Management	03									
	Total Credit Hours	18		Total Credit Hours	15		Total Credit Hours	03		Total Credit Hours	16

Department of Electrical Engineering



Introduction

The department of Electrical Engineering at BUET Khuzdar was established in 1987 and considered as the oldest department of the University. At present, the department has more than 400 number of undergraduate and postgraduate students. The department has 22 faculty members among which there are 09 PhD Professors. The department has well-established 06 classrooms which are equipped with modern teaching tools. There are 09 state-of-the-art laboratories which are supported by well-experienced and professional lab engineers and other supporting staff. A departmental library consisting of more than 3000 books is also available for the faculty members and students. The department has a staff room for the faculty members for gatherings and refreshments. There is also a girls' common room for the female students of the department.

We offer quality engineering education and provide the best learning environment in the department so that the students can reach at the highest level of their intellectual capabilities. The department always encourages the hardworking students through motivational talks, industrial visits, or by organizing educational workshops and seminars. The graduate students of the electrical engineering department are not only playing a significant role in the country but they are doing excellent jobs in the developed countries of the world.

Vision

To create an inspiring and productive environment for providing quality education and research.

Mission

We are committed to provide students with comprehensive knowledge and practical skills which emphasize design and commitment to life-long learning in today's hi-tech competitive market.

message from

Chairman of the Department



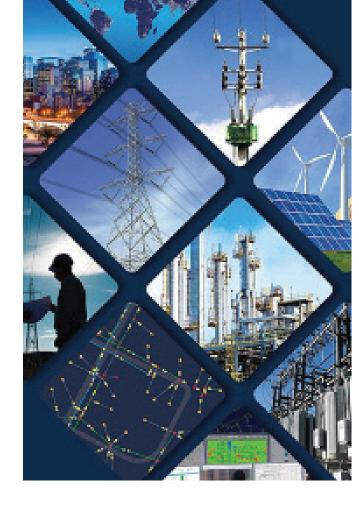
The department of Electrical Engineering deals with the study and applications of power systems, electronics, communication, and control system as per approved HEC curriculum.

Engr. Dr. Raza Haider Chairman Department of Electrical Engineering

This is a great pleasure for me as chairman of the department to well come every one in the department of Electrical Engineering. Our department offers undergraduate and postgraduate programs covering the disciplines of electrical, telecommunications and electronics. The department has senior PhD faculty members who lay great emphasis on emerging areas of research. Our faculty members are admirably engaged in teaching and various research projects.

The students and teachers work together in a friendly atmosphere keeping in view the moral values. The students of the department are our assets and we are committed to produce a constructive and technical minds that can play a significant role in engineering world. The department has nine laboratories consisting of modern and state-of-the-art equipment.

The fast development in the field of Electrical and Electronics Engineering is at an accelerating pace, therefore, we have to run fast to cope with these changes smartly. A strong interaction between the academia and industry has also been developed which helps our graduates to achieve their targets. The engineering education and other information processing tools equip our students with the requisite know-how for solving real life problems and cope with the challenges of the professional world ahead.



I am confident that the hard work and sincere efforts for your professional degree will make significant contribution in human resource development and enhance the indigenous capabilities for self-sufficiency in the field of science and technology.

I cordially invite you to join electrical engineering program as your professional degree studies at BUETK and benefit the society at national and international level.

Faculty



Dr. Raza Haider
Chairman

PhD , Sungkyunkawn University, South Korea

Ph:+(92) 848 550272

Em: razahaider @buetk.edu.pk



Prof. Dr. Zahoor Ahmed

PhD Telecommunication (France).

Ph: +(92) 848 550272

Em:zahoor@buetk.edu.pk



Dr. Ayaz Hussain Associate Professor

PhD, Sungkyunkwan University, South Korea

Ph: +(92) 848 550272 Em:ayaaz@buetk.edu.pk

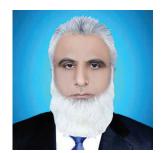


Dr. Imran Sarwar
Assistant Professor

(Shared Faculty)
PhD (Electrical/Electronic Engg),
Politecnico di Torino, Italy

Ph:+(92) 848 550272

Em:imran.sarwar@buetk.edu.



Dr. Wazir M Laghari

PhD, Chulalongkorn University Bangkok Thiland

Ph: +(92) 848 550272

Em: waz irlaghari@buetk.edu.pk



Dr. Saeed Zaman

Assistant Professor

Ph.D (Electrical Power) SKKU South Korea

Ph: +(92) 848 550272

Em saeedzaman@buetk.edu.pk



Dr. Mehmudul Hassan
Assistant Professor

PhD (Nuclear Science and Technology

(USTC, CHINA)

Ph:+(92) 848 550272

Em: mehmoodulhassan@buetk.edu.pk



Dr. Zafar Hayat

Assistant Professor (Shared Faculty)

PhD: Electronic and Electrical Engineering (SKKU, South Korea)

Ph: +(92) 848 550272

Em:zafarhayat@buetk.edu.pk



Dr. Shamshad Ali

Assistant Professor (Shared Faculty)

PhD: Electronic Sciences and Technology (UESTC, CHINA)

Ph: +(92) 848 550272

Em:engr.shamshad@buetk.edu.pk



Dr. Kashif Rafiq
Assistant Professor

PhD (Energy Management): SKKU, South Korea

Ph:+(92) 848 550272

Em: kashif.rafique@buetk.edu.pk



Engr. Muhammad Usman Associate Professor

MS (Microwave Engineering) NUST

Ph: +(92) 848 550272

Em: usman.baloch@buetk.edu.pk



Dr. Attaullah Khidrani Assistant Professor

Ph.D , UTM Malaysia

Ph:+(92) 848 550272

Em: khidraniatta@buetk.edu.pk

Faculty



Engr. Abid Mengal Assistant Professor (Shared Faculty) M.E (Electronics) BUITEMS, Quetta





Engr. M Yaqoob Assistant Professor (On Study-Leave)

M.E (Telecommunication) Asian Institute of Technology, Thailand Ph:+(92) 848 550272 Em:m.yaqoob@buetk.edu.pk



Engr. Noor Hussain
Assistant Professor (On Study-Leave)

M.E (Micro Grid) UTM Malaysia

Ph:+(92) 848 550272

Em: noorhussain@buetk.edu.pk



Engr. M Ismail Marri Assistant Professor

MS (Control System & Automation), Bahria Karachi Ph:+(92) 848 5502732 Em:ismail.marri@buetk.edu.pk



Engr. Shazia Baloch

M.E (Electrical Power) MUET Jamshoro

Ph:+(92) 848 550272 Em:shazia@buetk.edu.pk



Engr. M Ibrahim

M.E (Electrical), Bbalochistan UET Khuzdar

Ph:+(92) 848 550272

Em:ibrahimbal och @buetk.edu.pk



Engr. Tayyab Hassni Lecturer

M.E (Electrical) Balochistan UET, Khuzdar

Ph:+(92) 848 550272 Em:tayyab@buetk.edu.pk



Engr. Mansoor Ahmed

M.E (Electrical) Balochistan UET, Khuzdar

Ph:+(92) 848 550272

Em: mansoorkurd@buetk.edu.pk



Engr. Hammal Khan

M.E (Electrical), Bbalochistan UET Khuzdar

Ph:+(92) 848 5502732Em:

hammal@buetk.edu.pk

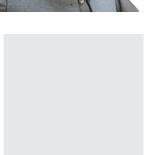


Engr. Shabnam Rehmat

(Shared Faculty) M.E (Electrical Engineering), Balochistan UET Khuzdar

Ph: +(92) 848 550272

Em:shabnamrehmat@buetk.edu.pk



Engr. Haseena Qadir Lab Engineer

M.E (Electrical Power), Balochistan UET Khuzdar

Ph:+(92) 848 550272

Em: haseena@buetk.edu.pk



Engr. Bashir Ahmed
Lab Engineer

M.E (Electrical), Balochistan UET Khuzdar

Ph:+(92) 848 550272

Em : basheer@buetk.edu.pk

Postgraduate Program

Master of Electrical Engineering

We are committed to provide quality and advanced technological education, the department of Electrical Engineering at Balochistan UET Khuzdar offers a two years M.E degree program in Electrical Engineering with specialization in Electrical power and communication systems engineering. The course contains a balance of analytical and professional aspects and is designed to suit the needs of fresh graduates and those with professional experience.

Most of the postgraduate students belongs to the Power Engineering and act as a bridge for university and power sector linkage that makes research in the department to be practical and useful for the country.

Master of Engineering program is being conducted in the weekend to cater the demands of working professionals. The students enrolling in the evening programs come from a variety of professional backgrounds and establishments, particularly government and semi-government organizations, as well as practicing engineers from private sector.



Program Courses

First Semester									
S. No	Subject	Credit Hrs							
1	Core-I	03							
2	Reserch Methodology	03							
3	Elective-I	03							
	Total Credit Hours	09							

	Second Semester			
S. No	Subject	Credit Hrs		
1	Core-II	03		
2	Core-III	03		
3	Elective-II	03		
	Total Credit Hours	09		

S. No Subject Credit Hrs 1 Elective-III 03 2 Thesis-1/Courses Work 03 Total Credit Hours 06

Fourth Semester				
S. No	Subject	Credit Hrs		
1	Elective-IV	03		
2	Thesis-1I/ Courses Work	03		
	Total Credit Hours	06		

Core Courses

S No	Code	Subjects Tot	al Credit Hours
1.	EE-501	Power System Design	3
2.	EE-502	Transients in power Systems	3
3.	EE-503	Power System Protection	3
4.	EE-504	Renewable Energy in Power Syste	ms 3
5.	CE-505	Design of Hydraulic Structures	3
6.	EE-601	Dissertation	6

Elective Courses

S No	Code	Subjects	Total Credit H	lour
1	EE-511	Operation and Control of Pov	wer Systems	3
2	EE-512	Power System Planning		3
3	EE-513	Power System Reliability		3
4	EE-514	High voltage Engineering		3
5	EE-515	Energy management		3
6	EE-516	Distributed Generations		3
7	EE-517	Advanced Control Systems		3
8	EE-518	Computational Methods in Po	ower Systems	3
9	EE-519	Artificial intelligence in Powe	r Systems	3
10	EE-520	Power Quality		3
11	EE-521	Flexible AC Transmission Sys	tems	3

Undergraduate Program

Bachelor of Electrical Engineering

Electrical engineering concentrates on electrical and electronic devices and systems, computer systems, telecommunications, control and electrical power engineering. Electrical engineers play a major role in renewable energy generation, heavy industry and manufacturing installations, robotics and automation, mining and electrical power distribution. They work in a number of industries, for example: construction, mining, resources, aeronautical, electronics, engineering management, telecommunications, power generation and distribution, renewable energy, aerospace, water resource management, robotics and manufacturing, railroad and shipbuilding. These engineers are highly sought after for their capability in the development and application of sustainable electrical and electronic systems across a wide range of areas.

The Bachelor of Electrical Engineering degree at BUET Khuzdar enhances your ability to design and build systems and machines and guides you to tackle the world's biggest challenges in different engineering related fields. Under the dynamic supervision of leading professionals, you develop a fundamental knowledge of electrical circuits, computer systems, control, power systems and management.

During your studies, you are informed about core skills and knowledge related to circuit analysis, AC and DC machines, Power generation, computer science, communication. The program is designed to provide you with practical and problem solving skills to become an electrical engineer.

The goal of our program is to make students learn about engineering and its diverse areas before deciding which discipline to study. Our engineering degree delivers lab work and industry experience for your professional growth. The program provides you with the foundations, know-how and confidence to work across any area in engineering. You can specialize in telecommunications, power systems or electronic systems, as there is a huge demand for BUETK Khuzdar graduates in public and private sector organizations.



PEO-1

PEO-2

PEO-3

Be able to emphasize the practical aspects of engineering and widely recognized in the industry for their outstanding performance.

Be able to actively participate in continuous professional development and exhibit quest for learning

Be able to show professional integrity and commitment to social and ethical responsibilities

Program Learning Outcomes (PLOs)

PLO-01: Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: 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.

PLO-04: Investigation: 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.

PLO-05: Modern Tool Usage: Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: 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.

PLO-07: Environment and Sustainability: Ability to understand the impact of professional engineering solutions in societal and environmental contexts, demonstrate knowledge of, and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.

PLO-09: Individual and Teamwork: Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.

PLO-10: Communication: 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 documentations, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: 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.

PLO-12: Lifelong Learning: Ability to recognize importance of and pursue lifelong learning in the broader context of innovation and technological developments

	First Semester			Second Semester			Third Semester			Fourth Semester			
S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs		
1	Electricity and Magnetism	3+1	1	Programming Fundamentals	3+1	1	Communication Skills	2+0	1	Data Structure and Algorithms	3+1		
2	Introduction to Computing	1+1	2	Engineering Drawing	0+1	2	Electronic Device and Circuits	3+1	2	Signals and Systems	3+1		
3	Workshop Practice	0+1	3	Linear Circuit Analysis	3+1	3	Electrical Network Analysis	3+1	3	Electromegnetic Field Theory	3+0		
4	Calculus & Analytical Geometry	3+0	4	Pakistan Studies	2+0	4	Differential Equation	3+0	4	Linear Algebra	3+0		
5	Islamic Studies/Ethics	2+0	5	Basic Mechanical Engineering	3+1	5	Digital Logic Design	3+1	5	Probability Methods in Engg:	3+0		
6	Functional English	3+0	6	Multivariable Calculus	3+0								
	Total Credit Hours	15		Total Credit Hours	18		Total Credit Hours	17		Total Credit Hours	17		

	Fifth Semester			Sixth Semester			Seventh Semester			Eighth Semester		
S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	S. No	Subject	Credit Hrs	
1	Com. systems	3+1	1	Power Generation Sytems	3+0	1	Organizational Behavior	3+0	1	Electrical Power Transmission	3+1	
2	Power Sys: Analysis	3+0	2	Instrumentation & Meas.	3+1	2	Power Dist. & Utilization	3+1	2	Power System Protection	3+1	
3	Intr. to Embedded systems	3+1	3	Technical Report Writing	3+0	3	Senior Design Project-I	0+3	3	Enterpreeurship & business	3+0	
4	Engineering Economic & Mngmt:	3+0	4	Professional Ethics	3+0	4	Computer Comm Networks	3+1	4	Manangement		
5	Electrical Machines	3+1	5	Linear Control System	3+1	5	Power Electronics	3+1	5	Senior Design Project-II	0+3	
									6	Numerical Analysis	3+0	
	Total Credit Hours 18			Total Credit Hours	17		Total Credit Hours	18		Total Credit Hours	17	

Undergraduate Program

B.Sc Electrical Engineering Technology Outcomes (PLOs)

Electrical technology deals with all machines, tools, devices, and systems in which a current or a flow of electrons takes place through conductors and metals. It involves the design and development of high-voltage systems and components such as motors, generators, heaters, electrical power transmission and distribution systems, radio wave and optical systems, converters, and control systems for operating light and heavy machinery.

In order to design, produce, and maintain all the electrical equipment and services, a number of professionals, including engineers, technologists, and technicians, need to cooperate and supplement each other's skills and responsibilities.

Electrical Engineers are mostly involved in the design theory and analysis of procedures, the development of new products or in activities such as problem identification, technical solutions, and the further research and advancement of electrical technology. Technologists take over the role of implementing the designs to develop the new products and systems, and furthermore, a technician will install, test and keep in good condition the electrical equipment.

The professionals of the field will also have to cooperate with computer, electronics, and software engineers and in some cases, depending on the application, chemical or biomedical engineers and scientists of various disciplines. As electrical technology advances the interaction among multiple disciplines becomes more and more vital.

The work of all professionals as a team is absolutely necessary to maintain the high level of technology used in our everyday life, as well as solve the problems originating from its use.

Program Objectives

PEO-1

PEO-2

PEO-3

Successfully apply fundamental mathematical, scientific, and engineering technology principles in formulating and solving electrical engineering problems

Acquire new knowledge by being a member or part of professional organizations and keeping themselves up to date of the new advances in the electrical engineering technology field.

Work competently in one or more core electrical engineering technology areas of practice.

Program Learning

- Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering PLO 1. fundamentals and an engineering specialization to the solution of complex engineering problems.
- PLO 2. Problem Analysis: An ability to identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- 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.
- 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.
- PLO 5. Modern Tool Usage: An ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to complex engineering activities, with an understanding of the limitations.
- The Technologist 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.
- 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.
- PLO 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- Individual and Team Work: An ability to work effectively, as an individual or in a team, on PLO 9. multifaceted and /or multidisciplinary settings.
- PLO 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.
- PLO 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.
- PLO 12. Lifelong Learning: An ability to recognize importance of and pursue lifelong learning in the broader context of innovation and technological developments.

	First Semester			Second Semester			Third Semester			Fourth Semester			
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs		
1	Islamic Studies / Prof: Ethics	02	1	Communication Skills	03	1	Power Generation Systems	02	1	AC Circuits Analysis	04		
2	Applied Mathematics-I	03	2	Pakistan Studies	02	2	Technical Report Writing	03	2	Electro-Magnetic Fields	02		
3	Applied Physics	03	3	Electronics	04	3	Electrical Instruments and	04	3	Electrical Power Transmission	03		
4	Linear Circuits Analysis	03	4	Basic Mechanical Technology	03		Measurements		4	Electrical Power Distribution &	03		
5	Engineering Drawing	03	5	Applied Mathematics – II	03	4	Electrical Machines - II	04		Utilization			
6	Intro. to Computer Fundamentals	03	6	Electrical Machines – I	03	5	Digital Electronics	04	5	Power Electronics	04		
	Total Credit Hours	17		Total Credit Hours	18		Total Credit Hours	17		Total Credit Hours	16		

	Fifth Semester			Sixth Semester			Seventh Semester			Eighth Semester		
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	
1	Micro-Processor Theory & Inter:	03	1	Project Management	03	1	Project (Continue)	03	1	16 Weeks	16	
2	Switch Gear & Protective devices	03	2	Power System Analysis	02					Supervised Industrial /		
3	Communications Technology	04	3	Data & Computer Communication	04					Field Training		
4	Control Technology	03	4	Industrial Drives & PLC	04					(8x5=40 hrs / Week)		
5	Total Quality Management	02	5	Project	03							
6	High Voltage Technology	03										
	Total Credit Hours	18		Total Credit Hours	16		Total Credit Hours	03		Total Credit Hours	16	

Department of Mechanical Engineering



Introduction

Mechanical Engineering spans the broadest spectrum of engineering activities from concept and design, through manufacturing and maintenance of all kinds of products and systems. It includes the areas such as energy, Fluid mechanics, dynamics, combustion, vibration, design, manufacturing processes, system modelling and simulation, mechatronics, robotics, mechanics of material and engineering material. By combining comprehensive education in the engineering sciences with a solid foundation in practical, problem solving know how, BUETK's Mechanical engineering undergraduate program prepare students to take on challenges that may carry technological and societal consequences.

The BUETK undergraduate program in mechanical engineering begin with a solid background in mathematics and basic engineering science courses. This strong foundation during first two years prepare the students for the advanced classes and research projects that students will undertake in their final two years. The curriculum, which culminates with the senior design projects, gives students a background that can be immediately applied to an engineering career on expended by more advanced education in other engineering or diverse other fields.

Vision

To produce Mechanical engineers with professional skills and leadership qualities for the prosperity of society.

Mission

The mission of Mechanical Engineering program in the Mechanical Engineering Department pledges to offer high-quality education to create professionals and contribute towards the industry of Pakistan by providing inventive solutions with a focus on research and development in mechanical and associated disciplines..

message from

Chairman of the Department



The Balochistan University of Engineering and Technology Khuzdar (BUETK) has been offering access to professional education with great potential for adding value to products and services and for contributing to the national economy.

Dr. Abdullah Mengal Chairman Department of Mechanical Engineering

With full-time faculty members dedicated to teaching and research, the Department of Mechanical Engineering supports research in numerous relevant fields. Mechanical engineering is a diverse discipline, and our robust faculty is engaged in every aspect of it.

The Department of Mechanical Engineering is dedicated to continued innovation through its high-quality academic program. The department offers an undergraduate and postgraduate program in Mechanical Engineering, which covers a wide spectrum of fields while keeping up with their fast pace of technological advancement.

Department of Mechanical Engineering offers high-quality courses aimed at individuals who can amicably meet these challenges. The program of studies enables them to read the team of future young engineers and to realize their innovative ideas.

We consider educating and nourishing the next generation of engineers as a key role in the technological development of the society.



The faculty at the Mechanical Engineering Department is equipped with vast academic and research experience and is instrumental in providing excellence both theoretically and practically.

Mechanical Department will fulfill its responsibility of graduating culturally enlightened, technologically knowledgeable, and academically competent and research-oriented productive citizens who are prepared to lead, to inspire, and to serve humanity.

Faculty



Dr. Abdullah Mengal

PhD. MUET, Jamshoro Ph: +(92) 848 550274

Em:chairman.med@buetk.edu.pk



Dr. Syed Mushtaq Shah
Professor (On Leave)

PhD INSA-LYON, France Ph: +(92) 848 550274

Em: mushtaq.shah@buetk.edu.pk



Dr. Ali Raza Shah Associate Professor HEC approved supervisor PhD (Qulality Engineering), UTM

Malaysia.

Ph:+(92) 848 550274

Em:razadopasi@buetk.edu.pk



Engr. M Mushtaque Assistant Professor

M.E (Manufacturing) NED UET, Karachi

Ph:+(92) 848 550274

Em: mushtaquerajput@buetk.edu.



Engr. Javid Iqbal
Assistant Professor

MSc Adv Engg (Thermo Fluid), University of Leicester , Uk Ph : +(92) 848 550274

Em: javid.igbal@buetk.edu.pk



Engr. M Naeem Assistant Professor

M.E (EMU) North Cyprus

Ph: +(92) 848 550274 Em: naeem@buetk.edu.pk



Engr. Liaquat Ali Lehri Assistant Professor

M.E (IME) Asian Institute of Technology, Thailand Ph: +(92) 848 550274

Em:liaquat@buetk.edu.pk



Engr. M. Ishaq Assistant Professor

M.E (IME) Asian Institute of Technology, Thailand

Ph:+(92) 848 550274

Em:m.ishaq@buetk.edu.pk



Engr. A Hameed Baloch

M.E (Engineering Materials) UTM, Malaysia

Ph:+(92) 848 550274

Em:abdul.hameed@buetk.edu.pk

Faculty



Engr. Waqar Hazoor

M.E (Mechanical) UET, Khuzdar Ph:+(92) 848 550274 Em:waqarha@buetk.edu.pk



Engr. Ikram Baloch Lecturer (on Study Leave)

B.E (Mechanical) Balochistan UET, Khuzdar Ph: +(92) 848 550274

Em:ikram.baloch@buetk.edu.



Engr. Najeehullah

M.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274

Em:engr_najeehullah@buetk.edu.pk



Engr. Faisal Maqbool
Lab Lecturer (on Study Leave)

M.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274

Em: faisal.maqbool@buetk.edu.pk



Engr. M Arif
Lecturer (on Study Leave)

M.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274 Em:m.arif@buetk.edu.pk



Engr. Baloch Khan

M.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274

Em:baloch.khan@buetk.edu.pk



Engr. Shahzaib Iqbal

BM.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274

Em: shahzaib.iqbal@buetk.edu.pk

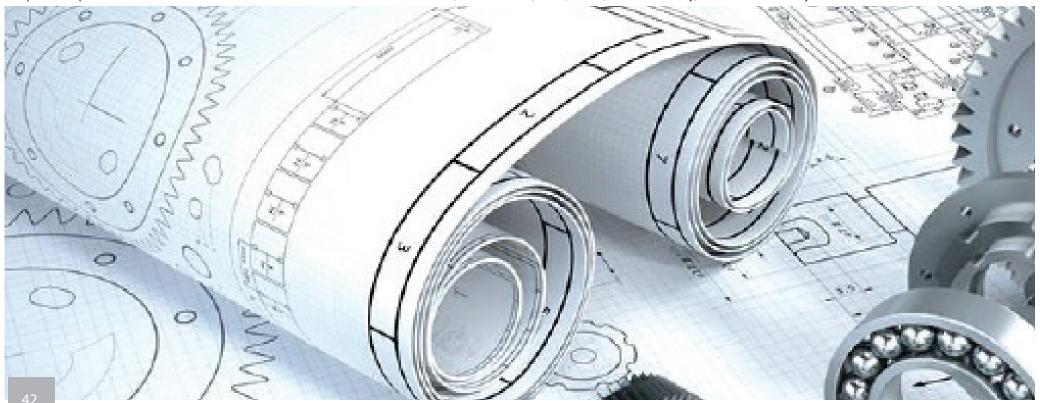
Postgraduate Program Master of Mechanical Engineering

The Master of Mechanical Engineering (ME) program is intended for students with undergraduate degrees in mechanical engineering. Students' undergraduate backgrounds should include mechanical engineering core courses in fluid mechanics, thermodynamics, heat transfer, mechanics of materials, dynamics of mechanical systems, systems analysis, machine design, manufacturing, and design.

The mechanical engineering postgraduate degree provides a solid foundation for engineering career. The Department of Mechanical Engineering offers M.E Mechanical degree program requiring the student to complete 30 credit hours of graduate studies including 6 C.H for Research work. The program is designed for in-service professionals and for those beginning their careers. Program enable experienced professionals to balance their full-time job with studies

The ME Mechanical Engineering Program, prepares participants to work in applied fields including thermal power, emissions controls, design, structural analysis, automatic controls, fluid dynamics and emerging areas in alternative energy. The program is focused on teaching students how to apply knowledge and experience to establish careers in global marketplace and pursue advanced studies along with continued professional development.

Under the supervision of faculty, students investigate the advanced principles and applications of mechanical engineering and enhance their professional skills. Student are encouraged to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, and manufacturability.



	First Semester											
S. No.	Subject	Credit Hrs										
1	Core-I	03										
2	Reserch Methodology	03										
3	Elective-l	03										
	Total Credit Hours	09										

S	Second Semester										
S. No.	S. No. Subject										
1	Core-II	03									
2	Core-III	03									
3	Elective-II	03									
	Total Credit Hours	09									

	Third Semester											
S. No.	Subject	Credit Hrs										
1	Elective-III	03										
2	Thesis-1/ Courses Work	03										
	Total Credit Hours	06										

	Fourth Semester											
S. No.	S. No. Subject											
1	Elective-IV	03										
2	Thesis-1I/ Courses Work	03										
	Total Credit Hours	06										

Undergraduate Program

Bachelor of Mechanical Engineering

The Bachelor of Engineering (Mechanical) is a four years degree program based on taught courses and laboratory work. A student opting for Bachelor's degrees has to complete the requisite number of credit hours for course work as laid down in Higher Education Commission regulations for the mentioned degree. A thesis based on original research work will have to be submitted and defended as per procedure of HEC. The duration of these degrees depends on the performance of the student and on the nature of research problem. The minimum time limit for completion of B.E is four years.

Objectives

The mechanical engineering program seeks to prepare graduate who, after the completion of undergraduate mechanical engineering studies have:

- Prepared themselves for professional practices in engineering positions or to enroll in future engineering 1. degree program
- Established themselves as valued practicing mechanical engineers working primarily in the region. 2.
- 3. Become supportive member of the community and active professionally seeking continuous improvement of skill and professional growth.
- Prepared themselves for successful career and leadership position as a result of teaming, communication 4. and problem solving skill learned in our program
- 5. Engaged at all stages of their careers, in actives that demonstrate a commitment to and a desire for ongoing personal and professional growth and learning



PEO-1

PEO-2

PEO-3

Be able to emphasize the practical aspects of engineering and widely recognized in the industry for their outstanding performance.

Be able to actively participate in and exhibit quest for learning

Be able to show professional integrity continuous professional development and commitment to social and ethical responsibilities

Program Learning Outcomes (PLOs)

PLO-01: Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: 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.

PLO-04: Investigation: 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.

PLO-05: Modern Tool Usage: Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: 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.

PLO-07: Environment and Sustainability: Ability to understand the impact of professional engineering solutions in societal and environmental contexts, demonstrate knowledge of, and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.

PLO-09: Individual and Teamwork: Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.

PLO-10: Communication: 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 documentations, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: 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.

PLO-12: Lifelong Learning: Ability to recognize importance of and pursue lifelong learning in the broader context of innovation and technological developments

	First Semester			Second Semester			Third Semester			Fourth Semester			
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs		
1	Pakistan Studies	2 – 0	1	Islamic Studies	2 – 0	1	Engineering Dynamics	3 – 1	1	Complex Variables & Transforms	3 – 0		
2	Calculus & Analytical Geometry	3 – 0	2	Electrical Engineering	2 – 1	2	Mechanics of Materials-I	2 – 1	2	Machine Design-I & CAD-I	2 – 1		
3	Functional English	3 – 0	3	Ordinary Differential Equation	3 – 0	3	Thermodynamics-I	2 – 1	3	Mechanics of Materials-II	3 – 1		
4	Computer System & Prog.	2 – 1	4	Communication Skills	2 – 0	4	Fluid Mechanics-I	2 – 1	4	Fluid Mechanics-II	3 – 1		
5	Engineering Drawing & Graphics	2 – 1	5	Engineering statics	3 – 0	5	Electronics	2 – 1	5	Thermodynamics-II	2 – 1		
6	Workshop Practice	0 – 2	6	Engineering Materials	3 – 1								
	Total Credit Hours	16		Total Credit Hours	17		Total Credit Hours	16		Total Credit Hours	17		

	Fifth Semester			Sixth Semester			Seventh Semester			Eighth Semester			
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs		
1	Report Writing Skills	3 – 0	1	Applied Statistics	3 – 0	1	Engineering Economics	2 – 0	1	Renewable Energy Technology	3 – 0		
2	Numerical Analysis	3 – 0	2	Manufacturing Processes	3 – 1	2	Mechanical Vibrations	3 – 1	2	Finite Element Method (FEM)	3 – 1		
3	Machine Design-II & CAD-II	3 – 1	3	Control Engineering	2 – 1	3	Internal Combustion Engines	3 – 1	3	Industrial Management	3 – 0		
4	Measurement & Instrumentation	2 – 1	4	Mechanics of Machines	3 – 0	4	Power Plant	3 – 0	4	Business and Entrepreneurship	3 – 0		
5	Heat & Mass Transfer	3 – 1	5	Refrigeration & Air Conditioning	3 – 1	5	Final Project	0 – 3	5	Final Project	0 – 3		
			6	Introduction to Mechatronics	2 – 0								
	Total Credit Hours 17			Total Credit Hours	19		Total Credit Hours	16		Total Credit Hours	16		

Undergraduate Program

B.Sc of Mechanical Engineering Technology Outcomes (PLOs)

This degree program is typically designed for individuals who have completed 3-year diploma of associate engineer (DAE) in Mechanical technology and F.Sc (Pre-Eng.) / ICS from various colleges and institutes across country. This program, unlike mechanical engineering programs, is less focused on theory and more focused on handson experience. Thus, students spend the majority of their time in labs rather than the classroom. This program is accredited by the Technology Accreditation Commission of the country.

The goal of the Mechanical Engineering Technology program is to provide students with the necessary training and education so they can provide high-level technical support to a variety of industrial, commercial, consulting, and governmental organizations. The emphasis of the program is in the application of scientific and engineering principles. Technical communication in oral and written form is also emphasized.

Graduates are expected to appreciate the ethical and societal responsibilities of a technologist, the concepts of Continuous Quality Improvement, and the continuing impact of globalization of design, manufacturing, and marketing of technical goods and services. Graduates are trained to deal with choice of materials and methods that are safe, environmentally and aesthetically acceptable, and economically competitive.

Typical responsibilities that may be assigned to graduates are the development and evaluation of machines and mechanisms; development, organization and supervision of manufacturing processes and procedures; the instrumentation, control and testing of a process; quality control; technical marketing and sales; design of mechanical systems for heating and cooling; and energy management.



PEO-1

PEO-2

PEO-3

Be able to emphasize the practical aspects of engineering and widely recognized in the industry for their outstanding performance.

Be able to actively participate in continuous professional development and exhibit quest for learning

Be able to show professional integrity and commitment to social and ethical responsibilities

Program Learning

PLO-01: Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: 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.

PLO-04: Investigation: 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.

PLO-05: Modern Tool Usage: Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: 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.

PLO-07: Environment and Sustainability: Ability to understand the impact of professional engineering solutions in societal and environmental contexts, demonstrate knowledge of, and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.

PLO-09: Individual and Teamwork: Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.

PLO-10: Communication: 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 documentations, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: 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.

PLO-12: Lifelong Learning: Ability to recognize importance of and pursue lifelong learning in the broader context of innovation and technological developments

	First Semester			Second Semester			Third Semester			Fourth Semester			
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	Course Code	Subject	Credit Hrs		
1	Islamic Studies/ Prof. Ethics	02	1	Applied Mathematic - II	03	1	Communication Skills	03	1	Machine Design	03		
2	Applied Physics	03	2	Pakistan Studies	02	2	CAD - II	03	2	Fluid Mechanics	04		
3	Applied Mathematics-I	03	3	Technical Drawing and CAD-1	04	3	Industrial Material	03	3	Engineering Statics	03		
4	Applied Chemistry	03	4	Applied Thermo- dynamics- 1	04	4	Mechanics of Material	03	4	Probability and Statistics	03		
5	Introduction to Computer	03	5	Basic Electrical & Electronics	04	5	Applied Thermodynamics - II	03	5	Total Quality Management	02		
6	Workshop Technology	03							6	Technical Reportt Writing	03		
	Total Credit Hours	17		Total Credit Hours	17		Total Credit Hours	15		Total Credit Hours	18		

	Fifth Semester			Sixth Semester			Seventh Semester			Eighth Semester		
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	
1	Heat Transfer	03	1	Instrumentation and Control	03	1	Project (Continue)	03	1	16 Weeks	16	
2	I C Engine	04	2	Mechanical Vibration	03					Supervised Industrial /		
3	Dynamics	03	3	Refrigeration & Air Conditioning	03					Field Training		
4	Manufacturing Processes	03	4	Material Handling and Safety	04					(8x5=40 hrs / Week)		
5	Project Management	03	5	Project	03							
6	Economics	02										
	Total Credit Hours 18			Total Credit Hours	16		Total Credit Hours	03		Total Credit Hours	16	

Department of Computer Systems Engineering & Sciences



Introduction

Information and communication technologies are emerging as key disciplines of the 21st Century. Balochistan University of Engineering and Technology Khuzdar has made pioneering contributions in the region towards higher education and research, particularly in the field of computing after the establishment of Department of Computer Systems Engineering and Science in the year 2002.

The department consists of well qualified faculty members from renowned institutions with specializations in different subjects and have extensive teaching experience.

There are 9 states of the art laboratories in the department which are equipped with latest workstations for the students.

Currently, the department is offering four undergraduate programs of BE(Computer Systems Engineering), BS (Information Technology), BS Software Engineering) and two post graduate programs of ME (Computer Engineering) and MS (Computer Science). The Engineering programs are accredited by Pakistan Engineering Council (PEC) and all sciences programs are accredited by National computing Education Accreditation Council (NCEAC).

The curriculum is revisited regularly for all degree programs to keep it updated.

Vision

To become a leader in the field of Computer Systems Engineering and Sciences by producing Research Oriented Skilled Professionals to combat the challenges of 4th Industrial Revolution and beyond.

Mission

To provide an excellence knowledge of Computer Systems Engineering and sciences to prepare the students with strong fundamental concepts, analytical capability, programming and problem solving skills, and to promote organizational and leadership qualities to enhance their employability.

Message from

Chairman of the Department



The Department of Computer Systems Engineering & sciences is a vibrant and a rapidly growing department with innovative education to be in the forefront of Information Technology field.

Dr. Sohrab Khan Bizanjo

The Incessant expansion of Information Technology continues to fuel demand of Computer scientists and IT professionals. The field of Computer Science and Engineering provides excellent professional prospects and challenging career opportunities.

The Department of Computer Systems Engineering & sciences is a vibrant and a rapidly growing department with innovative education to be in the forefront of Information Technology field. The department is committed to provide top-notch education which prepares students to successfully enter in the job market.

The Department of Computer Systems Engineering and Sciences believes in providing quality education in the field of computing to the people of Balochistan in particular and other provinces in general, through target-oriented teaching, problem-oriented research and good services

The CSE&S department was established in 2002, even though it is fairly young department but has experienced amazing growth with qualified faculty, updated curriculum, state of art laboratories and other facilities with consistent development to improve the quality of programs and students.



The department of CSE&S is on the move! We have a vision to be the best department at BUET Khuzdar.

Being the best means striving to be better today than yesterday, setting higher standards and working with full devotion to meet those standards.

I welcome you to explore a wide range of educational opportunities at the Department of Computer Systems Engineering & Sciences.

Faculty



Dr. Sohrab Bizanjo Chairman HEC Approved Supervisor PhD. (Information Systems) UTM, Malaysia



Dr. Shabbar Naqvi Associate Professor HEC Approved Supervisor PhD (Artificial Intelligence) University of Nottingham UK Ph: +(92) 848 550275

Em:shabbar@buetk.edu.pk



Dr. Jalal Shah
Associate Professor
HEC Approved Supervisor
PhD (Software Engineering),
Universiti Teknologi Malaysia
Ph: +(92) 848 550275
Em:jalalshah@buetk.edu.pk



Engr. M Dawood
Assistant Professor

Ph:+(92) 848 550275

Em:sohrab@buetk.edu.pk



Ph:+(92) 848 550275

Em:dawood@buetk.edu.pk



Dr. Zuhaibuddin Bhutto

PhD, Dong-A University, South Korea.

Ph:+(92) 848 550275

Em: zbhutto@buetk.edu.pk



Engr. Ali Raza Assistant Professor

MS (ICT) University of Agder, Norway

Ph:+(92) 848 550275 Em:ali.raza@buetk.edu.pk



Engr. Shakeel Rehman

M.E (Information Management) AIT, Thailand

Ph:+(92) 848 550275

Em:shakeelrehman@buetk.edu.pk



Dr. Nooruddin

PhD, Xi'an Jiaotong University, China.

Ph:+(92) 848 550275

Em:nooruddin@buetk.edu.pk



Engr. Noor Ahmed

M.S , Xi'an Jiaotong University, China

Ph:+(92) 848 550275

Em: noor.ahmed@buetk.edu.pk



Engr. Shakeel Ahmed
Lecturer

M.E (Computer Engineering), Balochistan UET, Khuzdar Ph: +(92) 848 550275

Em : shakeel.sheikh@buetk.edu.pk



Engr. Mohsin Aziz

M.E (Computer Engineering), Balochistan UET, Khuzdar Ph: +(92) 848 550275

Em: mohsinaziz@buetk.edu.pk



Engr. Jan Sher Khan

M.E, University of Delaware, USA

Ph:+(92) 848 550275

Em: jansherkhan@buetk.edu.pk

Faculty



Engr. M Idrees
Lab Lecturer

M.E (Computer Networks &
Performance Evaluation), NED

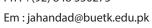
Ph: +(92) 848 550275

Karachi



Engr. Jahandad Lecturer







Engr. Rozina Baloch

M.E (Compute Engineering)
Balochistan UET, Khuzdar
Ph:+(92) 848 550275
Em:rozina@buetk.edu.pk



Engr. Sher Mohammad Lecturer

M.E (Computer Engineering)
Balochistan UET, Khuzdar
Ph: +(92) 848 550275
Em: shermohammadl@buetk.edu.pk



Engr. Faraz Shah

M.E (Computer Enigneering) Balochistan UET, Khuzdar

Ph: +(92) 848 550275 Em: farazshah@buetk.edu.pk



Engr. Mohammad Nawaz

M.E (Computer Networks & Performance Evaluation), NED Karachi

Ph:+(92) 848 550275



Ms. Mah Gul Bizanjo

MS. University Technology
Malaysia (UTM)
Ph: +(92) 848 550275
Em:mahgul.bizanjo@buetk.edu.pk



Engr. Gulnisa Lab Engineer

B.E (CSE) Balochistan UET, Khuzdar Ph: +(92) 848 550275

Em: gulnisa@buetk.edu.pk



Engr. Abdul Raziq

B.E (CSE) Balochistan UET, Khuzdar

Ph:+(92) 848 550275

Em: abdulraziq@buetk.edu.pk



Engr. Yasir Anwar

B.E (CSE) Balochistan UET, Khuzdar

Ph:+(92) 848 550275

Em:yasir.anwar@buetk.edu.pk

Postgraduate Program

Master of Computer Engineering

The masters program in Computer Engineering provides a broad education in the field of computer engineering with the possibility to specialize within different subjects. This is a two year degree program including strong theoretical foundations and the practical ability to design systems and computational platforms.

The department is committed to prepare students for professional and research activities in their chosen subjects. The program of M.E (Computer Engineering) is carefully designed to prepare students in their technically demanding professional career as well as for their future studies in Computer Engineering or related fields.



	First Semester		Second Semester							
S. No	Subject	Credit Hrs	Course Code	Subject	Credit Hrs					
1	Core -1	03	1	Core – 3	03					
2	Core -2	03	2	Specialization Elective – 1	03					
3	Elective – I	03	3	B Elective – 2						
	Total Credit Hours	09		Total Credit Hours	09					

	Third Semester		Fourth Semester							
Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs					
1	Specialization Elective – 2	03	1	Thesis / additional graduate	06					
2	Elective - 3	03	2	level course for non-thesis						
3			3	students						
	Total Credit Hours	06		Total Credit Hours	06					

The student has to complete a minimum of three core courses from the following list. The department may offer core/elective courses from the given list, but not limited to this list, as per the availability of resources.

Core Courses

S. No.	Code	Course Title	Cr. Hrs.
1	CS-501	Advanced Computer Architecture	3
2	CS-502	Advanced Operating Systems	3
3	CS-503	Advanced Computer Networks	3
4	CS-504	Advanced Digital Image Processing	3
5	CS-505	Advanced Digital Signal Processing	3
6	CS-506	Advanced Database Management Systems	s 3
7	CS-507	Advanced Software Engineering	3
8	CS-508	Information Theory and Coding	3
9	CS-509	Advanced Digital Systems Design	3
10	CS-510	Advanced Algorithms Analysis & Design	3

(The course list can be provided in hard copy/ or can be found on BUETKwebsite)

Postgraduate Program

Master of Computer Science

The masters program in Computer Science provides a broad education in the field of computer science with the possibility to specialize within different subjects. This is a two year degree program including strong theoretical foundations and the practical ability to design systems and computational platforms.

The department is committed to prepare students for professional and research activities in their chosen subjects. The program of M.S (Computer Science) is carefully designed to prepare students in their technically demanding professional career as well as for their future studies in Computer Science or related fields.



	First Semester		S	econd Semeste	er
S. No	Subject	Credit Hrs	Course Code	Subject	Credit Hrs
1	Core Course	03	1	Core Course	03
2	Core Course	03	2	Core Course	03
3	Research Methodology	03	3	Elective – I	03
	Total Credit Hours	09		Total Credit Hours	09

	Third Semester		Fourth Semester							
Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs					
1	Elective – II	03	1	MS Thesis	06					
2	Elective – III	03								
	Total Credit Hours	06		Total Credit Hours	06					

The student has to complete a minimum of three core courses from the following list. The department may offer core/elective courses from the given list, but not limited to this list, as per the availability of resources.

Core Courses

S. No.	Code	Course Title	Cr. Hrs.
1.	CSC-501	Advanced Analysis of Algorithms	3
2.	CSC-502	Advanced Computer Architecture	3
3.	CSC-503	Advanced Theory of Computation	3
4.	CSC-504	Theory of Automata-II	3
5.	CSC-505	Advanced Database Systems	3
6.	CSC-506	Advanced Operating Systems	3
7.	CSC-507	Theory of Programming Languages	3
8.	CSC-601	Dissertation (For Research)	6
9.	CSC-511	MS Project	3

(The course list can be provided in hard copy)

Undergraduate Program

Bachelor of Computer Systems Engineering Outcomes (PLOs)

The Bachelor of Computer Systems Engineering is a four year degree program offered at the Department of Computer Systems Engineering and Sciences. This program is accredited by Pakistan Engineering council and offers a robust and multidisciplinary curriculum that includes strong theoretical fundamentals and laboratory based learning to address issues and advancements in the field of computer engineering. The students are prepared to design, create, manufacture, test, and improve computer systems. They can get the awareness of the role computer engineering plays in a modern technological society. The course is also supplemented with research work and seminars and prepares graduates for professional employment or advanced studies



Program Objectives

PEO-1

Graduates will be able to serve

the community through the

effective use of the concepts and

techniques of computer systems

engineering by giving research based

innovative solutions for sustainable

development.

PEO-2

Graduates will be able to exhibit aptitude for leadership, team work, collaboration, independent learning and effective interpersonal communication skills, and will abide by the code of ethics and professional practices.

PEO-3

Graduates will be able to set motivated to demonstrate continuous learning and skill development, so as to function and survive in a competitive landscape.

Program Learning

PLO-01: Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: 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.

PLO-04: Investigation: 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.

PLO-05: Modern Tool Usage: Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: 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.

PLO-07: Environment and Sustainability: Ability to understand the impact of professional engineering solutions in societal and environmental contexts, demonstrate knowledge of, and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO-09: Individual and Team Work: Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.

PLO-10: Communication: 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 documentations, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: 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.

PLO-12: Lifelong Learning: Ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

	First Semester		Second Semester				Third Semester			Fourth Semeste	r
Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs
1	Calculus & Analytical Geometry	3	1	Linear Algebra	2	1	Digital Logic Design	4	1	Differential Equations	3
2	Islamic Studies and Ethics	2	2	Circuit Analysis	4	2	Technical Writing	3	2	Data Structure & Algorithms	4
3	Information & Comm. Tech. ICT	3	3	Computer Programming	4	3	Object Oriented Programming	4	3	Signals & System	4
4	Applied Physics	3	4	Electronics Devices & Circuits	4	4	Discrete Structure	3	4	Computer Arch. & Organization	4
5	Functional English	2	5	Communication Skills	2	5	Complex Variables & Transforms	3	5	Engg Project Management	3
6	Engg. Workshop	1	6	Pakistan Studies & Global Perspective	2						
	Occupational Health & Safety			,							
	Total Credit Hours	15		Total Credit Hours	18		Total Credit Hours	17		Total Credit Hours	18

	Fifth Semester			Sixth Semester			eventh Semeste	er		Eighth Semeste	r
Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs
1	Microprocessor & Interfacing	4	1	Database Management System	4	1	Enterpreneurship	2	1	Social Science Elective-1	2
2	Digital Signal Processing	4	2	Systems and Network Security	4	2	Digital System Design	4	2	Internet of Things	4
3	Computer Comm. & Networks	4	3	Artificial Intelligence & Machine Learning	4	3	Cloud & Distr. Computing	4	3	Block Chain Technologies and	3
4	Operating System	3	4	Software Engineering	3	4	Numerial Analysis	3		Applications	
5	Engg. Economics	3	5	Probability and Statistics	3	5	Senior Design Project-1	3	4	Senior Design Project-2	3
									5	Data Ware houseing & Big data	3
	Total Credit Hours	18		Total Credit Hours	18		Total Credit Hours	16		Total Credit Hours	15

Undergraduate Program B.Sc Computer Engineering Technology

The Bachelor of Computer Engineering Technology is a four year degree program that is designed to meet the ever changing need of the industry for computer engineers with an in-depth knowledge of hardware and software design. Students enrolled in this degree program are provided with a strong foundation of engineering principles through classroom teaching and laboratory assignments. The students are provided with the opportunity to focus on applications and implementations more than theory and conceptual design. Students can secure a career in the design, application, programming, networking, and operation of computer systems.



Program Objectives

PEO-1

Graduates will be able to serve the community through the effective use of the concepts and techniques of computer engineering technology by giving research based innovative solutions for sustainable development.

PEO-2

Graduates will be able to exhibit aptitude for leadership, team work, collaboration, independent learning and effective interpersonal communication skills, and will abide by the code of ethics and professional practices.

PEO-3

Graduates will be able to motivate to demonstrate continuous learning and skill development, so as to function and survive in a competitive landscape.



Program Learning Outcomes (PLOs)

PLO-01: Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: 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.

PLO-04: Investigation: 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.

PLO-05: Modern Tool Usage: Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: 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.

PLO-07: Environment and Sustainability: Ability to understand the impact of professional engineering solutions in societal and environmental contexts, demonstrate knowledge of, and need for sustainable development.

PLO-08: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PLO-09: Individual and Team Work: Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.

PLO-10: Communication: 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 documentations, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: 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.

PLO-12: Lifelong Learning: Ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

	First Semester		Second Semester				Third Semester			Fourth Semeste	r
Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs
1	ILinear Circuit Analysis	03	1	Pakistan Studies	02	1	Digital Logic Design	4	1	Technical Report Writing	3
2	Engineering Drawing	03	2	Applied Mathematics-II	3	2	Data & Computer Comm.	3	2	Microprocessor Arch & Assembly Language	3
3	Applied Physics (Electricity & Magnetism)	03	3	Electronics	3	3	Communication Skills	3	3	Compiler Concepts	2
4	Intro to Computer Fundamentals	03	4	Programming Fundamentals	3	4	Operating Systems	3	4	Electronics Devices & Tech.	4
5	Applied Mathematics-I	03	5	Discrete Maths	3	5	Object Oriented Programming	4	5	Electromagnetic Field Theory	2
6	Islamic Studies	02	6	Workshop Practice	3						
	Total Credit Hours	17		Total Credit Hours	17		Total Credit Hours	17		Total Credit Hours	14

	Fifth Semester		Sixth Semester			S	eventh Semest	er		Eighth Semeste	er
Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs
1	Micro-Processor Theory & Inter.	3	1	Digital Signal Processing	3	1	Supervised Industrial/ Field	16	1	Supervised Industrial/ Field	16
2	Amplifier & Oscillators	3	2	Total Quality Management	3		Training			Training	
3	Signals & Systems	4	3	Hardware Descriptive Lanuage	4						
4	Professional Practices	2	4	System Programming	2						
5	Digital System Design	3	5	Parallel & Distr. Computing	3						
6	Project Management	3									
	Total Credit Hours	18		Total Credit Hours	15		Total Credit Hours	16		Total Credit Hours	16

Undergraduate Program Bachelor of Science (Computer Science)

Computer science is a vibrant and fast-moving field that brings together multiple disciplines such as mathematics, engineering, natural sciences, and psychology etc. The program of BS (Computer Science) at the Department of Computer Systems Engineering and Sciences is a four year degree program that is designed to cover different aspects of modern computer science. The program is accredited by National Computing Education Accreditation Council (NCEAC), which is the accreditation body for computing programs in the country under the administrative control of Higher Education Commission.

The students are provided with strong theoretical knowledge and practical skills in the field of computer science. Students enrolled in BS (Computer Science) program can study the design, development and analysis of software and hardware systems. They are prepared to be the technology leaders and assume responsible positions in their professional career.

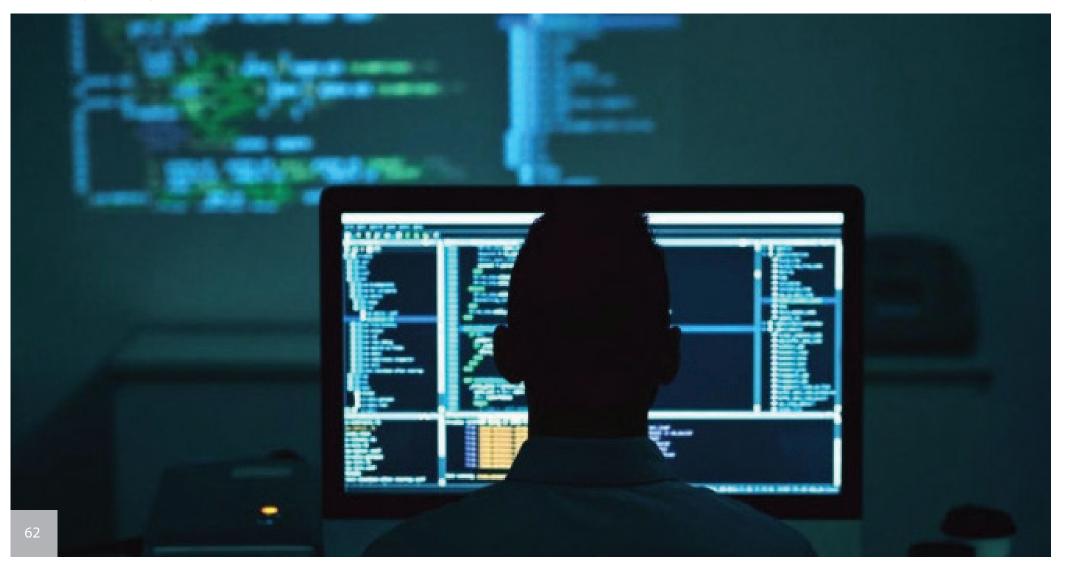


	First Semester			Second Semester			Third Semester			Fourth Semeste	Credit Hrs 3 4			
Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject				
1	Introduction to ICT	3	1	Digital Logic Design	4	1	Comp Org. & Assembly Lang.	4	1	Design & Analysis of Algorithms	3			
2	Programming Fundamentals	4	2	Object Oriented Programming	4	2	Data Structures & Algorithms	4	2	Theory of Automata	3			
3	English Composition & Comprehension	3	3	Communication & Presentation	3	3	Discrete Structures	3	3	Database Systems	4			
4	Calculus & Analytical Geometry	3	4	Skills		4	Professional Practices	3	4	Linear Algebra University Elective – 2	3			
5	Applied Physics	3	5	Probability & Statistics	3	5	CS Supporting – 1	3	5	Offiversity Elective – 2	3			
			6	University Elective – 1	2									
	Total Credit Hours	15		Total Credit Hours	17		Total Credit Hours	17		Total Credit Hours	16			

	Fifth Semester		Sixth Semester			S	Seventh Semeste	er		Eighth Semester	r
Course Code	SIIDIACT	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	Course Code	Subject	Credit Hrs
1	Compiler Construction	3	1	Artificial Intelligence	4	1	CS Elective – 3	3	1	CS Elective – 5	3
2	CS Supporting – 2	3	2	Computer Networks	4	2	CS Elective – 4	3	2	University Elective – 4	3
3	Operating Systems	4	3	CS Elective – 1	3	3	Final Year Project – I	3	3	Final Year Project – II	3
4	Software Engineering	3	4	CS Elective – 2	3	4	University Elective – 3	3	4	Information Security	3
5	CS Supporting – 3	3	5	Technical & Business Writing	3	5	Parallel & Dist. Computing	3	5	Islamic Studies/ Ethics	2
						6	Pakistan Studies	2	6		
	Total Credit Hours	16		Total Credit Hours	17		Total Credit Hours	17		Total Credit Hours	14

Undergraduate Program Bachelor of Science (Software Engineering)

The phenomenal use of software in today's world creates a great demand for software developers who can apply theory and practice of computer science, engineering and mathematical analysis to design, develop, test and evaluate software systems. The program of Bachelor of Science (Software Engineering) will attract those who are inspired by the power and magnificence of software in today's life. The BS in Software Engineering degree will equip students with technical knowledge of the fundamentals of computer systems, programming languages, and the mathematical foundations of algorithms and data structures that are required to establish reliability and safety in software. This degree will enable the students to begin a career in software development, project management, quality management, enterprise application development, business & system analysis, architecture, design, testing etc.



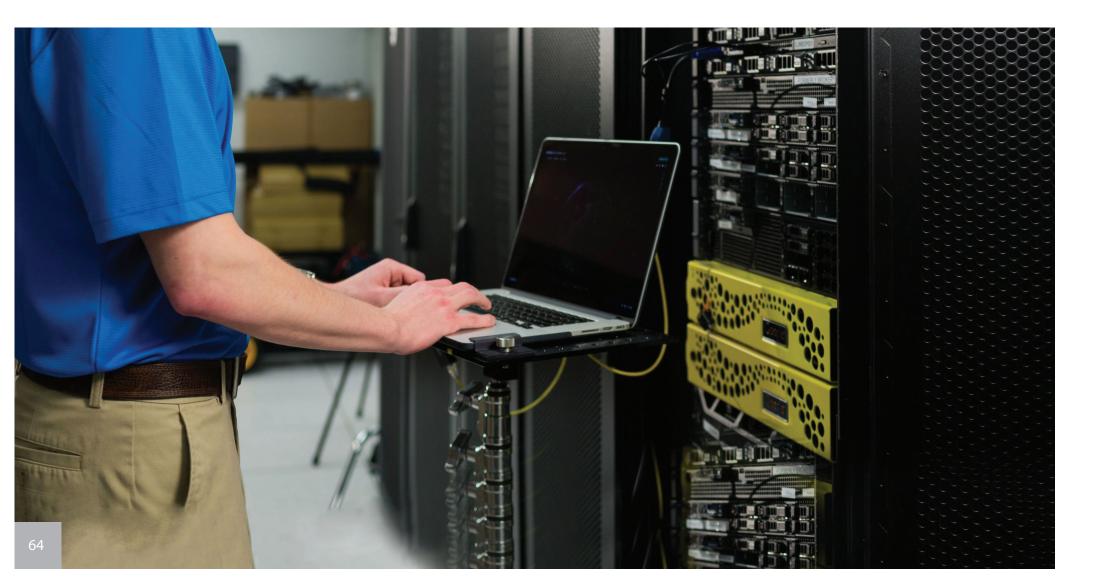
First Semester			Second Semester			Third Semester			Fourth Semester		
Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs
1	Intro. to ICT	3	1	Object Oriented Programming	3-1	1	Data Structures & Algorithms	3-1	1	Operating Systems	3-1
2	Programming Fundamentals	4	2	Comm. & Present. Skills	3-0	2	Software Requirement Engg.	3-0	2	Database Systems	3-1
3	English Composition & Compreh.	3	3	Discrete Structures	3-0	3	Human Computer Interaction	3-0	3	Software Design & Architecture	2-1
4	Calculus & Analytical Geometry	3	4	Software Engineering	3-0	4	Linear Algebra	3-0	4	Probability and Statistics	3-0
5	Pakistan Studies	3	5	Islamic Studies	2-0	5	University Elective-II	3-0	5	University Elective - III	3-0
6	Applied Physics		6	University Elective - I	3-0						
	Total Credit Hours	18		Total Credit Hours	18		Total Credit Hours	16		Total Credit Hours	17

Fifth Semester			Sixth Semester			Seventh Semester			Eighth Semester		
Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs
1	Software Construction and Dev.	2-1	1	Software Quality Engineering	3-0	1	Software Project Management	3-0	1	SE Elective – IV	3-0
2	Computer Networks	3-1	2	Information Security	3-0	2	Software Re-Engineering	3-0	2	SE Elective – V	3-0
3	Technical and Business Writing	3-0	3	Professional Practice	3-0	3	SE Elective – II	3-0	3	Final Year Project - II	0-3
4	SE Supporting-I	3-0	4	Web Engineering	3-0	4	SE Elective – III	3-0	4	University Elective – IV	3-0
5	SE Supporting-II	3-0	5	SE Elective – I	3-0	5	Final Year Project - I	0-3			
			6	SE Supporting - III	3-0						
Total Credit Hours 16		16		Total Credit Hours	18		Total Credit Hours	15		Total Credit Hours	12

Undergraduate Program Bachelor of Science (Information Technology)

The Bachelor of Science in Information Technology (IT) program offered at the Department of Computer Systems Engineering and Sciences focuses on enterprise IT infrastructure, IT project integration, networking and communication systems and areas of great interest to industry and students nationwide, particularly in Balochistan.

This degree program will play an important role in the cultural and economic life of Balochistan in order to develop and retrain the workforce, and to respond to the challenges of 4th industrial revolution. Another feature of the BS (IT) program is that it will also prepare students for graduate degree opportunities in the area of Master in Computer Science, Computer Engineering and similar programs offered by universities in Pakistan and abroad.



	First Semester			Second Semester			Third Semester			Fourth Semester		
Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	
1	Introduction to ICT	2-1	1	Object Oriented Programming	3-1	1	Data Structures & Algorithms	3-1	1	Operating Systems	3-1	
2	Programming Fundamentals	3-1	2	Comm: & Presentation Skills	3-0	2	Discrete Structures	3-0	2	Information Security	3-0	
3	English Composition & Compre	3-0	3	IT Supporting Course – I	3-0	3	Professional Practices	3-0	3	Computer Networks	3-1	
4	Calculus & Analytical Geometry	3-0	4	Probability & Statistics	3-0	4	IT Supporting Course – II	3-0	4	IT Project Management	3-0	
5	Applied Physics	3-0	5	University Elective – 1	3-0	5	Linear Algebra	3-0	5	University Elective – 3	3-0	
			6	University Elective – 2	3-0							
	Total Credit Hours	16		Total Credit Hours	19		Total Credit Hours	16		Total Credit Hours	17	

Fifth Semester			Sixth Semester			Seventh Semester			Eighth Semester		
Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs	Serial No.	Subject	Credit Hrs
1	Database Systems	3-1	1	Web Technologies	3-0	1	Virtual Systems and Services	3-1	1	Final Year Project – II	0-3
2	Software Engineering	3-0	2	IT Elective – 1	3-0	2	Final Year Project – I	0-3	2	Cyber Security	3-0
3	IT Supporting Course – III	3-0	3	IT Elective – 2	3-0	3	IT Elective – 3	3-0	3	IT Elective – 5	3-0
4	System & Network Administration	3-1	4	IT Infrastructure	3-0	4	IT Elective – 4	3-0	4	Database Admin: & Management	3-1
5	University Elective – 4	3-0	5	Technical & Business Writing	3-0	5	Pakistan Studies	2-0	5	Islamic Studies/ Ethics	2-0
Total Credit Hours 17		17		Total Credit Hours	15		Total Credit Hours	15		Total Credit Hours	15

Department of Electronic Engineering



Introduction

The electronic engineering department is a newly built department at Balochistan University of Engineering and Technology, Khuzdar (BUETK). To maintain a competitive edge in newly emerging studies, the addition of the electronic engineering department is viewed as a very important step for reshaping the academic portfolio of the BUETK. The department endeavors to give quality education in electronic engineering. Our faculty in the department consists of researchers, educators, innovators, and leaders. They take pride in teaching and sharing their leading knowledge about electronic engineering.

The electronic engineering department offers state-of-the-art courses focused on exposing the students to the full breadth of electronic engineering fundamentals. The objective of our department is to educate and equip our students with cutting edge knowledge in electronic engineering. We strive to produce qualified, skilled and capable engineers for the future development of our society. We will continue to contribute to the prosperity and development of our nation by challenging the boundaries of knowledge. The electronic engineering department will run educational programs to meet the requirements of the industries leveraging its outstanding faculty and facilities.

Vision

To ensure the progress of the electronics engineering department to a leading department nationally, we declare the following

- Electronics engineering department will secure world-class education and research capacities and contribute towards the prosperity and development of Pakistan.
- To prepare our students to become the future pioneers of society with global leadership skills. Infusing the spirit of creativity in their personality.

Mission

In order to elevate its status as a nationally reputable and distinguished department, we are dedicated to pursuing a variety of mission objectives.

- To become one of the largest and most innovative department nationally.
- To offer a complete range of undergraduate and graduate state-of-the-art courses in development and evolution of electronics engineering.

message from

Chairman of the Department



In the electronics engineering department, we value the future of our students and aim to create innovating minds for the development of education and research in Pakistan.

Dr. Shamshad Ali Chairman Electronic Engineering Department

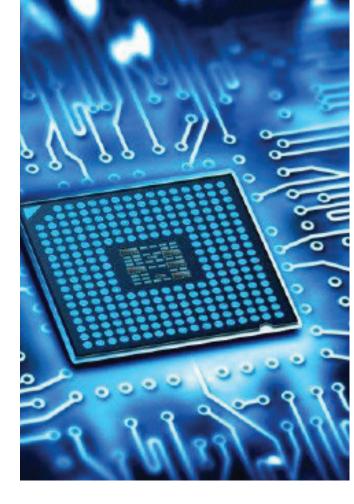
We have many unprecedented changes and challenges in our higher education system. We live in a digital age, where every day technology and research trends are evolving. Advancements in information and communication technologies such as artificial intelligence, the Internet of Things (IoT), Big Data, and mobile technologies are reshaping the basic structure of our economy and society.

We will make sure in the electronic engineering department to overcome these challenges by giving world-class education to our young generation.

We will reshape the future of Balochistan university of engineering and technology with sincerity and will work hard to bring prosperity to our society through sustainable innovations.

We will strive to create an atmosphere that will both encourage and motivate our future pioneers to excel and achieve goals that will shape the future of our country.

Lastly, I would like to express my deep pleasure in working at a diverse and creative organization. To maintain this environment, I aim to create a bond between our faculty and students by encouraging



teamwork and creativity.

The students at the electronic engineering department are provided with an environment conducive to academic and moral excellence.

It is my greatest desire to make the electronic engineering department an ideal place for producing leaders, researchers, and scientists of the future

Faculty



Dr. Shamshad Ali

PhD: Electronic Science and Technology (UESTC, CHINA) Ph: +(92) 848 550272

Em:chairmanelectro@buetk.edu.pk



Dr. Inayat Ali Assistant Professor

Ph.D. (Electrical, Electronics & Comm. Engg), Sungkyunkwan University

Ph:+(92) 848 550272

Em:inayat.ali@buetk.edu.pk



Dr. Imran Sarwar Assistant Professor

PhD (Electrical/Electronic Engg), Politecnico di Torino, Italy

Ph:+(92) 848 550272

Em:imran.sarwar@buetk.edu.



Dr. Zaffar Hayat Khan
Assistant Professor

PhD (Electronic & Electrical Engg.), Sungkyunkwan University.

Ph: +(92) 848 550272

Email: zaffar2572018@gmail.com



Dr. Haseeb Ashraf Malik

PhD: Electronic Science and Technology (UESTC, China) Ph: +(92) 848 550272

Em : haseeb@buetk.edu.pk



Dr. Mansoor Ahmed
HEC IPFP Fellow

PhD: Electronics Engineering (Sabanci University Istanbul, Turkey)

Ph: +(92) 848 550272

Em:drmansoor@buetk.edu.pk

Faculty



Engr. M Abid Mengal
Assistant Professor

M.E (Electronics) BUITEMS, Quetta

Ph:+(92) 848 550272

Em:abidmengal@buetk.edu.pk



Engr. Shabnam Rehmat Lab Engineer (Shared Faculty) M.E (Master of Engineering), Balochistan UET Khuzdar Ph: +(92) 848 550272

Em:shabnamrehmat@buetk.edu.pk



Lab Engineer

ME (Electrical Power Engineering), Balochistan UET, Khuzdar.

Ph: +(92) 848 550272

Email: hasinaqadir@buetk.edu.pk

Undergraduate Program Bachelor of Engineering (Electronic)

The bachelor of engineering (electronic) is a four-year degree program based on the standard courses and practical work regulated by the Higher Education Commission (HEC) and Pakistan Engineering Council (PEC). A student opting for a bachelor's degree has to complete the requisite number of credit hours as laid down in HEC regulations. A thesis based on original research work will have to be submitted and defended as per the procedure of HEC. The duration of the degree depends on the performance of the student and the nature of the research problem.

The program is designed to ensure that the students are taught the core and breadth of electronic engineering. During the studies, students are trained with core skills and knowledge related to electronic circuit analysis, embedded systems, power electronics, computer science, communication, and many more. The program is designed to provide you with practical and problem-solving skills to become an electronic engineer.

We aim to produce graduates who are trained professionals in the area of electronic engineering and are aware of the evolving industrial needs. Our graduates will be competent in all aspects of professional skills like project management, oral communication, team-work, and business and organizational ethics.

The degree will provide you lab work and industry experience for professional growth. As there is a huge demand for BUETK graduates in public and private sector organizations, our graduates can meet the requirement of the employers by the skills developed during their studies.



PEO-1

Graduates would be able to use their knowledge and analytical skills in development of their career and profession.

PEO-2

Graduates would be able to contribute to the development of the society based on their expertise in technical knowledge and educational experience.

PEO-3

Graduates would be able to show leadership and excellence in leading the society and the mankind.

Program Learning Outcomes (PLOs)

PLO-01: Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PLO-03: Design/Development of Solutions: 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 electrical considerations.

PLO-04: Investigation: Ability to investigate complex engineering PLO-01: Engineering Knowledge: Ability to apply knowledge of mathematics, science and engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PLO-02: Problem Analysis: Ability to identify, formulate, research literature, and analyze complex engineering problems reaching sciences and engineering sciences.

PLO-03: Design/Development of Solutions: 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 electrical considerations.

PLO-04: Investigation: 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.

PLO-05: Modern Tool Usage: Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of the limitations.

PLO-06: The Engineer and Society: 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.

PLO-07: Environment and Sustainability: Ability to understand the impact of professional engineering solutions in societal and electrical contexts and demonstrate knowledge of and need for sustainable development. substantiated conclusions using first principles of mathematics, natural

PLO-08: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice. PLO-09: Individual and Team Work: Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.

PLO-10: Communication: 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 documentations, make effective presentations, and give and receive clear instructions.

PLO-11: Project Management: 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.

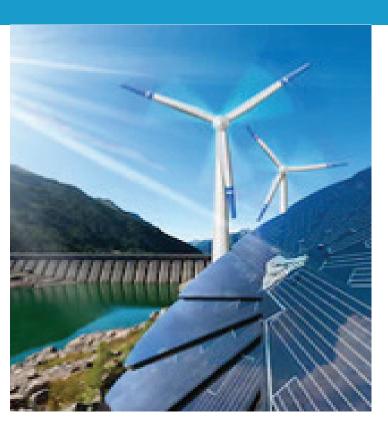
PLO-12: Lifelong Learning: Ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments. Specific details relating to the processes adopted for assessing, evaluating and reviewing the program outcomes should be provided. The institution can also present the internal quality assessment cycle adopted by its Quality Enhancement Cell (QEC).

Program Courses

	First Semester			Second Semester			Third Semester			Fourth Semester			
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs		
1	Functional English	2+0	1	Circuit Analysis	3 + 1	1	Electronic Devices and Circuits	3 + 1	1	Analog Integrated Circuits	3 + 1		
2	Basic Electrical Engineering	3 + 1	2	Basic Electronics	3 + 1	2	Communication Skills	2+0	2	Data Structure & Algorithms	3+0		
3	Differential & Integral Calculus	3+0	3	Differential Equations	3+0	3	Signals and Systems*	3 + 1	3	Instrumentation & Measurement	3 + 1		
4	Electricity & Magnetism	3 + 1	4	Basic Mechanical Engineering	2+0	4	Electromagnetic Fields	3+0	4	Digital Logic Design*	3 + 1		
5	Introduction to Computing	1 + 1	5	Programming Languages	2 + 1	5	Linear Algebra and Geometry	3 + 1	5	Islamic Studies	2+0		
6	Electronic Engg Drawing & Work-	0 + 2	6	Pakistan Studies	2+0								
	Total Credit Hours	17		Total Credit Hours	18		Total Credit Hours	16		Total Credit Hours	17		

	Fifth Semester			Sixth Semester			Seventh Semester			Eighth Semester			
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs		
1	Probability and Statistics	3+0	1	Academic Writing	2+0	1	Entrepreneurship	3+0	1	Elective I	3 + 1		
2	Communication Systems*	3 + 1	2	Microprocessor Programming &	3 + 1	2	Numerical Methods	3+0	2	Elective II	3 + 1		
3	Digital Signal Processing*	3 + 1		Interfacing		3	VLSI Systems Design*	3 + 1	3	Embedded System Design**	3 + 1		
4	Engineering Economics & Manag	3+0	3	Feedback Control Systems*	3 + 1	4	Business Communication & Ethics	3+0	4	Electronic Engineering Project-II	0+3		
5	Industrial Electronics*	3 + 1	4	Power Electronics*	3 + 1	5	Electronic Engineering Project-I	0 + 3					
			5	Electrical Machines*	3 + 1								
	Total Credit Hours	18		Total Credit Hours	18		Total Credit Hours	16		Total Credit Hours	15		

Department of Energy Systems



Introduction

The Bachelor of Engineering (Energy Systems) is a four years degree program based on taught courses and laboratory work. A student opting for Bachelor's degrees has to complete the requisite number of credit hours for course work as laid down in Higher Education Commission regulations for the mentioned degree.

A thesis based on original research work will have to be submitted and defended as per procedure of HEC.

The duration of these degrees depends on the performance of the student and on the nature of research problem. The minimum time limit for completion of B.E is four years.

Vision

To provide the result oriented education in the field of Energy Systems Engineering with research based ideas and develop solutions for improve system performance in various energy sectors to sustainable development of the country and industry.

Mission

The mission of Energy Systems Engineering Department is to educate young students that are able to face challenges of future needs regarding energy sector in industry, research, and to foresee developments of country.

message from

Chairman of the Department



The Balochistan University of Engineering and Technology Khuzdar (BUETK) has been offering access to professional education with great potential for adding value to products and services and for contributing to the national economy.

Dr. Altaf Alam Nonari Chairman Department of Energy Systems

The Balochistan University of Engineering and Technology Khuzdar (BUETK) has been offering access to professional education with great potential for adding value to products and services and for contributing to the national economy and improving quality of life of the people of this remote area.

The Department of Energy Systems Engineering at BUETK offers a curriculum which is designed to give the student a thorough understanding of the basic laws of science and advanced analysis and design skills to stimulate and develop creative thinking, a professional attitude, economic judgment and environmental consciousness.

The aim is to develop the students' potential to the fullest, to prepare the students for superior performance as Energy Systems engineers, and to provide the students with the fundamental principles necessary for pursuing advanced study in the diverse fields of engineering.

For me as a Chairman Energy Systems Engineering Department, it is a matter of pride to see the BUETK striving for competence and excellence within its limited resources and being situated in a remote and hard area of Balochistan.



The BUETK faculty and staff deserve appreciation for their laudable contributions.

Faculty



Dr. Altaf Alam Chairman

PhD. MUET, Jamshoro Ph: +(92) 848 550274

Em:chairman.enrgy@buetk.edu.pk



Dr. RashidAssistant Professor

PhD Beijing, China Ph:+(92) 848 550274 Em:dr.rashid@buetk.edu.pk



Dr. Imadullah Thaheem Assistant Professor

PhD DGIST, South Korea.
Ph:+(92) 848 550274
Em:imadullah@buetk.edu.pk



Dr. Asif Mehmood
Assistant Professor

PhD. China University of Petrolium.

Ph: +(92) 848 550274 Em: asif@buetk.edu.pk



Engr. Javid Iqbal
Assistant Professor

MSc Adv Engg (Thermo Fluid), University of Leicester , Uk Ph: +(92) 848 550274 Em: javid.iqbal@buetk.edu.pk



Hafiz Ghulam Nabi

M.E BUET Khuzdar Ph:+(92) 848 550274

Em:ghulamnabi@buetk.edu.pk

Shared Faculty



Engr. Ikram Baloch

B.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274

Em:ikram.baloch@buetk.edu.



Engr. Waqar Hazoor

M.E (Mechanical) UET, Khuzdar Ph: +(92) 848 550274

Em : waqarha@buetk.edu.pk



Engr. Baloch Khan

M.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274

Em: baloch.khan@buetk.edu.pk



Engr. Najeehullah

M.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274

Em:engr_najeehullah@buetk.edu.pk



Engr. M Arif

M.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274 Em:m.arif@buetk.edu.pk



Engr. Shahzaib Iqbal

BM.E (Mechanical) Balochistan UET, Khuzdar

Ph:+(92) 848 550274

Em: shahzaib.iqbal@buetk.edu.pk



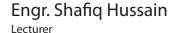
Engr. Faisal Maqbool

M.E (Mechanical) Balochistan UET,

Khuzdar

Ph: +(92) 848 550274

Em: faisal.maqbool@buetk.edu.pk



Undergraduate Program Bachelor of Energy Systems

Energy plays a pivotal role for the economic development of a country. A reliable source of energy is needed to improve the living standard of people. Pakistan is facing many energy challenges- massive gap between demand and supply, low per capita energy consumption, depleting oil and natural gas, increasing the oil price, and inefficient energy use. These challenges are badly affecting the socio-economic condition of people and industrial development.

To overcome these challenges, the highly qualified energy engineers are required to understand the local requirements, develop and implement the advances of science and technology to solve these problems.

In order to overcome the problems of acute shortage of energy engineer in the country and to impart quality instruction in a research oriented atmosphere with tremendous opportunities for personal and professional growth, the Energy systems engineering department at Balochistan University of Engineering and Technology Khuzdar, was established in 2019.

The department has highly qualified and experienced faculty members to teach fundamental course in friendly and congenial environment. The students have accessed the well-established laboratories to understand the fundamental of energy principles. The departmental laboratories will impart the practical knowledge in the field and will carry out the most recent research and development in the area of energy engineering.



PEO-3&4

3

Graduates would be able to act as ethical capable and responsible professional figure.

1

Graduates would be able to serve
as a teamwork member or as
an individual leader with right
direction in the local community
and profession

PEO-1

Graduates would be able to identify and formulate the complex energy systems issues with engineering skills and develop solutions when necessary.

PEO-2

Energy Systems graduates would be able to having cutting-edge knowledge about the operation and design of system in respect of cost effective with environment .friendly for achieving sustainable development.

Program Learning Outcomes (PLOs)

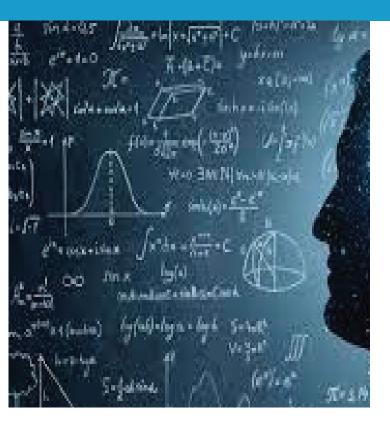
- PLO 1. Engineering Knowledge: An ability to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- PLO 2. Problem Analysis: An ability to identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- PLO 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.
- PLO 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.
- PLO 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.
- PLO 6. The Technologist 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.
- PLO 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.
- PLO 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
- PLO 9. Individual and Team Work: An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.
- PLO 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.
- PLO 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.
- PLO 12. Lifelong Learning: An ability to recognize importance of and pursue lifelong learning in the broader context of innovation and technological developments.

Program Courses

	First Semester			Second Semester			Third Semester			Fourth Semester		
S. No.	Subject	Credit Hrs	Course Code	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	
1	Metallurgy & Workshop Practices	2 – 2	1	Intro to Energy Systems Engg	2 – 0	1	Basic Electrical Circuits & NA	2 – 1	1	Instrumentation & Measurements	3 – 1	
2	Engineering Mechanics	2 – 1	2	Manufacturing Engineering	2 – 1	2	Engineering Thermodynamics	3 – 1	2	Mechanics of Materials	2 – 1	
3	Engg Drawing, Graphics, & CAD	2 – 1	3	Fluid Mechanics	3 – 1	3	Engineering Numerical Analysis	2 – 1	3	Heat and Mass Transfer	2 – 1	
4	Islamic Studies or Ethics	2 – 0	4	Energy Storage Technologies	2 – 0	4	English Composition	3 - 0	4	Communication & Presentation S	3 – 0	
5	Linear Algebra & Calculus	3 - 0	5	Comp Prog Fundamentals for Eng	2 – 1	5	Operations Management	2 – 0	5	Statistics and Probability	2 - 1	
6	Pakistan Studies and Global	2-0	6	Differential Equations	3 – 0				6	Applied Physics	2 – 1	
	Total Credit Hours	17		Total Credit Hours	17		Total Credit Hours	15		Total Credit Hours	17	

	Fifth Semester			Sixth Semester			Seventh Semester			Eighth Semester		
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	
1	Solar Energy Systems	3 – 1	1	Petroleum and Gas Exploration	2 – 1	1	Energy Conservation and Auditing	3 – 0	1	Power Electronics	2 – 1	
2	Wind & Hydropower Conversion	3 – 1	2	I.C. Engines	2 – 1	2	Bio-Energy Engineering	3 – 1	2	Energy Economics, Policy and M	3 – 0	
3	Boiler Engg and Power Plants	2 – 1	3	RS & GIS for Renewable Energy	2 – 1	3	Project and Report-I	0 – 3	3	Project & Report-II	0 – 3	
4	Power Transmission, Distribution	3 – 1	4	Heating, Ventilation and AC System	n 3-0	4	Hydrogen and Fuel Cells	2 – 1	4	Fuels and Combustion	2 – 1	
5	Energy & Environment	2 – 0	5	Microbial Bioenergy and Biofuels	3 – 1	5	Machine Design	3 – 0	5	Nuclear Energy Engineering	3 – 0	
	Total Credit Hours	17		Total Credit Hours	16		Total Credit Hours	15		Total Credit Hours	15	

Department of Basic Sciences



Introduction

The department of Basic Sciences' imparts strong rather unleashing support to cater interdisciplinary advanced linkage amongst the engineering and sciences faculties. It also provides educational degrees in the programs of BS English (Language and Literature), and Bachelor of Education (B.Ed.).

The faculty of the department is fervent pertinent to giving out high-quality teaching skills. Currently, the department consists of faculty members from main domains of Mathematics, English, Economics, Islamic Studies, Education and Pakistan Studies.

The department plays a pivotal role in ensuring that basic sciences, mathematical, management and humanities skills are developed in the students with quality education and research.

Vision

TTo become the best department in the fields related with Basic Sciences and humanities.

Mission

The mission of the department is to impart updated knowledge to disseminate core understanding of the specific subjects of Basic Sciences with benchmark quality.

message from

Chairman of the Department



The all-time active faculty of the department is fervent about imparting high-quality teaching and skills of cutting-edge research.

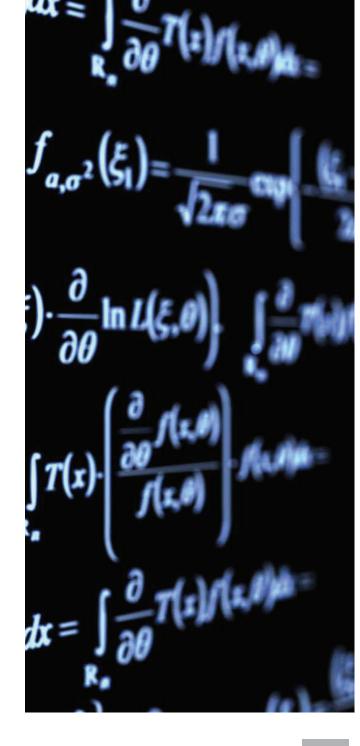
Mr. Abdul Shakoor Qaisrani Chairman Department of Basic Sciences

A profound base of Basic Sciences Department raises creative, questioning individuals, who come up with original ideas and solutions. The all-time active faculty of the department is fervent about imparting high-quality teaching and skills of cutting-edge research.

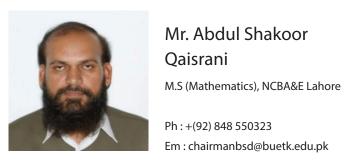
The Department of Basic Sciences offers lectures that are designed for students from different disciplines of engineering technology and sciences in order to fulfill the future needs of the students in the fields of Mathematics, English, Pakistan Studies, Economics, Management Sciences and Islamic Studies.

The department also offers four-year BS program in English (Language and Literature) and B.Ed program. Furthermore, the extensive research work is also being carried out by the qualified faculty members of this department.

In future the department aims to start other degree programs in basic and management sciences related to the main foundational domains linking to the socio economic development of the country and beyond by becoming the best in the field of basic sciences and humanities.



Faculty



Mr. Abdul Shakoor Qaisrani

Ph:+(92) 848 550323

Em:chairmanbsd@buetk.edu.pk



Dr. Waseem Asghar Associate Professor (On Leave)

PhD (Mathematics) COMSATS Islamabad

Ph: +(92) 848 550323

Em:wak@buetk.edu.pk



Ms. Hajira Masroor **Assistant Professor**

MPhil (EnglishLitrature) NUML Islamabad

Ph:+(92) 848 550323

Em:hagarmasroor@buetk.edu.pk



Mr. Gul Mohammad Lecturer

M.A (Arabic, Islamic Studies) Wafaqul-Madaris.

Ph: +(92) 848 550323

Em:gul.mohammad@buetk.edu.pk



Mr. Mehboob Shah Lecturer

MS (Mathematics) NED UET Karachi

Ph: +(92) 848 550323

Em: mehboobshah@buetk.edu.pk



Mr. Irfan Ali Jamali Lecturer (On-Study Leave)

MS (Economics) NUST,

Islamabad.

Ph: +(92) 848 550323

Em: irfan.jamali@buetk.edu.pk



Mr. Shaimazar Baloch Lecturer

M.Sc (Applied Mathematics),

UoB, Quetta.

Ph: +(92) 848 550323

Em: shaemazar@buetk.edu.pk



Mr. Habib Us Salam

Lecturer

M.A (Pakistan Studies) University of Balochistan, Quetta Ph:+(92) 848 550323

Em: habibussalam@buetk.edu.



Mr. Waleed Lateef

Lecturer

MA English Languages and Literature

IIU, Islamabad

Ph:+(92) 848 550323

Em:waleed@buetk.edu.pk

Faculty



Mr. Rahim Bakhsh

M.Sc (Mathematics), UoB, Quetta.

Ph:+(92) 848 550323

Em: noor.ahmed@buetk.edu.pk



Mr. Mumtaz Ali Lecturer

M.S (Maths), IIU, Islamabad

Ph:+(92) 848 550323

Em: mumtaz.ali@buetk.edu.pk



Mr. Muzafar Husain

MS English Linguistics & Literature BUEITMS Quetta, Pakistan

Ph:+(92) 848 550323

Em: muza farhusa in @buetk.edu.pk



Ms. Saima Ashraf

MSc (Maths) Sardar Bahadur Khan Women University, Quetta.

Ph:+(92) 848 550323

Em :saima.ashraf@buetk.edu.pk



Ms. Warda Faheem-Lecturer

B.S (English), SBK Women University, Quetta

Ph:+(92) 848 550323

Em:wardafaheem@buetk.edu.

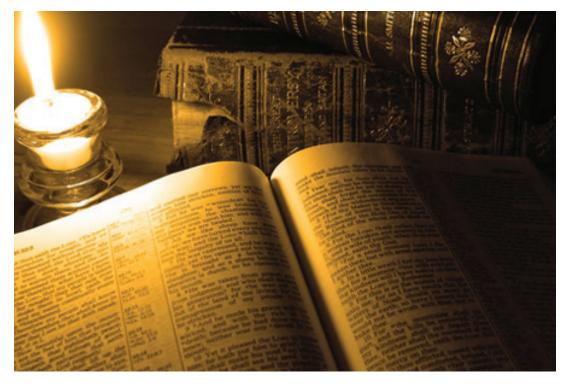
Undergraduate Program

Bachelor of Science (English Language and Literature)

English (Language and Literature) program was started in the year 2019 under the umbrella of Basic Sciences Department (BSD). The program offers four years BS degree in the main discipline of English (Language and Literature).

Eligibility Criteria

- Intermediate from a recognized board, or equivalent with a minimum 45% marks.
- Applicant has to appear and qualify Balochistan UET Khuzdar written test (conducted by university or any other testing body) and interview.



Goals of English (Language and Literature) Program

Goal I:

Write analytically and creatively, that is to express ideas clearly and incisively in their writing in ways required both inside and outside of the academy.

To accomplish this goal a student will be able to:

Compose a well-constructed essay that develops a clearly defined claim of interpretation which is supported by close textual reading.

Employ effective rhetorical strategies in order to persuasively present ideas and perspectives.

Utilize literary terminology, critical methods, and various lenses of interpretation in their writing.

Apply the rules of English grammar.

Adhere to the formatting and documenting conventions of the respective discipline in specific and other disciplines in general.

Goal II:

Analyze a broad range of literatures written in English (including representative authors and major literary periods), recognizing their temporal, social, political, and artistic contexts.

To accomplish this goal a student will be able to:

Interpret and critically evaluate texts of various genres, forms, and historical periods.

Demonstrate knowledge of the historical context of a work or author.

Choose an appropriate critical approach through which to analyze a given text.

Describe a range of literary techniques and rhetorical strategies used in a variety of texts, including their relationship to audience, purpose, and cultural contexts/constraints.

Goal III:

Use effectively a range of writing, reading, and research strategies applicable to multiple disciplines.

To accomplish this goal a student will be able to:

Integrate primary and secondary sources into their writing.

Employ methods of active reading, including annotating, summarizing, questioning, and synthesizing.

Locate and critically evaluate print and electronic sources.

Utilize current technologies to assist in the research and presentation of critical and creative writing.

Program Courses

	First Semester		Second Semester				Third Semester			Fourth Semester		
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	
1	Study Skills	03	1	Islamic Studies	02	1	Introduction to ICT Skills	03	1	Human Rights & Citizenship	03	
2	Gender Studies	03	2	Elementary Maths and Statistics	03	2	Human Resource Management	03	2	English IV- Academic Read-ing & Writing	03	
3	Pakistan Studies	02	3	Introduction to Philosophy	03	3	Global Poetry	03	3	Classical and Renaissance Drama	03	
4	English I: Reading and Writing	03	4	English II: Composition Writing	03	4	English III-Communication and Presnt: Skills	03	4	Classical Poetry	03	
5	Introduction to Literary Studies	03	5	Intro. to Phonetics & Phonology	03	5	Short Fictional Narratives	03	5	Semantics	03	
6	Introduction to Language Studies	03	6	Literary Forms and Movements	03	6	Introduction to Morphology	03	6	Rise of Novel (18-19th Century)	03	
	Total Credit Hours	17		Total Credit Hours	17		Total Credit Hours	18		Total Credit Hours	18	

	Fifth Semester		Sixth Semester			S	Seventh Semester			Eighth Semeste	r
S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs	S. No.	Subject	Credit Hrs
1	Intro to International Relation	03	1	Modern Poetry	03	1	Research Methods and Term Paper	03	1	Post-Colonial Literature	03
2	Inro to Environmental Studies	03	2	Modern Drama	03	2	Intro to Applied Linguistics	03	2	American Literature	03
3	Romantic and Victorian Poetry	03	3	Modern Novel	03	3	Introduction to Stylistics	03	3	Intro to Translation Studies	03
4	Foundation of Litrary & Criticism	03	4	Grammar and Syntax	03	4	Literary Theory and Practice	03	4	Introduction Women's Studies	03
5	Sociolinguistics	03	5	Discourse Studies	03	5	Pakistani Literature in English	03	5	World English	03
6	Popular Fiction	03	6	Creative Nonfiction	03						
	Total Credit Hours	18		Total Credit Hours	18		Total Credit Hours	15		Total Credit Hours	15

Undergraduate Program Bachelor of Education (B.Ed)



Balochistan University of Engineering and technology Khuzdar is one of the leading Engineering and Technology Universities of the province which is playing an eminent role in producing professional engineers, and science graduates belonging from different areas of Pakistan in general and Balochistan in particular.

Balochistan UET Khuzdar has taken another step towards quality education by introducing B.Ed program.

This program is designed for students of who wish to pursue quality teaching roles at different levels within educational organizations.

The program has been designed inline with guidelines of HEC and NACTE. It is envisaged that this program shall provide quality education for teachers ultimately benefiting children and youth of Balochistan in particular.

The program is designed in such a way that it includes imparting research skills to apply in classroom in addition to modern teaching aids and teaching methodologies.

Vision

TTo become the best department in the fields related with Basic Sciences and humanities.

Mission

The mission of the department is to impart updated knowledge to disseminate core understanding of the specific subjects of Basic Sciences with benchmark quality.





Undergraduate Admission Policy Faculty of Engineering

Admissions to the First Year for all the degree courses are made according to the policies and rules, framed by the authorities of the University from time to time. The rules mentioned in this prospectus are subject to revision by the competent authority as and when deemed necessary and without any notice. The number of seats has been fixed. There are othercategories of candidates who are also eligible for admission, which are described in detail in the subsequent clauses.

1. Number of Seats

The total number of seats for the admission in Balochistan University of Engineering and Technology, Khuzdar for each Academic Session shall be as under:

Civil Engineering	Electrical Engineering	Mechanical Engineering	Computer Systems Engineering CSE	Energy Systems Engineering	Electronic Engineering	Software Engineering	Total
100	100	81*	80	42*	42*	40	485

1.1. The Break-up of Seats:

1.1.1 Seats reserved for candidates of Balochistan Province:-

S. No	Civil Engineering	Electrical	Mechanical	Computer Systems	Energy Systems	Electronics	Software	Total
		Engineering	Engineering	Engineering	Engineering	Engineering	Engineering	
1		Self Finance						
	40	25	08	10	5	05		93
2		Seats Reserved for Balochistan Province						
	53	66	63	68	35	35	40	360
3	Quota for other Provinces							
	7	9	10	2	2	2		32
Total	101	100	81	80	42	42	40	485

1.1.2 Seats reserved for other Provinces/ Agencies
Break up of 32 seats are as under:-

S. No.		Civil	Electrical	Mechanical	Computer Systems	Energy Systems	Electronics	Software	Total
		Engineering	Engineering	Engineering	Engineering	Engineering	Engineering	Enigneering	
1									
2	Sindh Urban		01	01					02
3	Sindh Rural	01		01					02
4	Punjab	02	03	04	1				09
5	KPK		01	01					02
6	Azad Jamu and Kashmir	01	01		-1				02
7	FATA	01	01	02	02	02	02		10
8	Northern Area	01	01						02
9	Federal Capital Area.	01	01	01					03
	Grand Total	07	09	10	02	02	02		32

Distribution of 324 Reserved Seats for Candidates of Balochistan

324 seats are distributed as under:-

Sr. No.	Quota	No. of Seats
1.	Provincial open Merit	30
2.	DAE (@2% of the total seats in each discipline as per PEC policy	11
3.	Female	25
4.	Non-Muslims/ Minority Community	02
5.	Sports Man	01
6.	Children of Local/Domicile Engineers of Balochistan	01
7.	Handicapped	01
8.	Son/Daughter of Employees of BUETK	09
9.	Balochistan Districts	280
	Total	360

2.1. Provincial Open Merit

Discipline wise 30 seats shall be reserved for provincial open merit.

Discipline	Total Seats
Civil Engineering	10
Electrical Engineering	05
Mechanical Engineering	05
Computer Systems Engineering	05
Energy Systems Engineering	02
Electronic Engineering	02
Software Engineering	01
Total	30

2.2. Seats reserved for Diploma Holders (D.A.E): (11)

Diploma of Associate Engineers holders shall be eligible for admission against [02%] reserved seats in relevant discipline of Engineering in which he or she has passed the DAE examination as per PEC policy as follows:

Discipline	Total Seats	02% of the total seats
Civil Engineering	100	2
Electrical Engineering	100	2
Mechanical Engineering	81	2
Computer Systems Engineering	80	2
Energy Systems Engineering	42	1
Electronics Engineering	42	1
Software Engineering	40	1
Total	485	11

2.3 Seats Reserved for Females;

25 seats at the scale of three seats per zone shall be reserved for girls exclusively (in addition to the general seats along Boys on district level) as under:-

i.	Quetta Zone	3
ii.	Kalat Zones.	3
iii.	Zhob Zones.	3
iv.	Loralai Zone	3
V.	Sibi Zone	3
vi.	Naseerabad Zones	3
vii.	Mekran Zone	3
viii.	Rakhshan	3

01 seat is reserved for Khuzdar District

Total 25

2.3.1 Unclaimed Divisional Merit Seats for females

Unclaimed Divisional merit seats for females, if any shall be given to the candidates on provincial merit to the females only.

2.3.2 Female Candidates selected both on district and divisional reserved seats

A female candidate selected both on district regular seat and divisional reserved seats for females or any other quota shall be given choice which one she wants to avail.

2.4 Distribution of different quota seats other than district Quota

2.4.1 Seats reserved for Non-Muslims/ Minority Community.

02 seats shall be reserved for the Non-Muslim/Minority Candidates (2 for all Balochistan) however, they are eligible to compete on merit against the seats reserved for their respective districts.

2.4.2 Seats reserved for Sports Men:

01 seat shall be reserved for sports men on provincial level. Qualified Candidates against the Sports quota (1 for all Balochistan) in the prescribed sports fields shall be considered for admission as per BUETK regulations for the admission on sports quota. Annex I

2.4.3 Seats reserved for Children of Local/Domicile Engineers of Balochistan

01 seat shall be reserved for Children of Local/Domicile Engineers of Balochistan (retired/ in service/Private Business)

2.4.4 Seats Reserved for Handicapped

01 Seat shall be Reserved for Handicapped (1 for all Balochistan) as per Handicapped policy

2.4.5 Seats Reserved for Son/Daughter of Employees of BUETK09 seats shall be reserved for Son/Daughter of Employees of BUETK

2.5. Seats Reserved for Balochistan Districts:280 out of 360 seats are reserved for Balochistan districts with reference to their population based on census 2017.

2.5.1 Distribution of District Merit Seats 265 District Merit seats shall be distributed among all the districts with reference to their population based on census 2017 as under:-

S.No.	Name of District	Population	Total Seats						
	QUETTA DIVISION								
1	Quetta (Urban)	999385	23						
2	Quetta (Rural)	1270088	29						
3	Pishin	736903	17						
4	Killa Abdullah	323793	7						
5	Chaman	434561	10						
	Sub Total		86						
6	Kalat	211201	5						
7	Mastung	265676	6						
8	Khuzdar	798896	18						
9	Awaran	121821	3						
10	Lasbella	576271	13						
11	Surab	200857	5						
	Sub Total		50						
	ZHOB DIVISION								
12	Zhob	310354	7						
13	Killa Saifullah	342932	8						
14	Sherani	152952	3						
	Sub Total		18						

		LORALAI DIVISION	
15	Loralai	244446	5
16	Musa Khail	167243	4
17	Barkhan	171025	4
18	Duki	152977	3
		Sub Total	16
		SIBI DIVISION	
19	Sibi	179751	4
20	Ziarat	160095	4
21	Kohlu	213933	5
22	Dera Bugti	313110	7
23	Harnai	97052	2
		Sub Total	22
		NASEERABAD DIVISION	
24	Naseerabad	487847	11
25	Jaffarabad	513972	12
26	Jhal Magsi	148900	3
27	Bolan	309932	7
28	Sohbatpur	200426	4
		Sub Total	37
		MEKRAN DIVISION	
29	Kech	907182	21
30	Gawadar	262253	6
31	Panjgur	315353	7
		Sub Total	34
		RAKHSHAN DIVISION	
32	Kharan	162766	4
33	Washuk	175712	4
34	Chagai	226517	5
35	Noshki	178947	4
		Sub Total	17
		Grand Total	280

3. Eligibility Criteria

A candidate seeking admission in Balochistan University of Engineering and Technology, Khuzdar, in any branch of Engineering, must fulfill the following minimum requirements:-

- i. He or she has passed the Higher Secondary School Certificate (HSC/HSSC)/A level Pre-Engineering Examination with Physics, Chemistry and Mathematics, securing at least 60% marks in aggregate of a University, a Board of Intermediate or Board of Intermediate and Secondary Education in Pakistan. In addition, a combination of Physics, Mathematics and Computer Studies/ Computer Science may be allowed for admissions in Computer Engineering Programs.
- ii. He or she has passed any other examination of a Foreign University/ Institution/ Examination Body, which, both standard as well as scope wise is equivalent to the Higher Secondary School Certificate (Pre-Engineering) of a University or a Board of Intermediate/ Intermediate and Secondary Education in Pakistan. Equivalence of the Examination passed by the candidate shall be determined by concerned university/IBCC/HEC.
- iii. He/She has qualified an entrance test conducted or arranged by the University or any other reputed body providing testing services as decided/advertised by university as part of admission for that specific year.
- iv. A candidate who has passed Diploma of Associate Engineer Examination, securing at least 60% aggregate marks, shall be eligible for admission against [02%] reserved seats in relevant discipline of Engineering in which he or she has passed the DAE examination as per PEC policy.
 - v. A candidate seeking admission should possess adequate mental and physical health.
- vi. Only the Local/ Domicile residents of Balochistan shall be eligible for admission against the seats reserved in the University as mentioned in section 1.1.1.(2)
 - vii. No candidate shall be denied admission on the ground of race, religion, colour or cast.
 - viii. The candidates who have done their HSSC in Computer Science Shall be given priority while allotting technologies in the Computer System Engineering Discipline in case of equal score.
- ix. A candidate shall render himself/ herself ineligible for admission in case he/ she is found in possession of two or more local/ Domicile certificates from different districts simultaneously or has submitted forged documents. His/ her admission can be cancelled at any time, if he/ she succeeds in getting admission stealthily/ fraudulently
- x. The announcement for admission under all categories of reserved seats shall be advertised through print and electronic media/ University website. No separate letters/ notices/ invitation shall be issued to the candidates for test and interview.
- xi. Competition in each district shall take place between candidates of the same district i.e a candidate of district "x" shall not compete with a candidate of district "y".
 - xii. Physical presence of the candidate along with original documents at the time of admission shall be compulsory.
- xiii. A candidate who does not get admission in Balochistan University of Engineering and Technology, Khuzdar after his/her selection in a particular year, shall be debarred from selection.
 - xiv. Incomplete or applications received after due date shall not be entertained.
- xv. The application must accompany six copies of passport size recent photographs and the following documents in duplicate duly attested by a magistrate or an officer of BPS-17 or above:-

- a) F.Sc/A level (Pre-Engineering)/Diploma of Associate Engineering (as applicable) along-with detailed marks certificate duly verified from respective Board.
- b) Matriculation certificate along-with detailed marks certificate.
- c) Local/ Domicile certificate from the District Magistrate.
- d) Character certificate from the Principal of the college last attended.
- e) Certificate of Health from District Health Officer.
- f) An affidavit on the Non-judicial stamp paper, duly attested by first class Magistrate, stating that the candidate is in possession of only one local/domicile certificate.
- g) National Identity Card of the candidate or his/her father in case he/she is below 18 years of age.

Note

In case a candidate is below 21 year of age, the Domicile certificate of his/her father, mother or legal guardian candidate's name duly mentioned, will be considered valid.

- xvi. The Selection Committee is authorized to ensure the validity of documents attached with the application form from the relevant authority and reject the application found with discrepancy.
- xvii. Selection of candidates for admission shall be made by the Selection Committee, strictly on merit. Marks used for establishing merit will be reckoned by following weightage/percentage:
 - a. Weightage of total marks of Matriculation 10
 - b. Weightage of total marks of FSc/A-Level 40
 - c. Weightage of total marks of Entry Test 50
- xviii. In case the calculated aggregate marks of two or more candidates are equal, the candidate securing higher marks in F.Sc/A level, Mathematics and physics shall rank higher on merit.
- xix. In case a candidate does not clear F.Sc/A level/DAE Examination within the minimum period required for passing the same, after Matriculation, then every additional year or part of year beyond this period shall be treated as that he/ she has not appeared in the Examination in that year and in such case 10 marks will be deducted from F.Sc/A level/DAE marks for each additional year.
 - xx. The candidates who have done their HSSC in Computer Science Shall be eligible for admission only in Computer System Engineering Discipline.
- xxi. A candidate once admitted in any other professional graduation course against the Government reserved seats shall not be eligible for admission in BUET Khuzdar
- xxii. The announcement for admission under all categories of reserved seats shall be advertised through print and electronic media/ University website. No separate letters/ notices/ invitation shall be issued to the candidates for test and interview.

3.1 Urban and Rural Areas

The seats reserved for Quetta district will be divided into Rural and Urban areas. The areas falling in the limits of Municipal Corporation and Cantonment Board will constitute urban area and rest of the district rural area.

3.2 Unclaimed District Seats

Unclaimed District merit seats (other than female quota), if any shall be given to the candidates of the same Zone on merit and if no eligible candidate is available in the Zone, then those seats shall be allocated to the candidates on Provincial Merit.

- 3.3 (i) Unclaimed District merit seats (other than female quota), if any shall be given to the candidates of the same Division on merit and if no eligible candidate is available in the Division, then those seats shall be allotted to the candidates on Provincial Merit.
 - (ii) Any other unclaimed seats shall be allotted by the recommendation of the Selection committee and approval by the competent authority.
- 3.4 Unclaimed Seats of Other Provinces, FATA, AJK, Northern areas Unclaimed seats of other provinces and FATA, AJK, Northern areas shall stand transferred on self-financing / Regular if not filled within one month of the commencement of the session by the recommendation of the admission cell committee and approval by the competent authority.

4 Selection Procedure

Selection of candidates for admission shall be made by the Selection Committee, strictly on merit. Marks used for establishing merit will be reckoned by following weightage:-

a)	Weightage of Total marks of Matriculation	10
b)	Weightage of Total marks of F.Sc/ D.A.E	40
c)	Weightage of total marks of Entry Test.	50

Example 1

Suppose a candidate has scored 500/850 marks in Matric, 700/1100 marks in F.Sc Examinations and 230/400 marks to the Entry Test, the merit will be calculated as under:-

- i. Weightage of Matric Marks (calculation @ 10
 Adjusted Marks secured in Matric = 500
 Total Matric Marks = 850
 Marks secured out of 10 weightage = (500/850) ×10=5.88
- ii. Weightage of F.Sc Marks (calculation @ of 40)
 Adjusted Marks secured in F.Sc: = 700

Total F.Sc Marks = 1100

Marks secured out of 40 = $(700/1100)\times40=25.45$

(iii) Weightage of Entry Test Marks (calculation @ 50)

Marks obtained in Entry Test = 230 Total Marks of Entry Test = 400

Marks out of 50 = $(230/400) \times 50 = 28.75$

Total Marks out of 100 (i.e calculated Marks) =i+ii+iii=5.88+25.45+28.75=60.08

Example 2

Suppose a candidates securing 500/850 marks in Metric, 2700/3300 marks in D.A.E Examination and 230/400 marks in entry test.

(i) Matric Marks calculation @ weightage of 10

Adjusted Marks secured in Metric = 500 Total Metric Marks = 850

Marks secured out of 10 weightage = $(500/850) \times 10=5.88$

(ii) D.A.E Marks calculation @ weightage of 40

Adjusted marks of D.A.E = 2700 Total Marks of D.A.E = 3300

Marks out of 40 = $(2700/3300) \times 40=32.72$

iii) Entry Test Marks calculation @ weightage of 50

Marks obtained in Entry Test = 230 Total Marks of Entry Test = 400

Marks out of 50 = $(230/400) \times 50 = 28.75$

Total Marks out of 100 (i.e calculated Marks) = i+ii+iii=5.88+32.72+28.75=67.35

4.1.1 The Order of Merit

The order of merit for selection shall be as under:-

- i. First priority shall be given to the HSSC/A level (Pre-Engineering) candidates with 60% score and above.
- ii. In case the calculated marks of two or more candidates are equal, the candidate securing higher marks in the Mathematics and physics shall rank higher on merit.

4.2 Committee for Selection of Candidates

There shall be two committee to make final selection of the candidates for all undergraduate admissions (Engineering, Sciences, Technology, any other). One shall be called Admission Cell Committee whose recommendations shall be forwarded to Selection Committee for final selection of candidates.

(a) Admission Cell Committee

Composition of Admission Cell Committee shall be as follows:

i.	Dean Faculty of Engineering, BUET Khuzdar	(Chairman)
ii.	Dean Faculty of Sciences, BUET Khuzdar	(Member)
iii.	The Registrar, BUET Khuzdar	(Member)
iv.	Director General QEC, BUET Khuzdar	(Member)
V.	Chairmen of All Academic Departments, BUET Khuzdar	(Members)
vi.	The Controller of Examinations, BUET Khuzdar	(Member)
vii.	Director IT, BUET Khuzdar	(Member)

viii. Director Administration, BUET Khuzdar (Member/Secretary)

The Committee shall be responsible for preparing the merit list, allotment of Roll Nos, arrangement of entry test, result compilation, allotment of technologies, and to deal with any other matters related with the selection of candidates.

(b) Selection Committee

The composition of selection committee shall be as follows:

i.	Vice Chancellor BUET, Khuzdar	(Chairman)
ii.	Pro-Vice Chancellor	(Member)
iii.	Deans of Faculties BUET, Khuzdar	(Members)
iv.	Registrar, BUET, Khuzdar.	(Member)
V.	Director General QEC, BUET, Khuzdar	(Member)
vi.	Director General ORIC, BUET Khuzdar	(Member)
vii.	Controller of Examinations, BUET, Khuzdar.	(Member)
viii.	Chairmen of all Academic Departments BUET, Khuzdar	(Members)
ix.	Director IT, BUET, Khuzdar	(Member)
х.	Treasurer, BUET, Khuzdar	(Member)
	Deputy Commissioner or his /her Nominee of concerned District	(Member) (in case of any dispute).
xi.	Director Administration of BUET, Khuzdar.	(Member/Secretary)

Committee may co-opt any other member wherever required with approval by the competent authority. The committee may call the candidates for interview for selection if required

Half of the members shall constitute quorum of the meeting of the Selection Committee The committee shall give the final approval of all undergraduate admissions.

4.2.1 Publication of Merit List

The result of Pre-Admission test shall be published in the University official website directing the successful candidates if they have any objection among themselves regarding local certificate or any forged document, may submit the same to the Registrar, BUETK within 07 days of publication of provisional merit list. The Registrar after compiling the observations (if any) shall call the complainants and those against whom complaints received to appear before the Selection Committee and plead their cases. The Committee after examining the complaints and hearing both the parties shall decide the matters on merit. In case no complaint is received then the committee shall check the result of Pre-Admission Test before submission to the Vice Chancellor for final approval.

5 Procedure for allotment of Disciplines:

Candidates shall give choices of Disciplines in order of preference. However, allotment of Discipline shall be made under following ladder of merit, keeping the preference of candidates in view:-

5.1.1 First Stage

At the first stage, discipline wise fixed 30 seats shall be allotted in order of merit in terms of calculated marks (i.e combined marks of Metric, F. Sc and Entry Test) against the fixed discipline of Engineering in which they have opted as their first choices.

The discipline wise distribution of fixed 30 seats shall be allotted as under: -

Civil	10 seats
Electrical	05 seats
Mechanical	05 seats
CSE	05 seats
Energy Systems	02 seats
Electronic	02 seat
Software Engineering	01 seat

5.1.2 Second Stage

At the second stage of merit, Diploma holders shall be allotted disciplines in order of merit in terms of calculated marks (i.e combined marks of Metric, DAE and entry test) against [02%] reserved seats in relevant discipline of Engineering in which they have passed the DAE examination as per PEC policy. The discipline wise distribution of these seats shall be as under: -

Civil 2% of total intake (100) = 02 seats Electrical 2% of total intake (100) = 02 seats Mechanical 2% of total intake (81) = 02 seat CSE 2% of total intake (80) = 02 seat Energy Systems 2% of total intake (42) = 01 seat Electronic 2% of total intake (42) = 01 seat Software Engineering 2% of total intake (40) = 01 seat

5.1.3 Third Stage

At the third stage, female candidates shall be allotted 25 reserved seats as per discipline wise quota.

- i. In first step the top-most female candidate of each division shall be allotted Discipline in order of merit based on her choices and availability of discipline.
- ii. In the next step, subsequent female candidates of each division shall be allotted the Discipline in order of merit with reference to available choices. In case these choices were the same then the candidate shall be allotted discipline by admission selection committee.
 - iii. Unclaimed Divisional merit seats, if any shall be given to the female candidates of the other Divisions in the order of merit.
 - iv. If no eligible female candidate is available, then those seats shall be allotted on Provincial Merit.

The discipline wise distribution of these reserved seats shall be as under: -

Civil 03
Electrical 03
Mechanical 03
CSE 03+*01
Energy 04
Electronic 04
Software 04

*01 seat reserved for Khuzdar District in CSE

5.1.4 Fourth Stage

At the fourth stage 2 seats of minority, 1 seat of sports, 1 seat of handicapped, and 1 seat for the son/daughter of in-service/retired engineer of Balochistan, shall be allotted technology on merit in terms of calculated marks. (i.e. combined marks of Matric, HSSC and entry test). The discipline wise distribution of these five reserved seats shall be as under:-

99

Civil	01
Electrical	01
Mechanical	01
CSE	01
Energy	01

5.1.5 Fifth Stage

At the fifth stage 9 Seats Reserved for Son/Daughter of Employees of BUETK, shall be allotted technology on merit in terms of calculated marks (i.e. combined marks of Matric, HSSC and entry test). The discipline wise distribution of these Nine reserved seats shall be as under: -

Civil	0.
Electrical	0.
Mechanical	0.
CSE	0
Electronic	0
Energy	0

5.1.6 Sixth Stage

- i. All candidates of each district shall be allotted disciplines in order of merit according to discipline wise quota as per table given below.
- ii. If no eligible candidate is available in any district's waiting list, then those seats shall be allotted among the same division's awaited eligible candidates.
- iii. If no eligible candidate is available the in rest of the division after (ii), then remaining seats shall be distributed on provincial merit by the recommendation of Selection Committee.
 - iv. Any unclaimed seats from stage 1-5 shall be added to stage-6 after approval by the selection committee

The method for fixed allocation of 280 seats of each district according to the factor formula on Census 2017 registered population of Balochistan published by Pakistan Bureau of Statistics is given below:

*Total Population of Balochistan (TPB) = 12,335,129 No of District seats= TPB/ District (n) Population *280 Where District (n) is the population of the district for which seats are allocated

S.No.	Name of	Population				Mandato	ory Seats for	each District			
	District	Census 2017	Total Seats	Civil	Electrical	Mechanical	CSE	Energy	Electronic	Software	Allotted
\vdash					OUE	<u> </u>					
1	Quetta (Ur-	999385	23	1	4	3	5	2	3	5	23
	ban)								! !		
2	Quetta (Ru- ral)	1270088	29	1	4	4	5	2	5	8	29
3	Pishin.	736903	17	1	3	3	4	1	2	3	17
4	Killa Abdul- lah.	323793	7	1	1	1	1	1	1	1	7
5	Chaman	434561	10	1	2	2	2	1	1	1	10
<u> </u>	Sub Tota	al	86	5	14	13	17	7	12	18	86
			1		KAL	AT DIVISION					<u>, </u>
6	Kalat	211201	5	1	1	1	1	1	<u> </u>	<u> </u>	5
7	Mastung	265676	6	1	1	1	1	1	1		6
8	Khuzdar	798896	18	1	3	3	4	2	2	3	18
9	Awaran	121821	3	1	1	1		<u> </u>	ļ		3
10	Lasbella	576271	13	1	3	3	3	1	1	1	13
11	Surab	200857	5	1	1	1	1	1	ļ		5
<u> </u>	Sub Tota	al	50	6	9	9	10	6	5	5	50
<u></u>	т	т	т	1	1	OB DIVISION				T	<u>, </u>
12	Zhob.	310354	7	1	1	1	1	1	1	1	7
13	Killa Saiful- lah	342932	8	1	2	1	1	1	1	1	8
14	Sherani	152952	3	1	1	1					3
	Sub Tota	al	18	3	4	3	2	2	2	2	18
	-		-	*	LORA	LAI DIVISION	[
15	Loralai.	244446	5	1	1	1	1	1	<u> </u>		5
16	Musa Khail.	167243	4	1	1	1	1				4
17	Barkhan	171025	4	1	1	1	1				4
18	Duki	152977	3	1	1	1					3
	Sub Tota	al	16	4	4	4	3	1	1	0	16

	SIBI DIVISION										
19	Sibi.	179751	4	1	1	1	1				4
20	Ziarat.	160095	4	1	1	1	1				4
21	Kohlu.	213933	5	1	1	1	1	1			5
22	Dera Bugti.	313110	7	1	1	1	1	1	1	1	7
23	Harnai	97052	2	1	1						2
	Sub Tota	ıl	22	5	5	4	4	2	1	1	22
					NASEER	ABAD DIVISI	ON				
24	Naseerabad	487847	11	1	2	2	3	1	1	1	11
25	Jaffarabad	513972	12	1	2	2	3	1	2	1	12
26	Jhal Magsi.	148900	3	1	1	1					3
27	Bolan	309932	7	1	1	1	1	1	1	1	7
28	Sohbatpur	200426	4	1	1	1	1				4
	Sub Tota	ıl	37	5	7	7	8	3	4	3	37
					MEKF	RAN DIVISION	J				
29	Kech	907182	21	1	3	3	5	2	2	5	21
30	Gawadar	262253	6	1	1	1	1	1	1	0	6
31	Panjgur	315353	7	1	1	1	1	1	1	1	7
	Sub Tota	ıl	34	3	5	5	7	4	4	6	34
					RAKHS	HAN DIVISIC	N				
32	Kharan	162766	4	1	1	1	1				4
33	Washuk	175712	4	1	1	1	1				4
34	Chagai.	226517	5	1	1	1	1	1			5
35	Noshki	178947	4	1	1	1	1				4
	Sub Tota	ıl	17	4	4	4	4	1	0	0	17
Gı	rand Total	12335129	280	35	52	49	54	26	27	38	280

5.1.7 Reporting after Selection

All candidates once selected for admission are required to secure admission by reporting by submitting the required fee alongwith submitting the proof of payment and completion of other codal formalities within one week after publication of list. If any candidate is failed to report within stipulated time then his/her admission shall stand cancelled and candidate from the waiting list shall be allotted technology as per admission policy

5.1.8 Change of Technology/Discipline

In any circumstances, the Selection Committee may change the technology of any candidate on his/her own request within 30 days of commencement of classes.

5.2 Final Approval:

The recommendations of the Selection Committee shall be submitted to the Vice Chancellor, BUET Khuzdar for approval.

- 5.2 No Provisional admission shall be granted.
- 5.4 Cancellation of Admission and Fee Refund policy:

The University may cancel admission of any student at any stage provided that:

- i. The student has submitted forged documents
- ii. The student disciplinary committee recommends so
- iii. The students himself requests so.
- iv. The fee refund policy as prescribed by HEC shall be applicable for 5.4(iii) only, including Refund of self-finance fee.

6 Provision of Affidavit:

Each candidate shall furnish an affidavit on non-judicial stamp paper worth Rs. 50/- or above attested by a judicial Magistrate that he / she shall be liable to be expelled from the University in case he/ she is involved in political activities or indulges in boycott, strike, protest or procession against any decision or function of the University.

Admission Policy 2021 for Sciences and Education Programs

1. Programs and number of Seats

Programs and number of seats allocated to each program are given below

Programs	BS (Computer Science)	BS Information Technology	BS (English)	B. Education	Total
No of Seats	50	50	50	50	200

Eligibility Criteria

- i. The minimum requirements for admission in BS program in Computer Science/ Information Technology, is Intermediate (HSSC) examination with Mathematics or equivalent qualification with Mathematics certified by IBCC or pre-medical as discipline with 50% aggregate marks as per HEC/NCEAC policy applicable.
- ii. Pre-medical students who wish to take admission in (i) need to pass two deficiency courses of mathematics within the period of one year of the regular studies.
 - iii. Minimum requirement for BS (English-Language and Literature) program is HSSC or equivalent with 45% marks as per HEC policy applicable.
 - iv. Minimum requirement for B.Ed is BA/BSc or equivalent with 45% marks or second division as per HEC policy.
- 3. Selection of Candidates for BS Programs
- i. Selection of candidates for BS admission shall be made by the Selection Committee, strictly on merit. Marks used for establishing merit will be reckoned by following weightage/percentage:
 - g. Weightage of total marks of Matriculation 10
 - h. Weightage of total marks of HSSC/ICS 40
 - i. Weightage of total marks of Entry Test 50
- ii. In case a candidate does not clear HSSC/ICS or equivalent Examination within the minimum period required for passing the same, after Matriculation, then every additional year or part of year beyond this period shall be treated as that he/ she has not appeared in the Examination in that year and in such case 10 marks will be deducted from HSSC marks for each additional year with the maximum deduction of total 30 marks.
- 4. Selection of Candidates for B.Ed Program
 - Selection of candidates for B.Ed admission shall be made by the Selection Committee, strictly on merit.
 - Marks used for establishing merit will be reckoned by following weightage/percentage:
- a. Weightage of total marks of Intermediate 10

- b. Weightage of total marks of Graduation 40
- c. Weightage of total marks of Entry Test 50

5. Publication of Merit List

The result of Pre-Admission test shall be published in the University official website directing the successful candidates if they have any objection among themselves regarding local certificate or any forged document, may submit the same to the Registrar, BUETK within 07 days of publication of provisional merit list.

The Registrar after compiling the observations (if any) shall call the complainants and those against whom complaints received to appear before the Selection Committee and plead their cases. The Committee after examining the complaints and hearing both the parties shall decide the matters on merit. In case no complaint is received then the committee shall check the result of Pre-Admission Test before submission to the Vice Chancellor for final approval.

- 6. Procedure for allotment of Seats
- i. Seats shall be allotted to candidates based on Open merit initially to the candidates of the Balochistan. Any unclaimed seats shall be allotted to the candidates of the other provinces also including Federal Capital territory, AJK, and GB by the Selection Committee of the University.
- ii. In case of a conflict, decision by the selection committee shall be final

7. Reporting after Selection

All candidates once selected for admission are required to secure admission by reporting by submitting the required fee alongwith submitting the proof of payment and after completion of other codal formalities within one week after publication of list. If any candidate is failed to report within stipulated time then his/her admission shall stand cancelled and candidate from the waiting list shall be allotted technology as per admission policy.

- 8. Change of Technology/Discipline
- In any circumstances, the Selection Committee may change the technology of BS program of any candidate on his/her own request within 30 days of commencement of classes.
- 9. Final Approval
 - The recommendations of the Selection Committee shall be submitted to the Vice Chancellor, BUET Khuzdar for approval.
- 10. No Provisional admission shall be granted.
- 11. Cancellation of Admission and Fee Refund policy. The University may cancel admission of any student at any stage provided that:
- i. The student has submitted forged documents
- ii. The student disciplinary committee recommends so
- iii. The students himself requests so.
- iv. The fee refund policy as prescribed by HEC shall be applicable for 5.4(iii) only, including Refund of self-finance fee.
- 12. 6 Provision of Affidavit:

Each candidate shall furnish an affidavit on non-judicial stamp paper worth Rs. 50/- or above attested by a judicial Magistrate that he / she shall be liable to be expelled from the University in case he/ she is involved in political activities or indulges in boycott, strike, protest or procession against any decision or function of the University

Admission Policy 2021 for Technology Programs

Programs and number of Seats

Programs and number of seats allocated to each program are given below

Program	BSc (Civil Engineering	BSc (Electrical Engineering	BSc(Mechanical	BSc(Computer	Total
	Technology)	Technology)	Engineering	Systems Engineering	
			Technology)	Technology)	
Main Campus Khuzdar	80	80	80	80	320
Uthal Sub Campus	80	80	80	80	320
Turbat Sub-Campus	80	80	80	80	320
Grand Total					960

2. Eligibility Criteria

HSSC (Pre Engineering) or equivalent from any recognized board with 50% marks. ICS candidates with 50% marks are only eligible for Computer Systems Engineering Technology only. OR

Diploma of Associate Engineer (DAE) in the relevant field securing 50% marks

- 3. Selection of Candidates for Technology Programs
 - Selection of candidates for BSc Technology admission shall be made by the Selection Committee, strictly on merit.

Marks used for establishing merit will be reckoned by following weightage/percentage:

- j. Weightage of total marks of Matriculation 10
- k. Weightage of total marks of HSSC/ICS/DAE 40
- I. Weightage of total marks of Entry Test 50
- 4. In case a candidate does not clear HSSC/ICS/DAE or equivalent Examination within the minimum period required for passing the same, after Matriculation, then every additional year or part of year beyond this period shall be treated as that he/ she has not appeared in the Examination in that year and in such case 10 marks will be deducted from HSSC/ICS/DAE marks for each additional year with the maximum deduction of total 30 marks.
- Publication of Merit List

The result of Pre-Admission test shall be published in the University official website directing the successful candidates if they have any objection among themselves regarding local certificate or any forged document, may submit the same to the Registrar, BUETK within 07 days of publication of provisional merit list.

The Registrar after compiling the observations (if any) shall call the complainants and those against whom

complaints received to appear before the Selection Committee and plead their cases. The Committee after examining the complaints and hearing both the parties shall decide the matters on merit. In case no complaint is received then the committee shall check the result of Pre-Admission Test before submission to the Vice Chancellor for final approval.

- 6. Procedure for allotment of Seats
- i. Seats shall be allotted to candidates based on Open merit at first to the candidates of the Balochistan. Any unclaimed seats shall be allotted to the other provinces also including Federal Capital territory, AJK, and GB by the Selection Committee of the University.
- ii. In case of a conflict, decision by the selection committee shall be final.

7. Reporting after Selection

All candidates once selected for admission are required to secure admission by reporting by submitting the required fee alongwith submitting the proof of payment and after completion of other codal formalities within one week after publication of list. If any candidate is failed to report within stipulated time then his/her admission shall stand cancelled and candidate from the waiting list shall be allotted technology as per admission policy.

- 8. Change of Technology/Discipline
- In any circumstances, the Selection Committee may change the technology of any candidate on his/her own request within 30 days of commencement of classes.
- 9. Final Approval

The recommendations of the Selection Committee shall be submitted to the Vice Chancellor, BUET Khuzdar for approval.

- 10. No Provisional admission shall be granted.
- 11. Cancellation of Admission and Fee Refund policy

The University may cancel admission of any student at any stage provided that:

- i. The student has submitted forged documents
- ii. The student disciplinary committee recommends so
- iii. The students himself requests so.
- iv. The fee refund policy as prescribed by HEC (Annex 3) shall be applicable for 5.4(iii) only, including Refund of self-finance fee.
- 6 Provision of Affidavit:
- vi. Each candidate shall furnish an affidavit on non-judicial stamp paper worth Rs. 50/- or above attested by a judicial Magistrate that he / she shall be liable to be expelled from the University. in case he/ she is involved in political activities or indulges in boycott, strike, protest or procession against any decision or function of the University.



Postgraduate Academic Regulations for Semester Systems



Kegulations regarding the scheme and courses of studies, manner and method of teaching for the degree of Bachelor of Engineering as provided under Section 46 of BUET act 1994. Following are

the guidelines, rules, procedures and Regulations to be administered by all the Faculties and Departments, running under Semester System. Each Faculty/Department in the beginning of an academic session shall arrange an "Orientation Day" to familiarize the admitted students with semester system and their degree requirements. A copy of printed semester rules shall be made available in the University Library for guidance of students.

The Regulations inscribed here are subject to amendment/change and repletion by the competent authority as and when required.

1. Title

These regulations may be called postgraduate degree regulations 2013, Balochistan University of Engineering & Technology Khuzdar.

Commencement

These regulations shall come into force with immediate effect.

Definitions:

In these statutes, unless a different intention appears from the subject or the context, the following expressions shall have the meanings hereby respectively assigned to them, that is to say,

- a) "Semester" means a period of teaching and examination of 20 weeks including all gazetted holidays.
- b) "University" means Balochistan University of Engineering and Technology, Khuzdar.
- c) "Vice Chancellor" Director Post Graduate" Dean", "Chairman", "Controller" means respectively the Vice Chancellor of the University, the Director Postgraduate Studies of the university, the Dean of faculty of Engineering, the Chairman of respective department and the Controller of Examination.
- d) "Board of Advanced Studies, Research and Technological Development" means Board of Advanced Studies, Research and Technological Development (hereinafter called, BOASRATD) of the university.
- e) "Academic Year" means the period of program covering two semesters.
- f) "Credit Course" means a course of study, the successful completion of which shall be a requirement of obtaining the postgraduate degree.
- g) "Credit Hours" means the rating allotted to each course during a semester. One lecture hour per week is equal to one credit hour. One lab work session of 2 hours per week is also equal to one credit hour. If a course is taught for four lectures and two lab work sessions of 2 hours per week shall be of six credit hours.
- h) "Cumulative Grade Point Average" means the grade point average of a student at the end of each semester after second semester considering the grades obtained in all the courses or at the end of the entire period of study.
- i) "Grade Point Average" means the average value of all grade points earned by a student in a semester. Grade Point Average (GPA) is an expression for the performance of the student in the course he has taken during a particular semester. This is calculated by adding the quality points of all the

1. Title

These regulations may be called postgraduate degree regulations 2013, Balochistan University of Engineering & Technology Khuzdar.

2. Commencement

These regulations shall come into force with immediate effect.

3. Definitions:

In these statutes, unless a different intention appears from the subject or the context, the following expressions shall have the meanings hereby respectively assigned to them, that is to say,

- a) "Semester" means a period of teaching and examination of 20 weeks including all gazetted holidays.
- "University" means Balochistan University of Engineering and Technology, Khuzdar.
- c) "Vice Chancellor""Director Post Graduate""Dean", "Chairman", "Controller" means respectively the Vice Chancellor of the University, the Director Postgraduate Studies of the university, the Dean of faculty of Engineering, the Chairman of respective department and the Controller of Examination.
- d) "Board of Advanced Studies, Research and Technological Development" means Board of Advanced Studies, Research and Technological Development (hereinafter called, BOASRATD) of the university.
- e) "Academic Year" means the period of program covering two semesters.
- f) "Credit Course" means a course of study, the successful completion of which shall be a requirement of obtaining the postgraduate degree.
- g) "Credit Hours" means the rating allotted to each course during a semester. One lecture hour per week is equal to one credit hour. One lab work session of 2 hours per week is also equal to one credit hour. If a course is taught for four lectures and two lab work sessions of 2 hours per week shall be of six credit hours.
- h) "Cumulative Grade Point Average" means the grade point average of a student at the end of each semester after second semester considering the grades obtained in all the courses or at the end of the entire period of study.
- i) "Grade Point Average" means the average value of all grade points earned by a student in a semester. Grade Point Average (GPA) is an expression for the performance of the student in the course he has taken during a particular semester. This is calculated by adding the quality points of all the

courses taken in a semester divided by the total number of credit hours.

- j) "Quality Points" means a product of grade point (GP) and credit hours (CH). For example if a student obtain a B grade in a course of 4 credit hours then his quality point (QP) will be calculated as follows OP=GP ×CH=3×4=12
- k) "Non-Credit Course" means a course of study, the successful completion of which shall not be a requirement for the Master of Engineering degree

Nature of the Degree

Successful completion of the Master's Program shall lead to the Master's Degree in Engineering/Science

5. Nature of Program and Number of Seats

Any teaching department of this University offering undergraduate program may also offer part or full time postgraduate program. With approval of Vice Chancellor, the Director Postgraduate Studies shall specify number of seats in any program and under each area of specialization, (wherever applicable).

AUTHORITY OF ADMISSION

- i. The admission to any postgraduate degree program shall be made by the university on the basis of merit.
- ii. Lists of selected candidates shall be displayed by the DPS and if needed subsequent lists would be displayed till the last seat is filled up.

(Explanation: The last list shall be displayed keeping in view that 75% attendance in lectures shall not suffer).

iii. The university may refuse admission to a candidate without assigning any reason.

TIME FOR ADMISSION

i. Candidates may be admitted at the beginning of each spring or fall semester. If a candidate fails to complete enrollment, his/her admission shall stand cancelled. However, nominees of HEC, foreign countries and other Government organizations, may be admitted before the mid-term examination.

- 8. Criteria and Procedure for admission
- i. 16 years of education or 4 years (minimum 130 credit hours) education after F.Sc / A levels.
- ii. International students must get their testimonial attested from foreign office of their respective country and get their testimonial translated in English (if they are not in English).
- iii. For admission, in engineering disciplines the candidate must possess Bachelors of Engineering degree or equivalent fields and for MS (Computer Science) candidate must possess BS (Computer Science) or MSC (Computer Science) or equivalent in the relevant field.
- iv. The terminal degree must be recognized by PEC/HEC/NCEAC/NTC (as applicable), with a minimum CGPA of 2.0 out of 4.00 (3.0 out of 5.0), B grade or 55% marks. Percentage will only be valid if CGPA is not mentioned on the transcript.
- v. Application for admission shall be made on the prescribed form, and sent to the admission office, either by hand or by registered post. Any application received after the closing date shall not be considered. Any applicant (other than overseas students) who fails to appear in the Admission Test shall stand disqualified for admission.
- vi. Admission shall be granted on the basis of merit. Merit list of successful candidates will be prepared in accordance with criteria as under:
 - a. Last Examination Result.
 - b. Admission test conducted by University or GRE/GAT score.
 - c. Interview of candidate
- vii. Names of all selected candidates shall be displayed on the university notice boards and university website.
- viii. Selected candidates shall be required to report to the office of director postgraduate studies for verification of their documents, payment of prescribed fees and complete the registration / enrolment documents within the prescribed date as notified.
- ix. The Vice-Chancellor may cancel admission of any candidate without any reason.
- x. The Government employees seeking admission at BUET Khuzdar must produce No Objection Certificate from their respective departments. The candidates belonging to other provinces must produce migration certificate.
- xi. The candidate must produce, at the time of the first enrollment, a certificate from the University Resident Medical Officer to the effect that he/she is free from any communicable (contagious) disease or mental or physical disability which is likely to stand in the way of his/her pursuing the chosen field of study.
- xii. A candidate for admission has no age limit as long as there is no physical or mental handicap.
- 9. ROUTING OF ACADEMIC MATTERS

All the academic matters shall be routed through proper channel i.e. through the Chairman of the Department, DPS, and PVC to the Vice Chancellor.

10. Enrollment

- i. An application for enrollment on the prescribed Course Registration Form accompanied by proof of fee payment (bank receipt) shall be presented to the office of the Director Postgraduate Studies on or before the day(s) notified for enrollment.
- ii. The Director Postgraduate Studies under special circumstances and on payment of prescribed late fee may permit a student to enroll within ten days after the commencement of the classes.
- iii. The Vice Chancellor may allow a student to enroll till the last day of the 4th week after the commencement of classes, with double late fee.
- iv. Enrollment in absentia is not allowed. Student is required to be present in person with a proof of identification (CNIC) for enrollment.
- v. Enrollment shall only be considered complete when Course Registration Form is submitted to the office of the Director Postgraduate Studies. Depositing of fee only will not serve the purpose.
- vi. A candidate admitted to a postgraduate degree program shall, so long as he/she has not submitted thesis, has to enroll for each semester (in case of course work plus research).

11. Medium of Instruction

Instructions in all classes and laboratories and all examinations written or oral shall be carried out in the English language. The international students have to produce the proof of fluency in English.

12. Scheme of Studies

12.1 General

- i. The subjects of study for the postgraduate degree programmes may be amended from time to time. A student shall present an acceptable research project thesis in addition to completing his/her approved course work in order to qualify for the award of the degree (wherever applicable).
- ii. Each Program shall be of thirty (30) credit hours of course work or 24 credit hours of course work and six (6) credit hours of research work.
- iii. There shall be two semesters in one calendar year, namely; Spring Semester and Fall Semester.
- iv. Wherever applicable and in order of merit of selection, each candidate shall have the option to enroll either in the part-time or full-time program.
- v. Minimum duration to complete the ME/MS degree program will be 1.5 years subject to

provision and availability of courses and programs offered by the university.

- vi. Students may, however, also be allowed by the director postgraduate studies to register for dissertation which shall be based on an analytical and/or experimental work. The dissertation shall be administered as follows:
- a. The dissertation shall be equivalent to six credit hours and shall be required to be completed within duration of 1-2 semesters.
- b. The requisite work for dissertation has to be carried out under the supervision of an approved supervisor.
- c. Details regarding Research Work for Dissertation are as described in section 19.

12.2 Duration of Course

i. Maximum time allowed to complete ME/MS degree program will be 4 years subject to provision and availability of courses and programs offered by the University.

12.3 Duration of semester

- i. There shall be 2 semesters (fall and spring) of 18 weeks each. The commencement of semesters shall be regulated by the Director Postgraduate Studies.
- (Explanation: out of 18 weeks, 16 weeks shall be actual teaching time. The rest may be utilized for enrollment, conduct of examinations and declaration of results, etc.)
- ii. In the M.E/MS program, courses up to maximum of twelve credit hours shall be allowed in each semester. However, the director postgraduate studies may allow one additional course to any such student who otherwise might require one more semester to complete 24 credit hours for completion of course works.

12.4 Registration in Semester / Courses of Study

- i. The students are required to registration themselves in at least one course offered as such for the Semester by concerned Department(s) and / or registration for Dissertation.
- ii. Registration in course(s) shall be open to the student who has been offered admission.
- iii. A student whose CGPA is less than 2.0, if desires, shall be allowed to register in new course(s) for earning credit.
- iv. Such student shall be on probation and must achieve at least 2.5 CGPA on completion of the semester.
- v. Failing to achieve at least 2.0 CGPA, she/he shall be allowed to register in course(s) only for the improvement of CGPA.

- vi. Any student may be allowed to take one course of three credit hours offered under any other area of specialization in the same Department or in any other Department of the University with the recommendation of chairman of the concerned department and with the approval of director postgraduate studies.
- vii. Registration of students in any course may be subjected to the maximum number of students in the class.
- viii. An offered course may be withdrawn if less than four (04) students have been registered in that specific course.
- ix. Any student may be allowed to change a course within two weeks after the date of the commencement of the classes by the permission of member of BOASAT/chairman concerned department and with the prior approval of director postgraduate studies.

12.5 Transfer of Credits / Exemption

Transfer of credit/ exemption of courses(s) may be granted by the concerned Chairman against courses(s) which the student has passed earlier provided that:

- Application must be submitted before the completion of first semester of studies.
- ii. Discontinuation of his/her studies has not exceeded two calendar years.
- iii. Such course(s) was (were) not counted towards any other degree.

12.6 Transfer of Credits

The BOASRATD may consider credits earned by a student at another HEC recognized institution, subject to a maximum of 50 per cent of the minimum credit requirements for the degree, on the recommendations of Equivalence Committee, constituted by VC provided that:

- i. The contents of the course(s) for which credit is claimed, are identical or similar to the course included in his/her planned course work.
- ii. The course for which credit is claimed should not have been used for any other degree.
- iii. Courses with less than B grade shall not be considered for transfer of credit hours.
- iv. Any credit course(s) completed during preceding four semesters from this University with at least B grade may be credited with transfer of grade(s) as follows;
- v. Course(s) listed under the current scheme of specialization
- vi. One course from any other specialization in line with clause 12.6(vi), if applicable.
- vii. Students shall submit their course work during first semester and Synopsis should be approved by the end of 3rd semester of their program of study.
- viii. A course studied to qualify a degree shall not be taken / considered for any other higher degree program.

- ix. Credit earned for a course shall lapse on the expiry of duration of the program. The BOASRATD may revalidate the lapsed courses for special reasons to be recorded.
- x. No course shall carry more than four (04) credit hours.

12.7 Exemption of Courses

Subject to equivalence, exemption may be granted:

- i. To a maximum of six credit hours equivalent courses passed in at least B grade from any other institution.
- ii. Any number of non-credit courses from any other institution Grades of exempted course(s) shall not be counted towards CGPA and the thirty credit hours requirement for the degree shall be reduced accordingly.

Note: Necessary notification towards grant of transfer of credits /exemption shall be issued in each case.

12.8 Cancellation of Admission

The admission of a student enrolled in any Program shall be cancelled under the following circumstances:

- If the student is involved in any breach of discipline as prescribed in Regulations.
- ii. If a student fails to register in any semester without being officially allowed withdrawal either from the Semester or from the Program.

12.9 Withdrawal from Semester

- i. A student may discontinue an enrolled semester before appearing in the final examination with the permission of the Vice Chancellor, obtained through the DPS on the recommendations of the Chairman/member BOASRATD on account of sickness duly certified by the University Medical Officer or due to circumstances beyond his/her control, subject to fulfillment of condition that the student has appeared the final examination of previous semester.
- ii. The facility of discontinuation can be availed only once during the whole degree program and that too for one semester only.
- iii. A candidate shall not ordinarily be allowed to discontinue studies during the first semester.
- iv. A student permitted to discontinue is required to resume his/her studies from the next semester on the recommendation of Chairman or member BOASRATD notified by the Director Postgraduate Studies.
- v. During the semester freeze, bonafide status of the student shall remain suspended. He/she will not be entitled to avail any privilege as that of a regular student.
- vi. The fees paid shall not be refunded. In any case withdrawal shall only be allowed after successful completion of first semester.

12.10 Withdrawal from Program

A student, who is unable to continue his/her studies because of unavoidable circumstances on his/her part and desires withdrawal from the program, should apply to the director postgraduate studies. If allowed, necessary notification shall be issued. In any case withdrawal shall only be allowed after successful completion of first semester.

12.11 Re-Admission in the Program

- i. A student who has officially withdrawn from the Program may be readmitted in the program provided that the period of absence together with period of study shall not exceed maximum permissible period.
- ii. If a student fails to enroll in any semester(s) without permission of the competent authority, he/she shall cease to be on the rolls of the university and in case he/she desires re-admission, he/she shall have to apply for the same.
- iii. The university may re-admit such a candidate subject to the payment of Rs. 20000/- in additional of semester admission fee as per semester gap fee.
- iv. The university may refuse the re-admission if the reasons presented are not convincing.

13. Grades:

Grades given to a student in each course shall be of two types:

Numerical Grades:

Assessment of performance on the basis of marks (out of 100) fixed for a course of any credit hours Unit, shall be termed Numerical Grade (NG).

(ii) Alphabetical Grades:

Equivalent of numerical grade in terms of alphabets shall be termed as Alphabetical Grade (AG). Each letter carries a value in terms of numerical points of Grade point (GP).

13.1 Grading System:

a) Grade points should be as follows:

A for 4, A- for 3.70, B+ for 3.30, B for 3.0, B- for 2.70, C for 2.30, D for 2.0, F for 0.0, I for incomplete.

Maximum Grade Point Average = 4.0.

Please Note: Each course title consists of theory and practical (if applicable), as given in the courses of studies.

b) Equivalence between letter grading and numerical grading shall be as follows:

Marks Range	Grade Point	Grad
85 and above	4.00	Α
80-84	3.70	A-
75-79	3.30	B+
70-74	3.0	В
65-69	2.70	B-
61-64	2.30	C
58-60	2.00	D
00-57	0.00	F
Incomplete		1

. CGPA of 2.5 out of 4.0 is required to qualify for the award of degree.

13.2 Grade Point Average:

The academic rating of a student shall be calculated on the basis of the Grade Point Average. The Grade Points obtained by a student in each course shall be multiplied by the number of credit hours specified for that course and then the Grade Point Average (GPA) shall be calculated.

13.3 Cumulative Grade Point Average:

- a) The Cumulative Grade Point Average (CGPA) shall be calculated at the end of the second semester and each of the subsequent semesters.
- b) A student will be given one additional chance to improve his/her CGPA by repeating a course or reappearing in the examination of a course he/she has obtained Grade C or lower, when the course is offered for examination.
- c) If a student fails to make up the deficiency in his/her Cumulative Grade Point Average in the number of chances permitted, he/she will cease to be on the rolls of the university.

14. Examination

- i. There shall be two examinations mid and final in each semester. In addition to these examinations, the teacher shall give home assignments and quizzes etc. to the students. The nature of these examinations will be left to the teacher who will be solely responsible for the conduct of examination as well as evaluation in his/her course. The grade/marks given in the course by the teacher shall be final.
- ii. Only those students, who have at least 75% attendance in theory and practical separately in each course, shall be eligible to appear in the final examination.

- iii. A teacher shall report to the DPS the names of students who are absent from the lectures/ practical continuously for seven days to enable DPS to struck off the names of such students. The struck off students may be readmitted under the university rules or refused admission if the reasons given for readmission are not convincing enough.
- iv. The final examination for a semester shall be held on a date, time and place to be notified by the controller of examinations.
- v. The mid-semester examination shall be held during 9th week of the semester which shall carry 30 per cent of the total allocated marks for the course. This examination shall be held by the teacher concerned who shall determine the form of the examination.
- vi. Final examination covering the full syllabus with at least 25% of the course of mid-semester as well shall be held at the end of each semester.
- vii. Question paper for the mid and final semester examinations shall be set by the respective teacher. However, DPS or Chairman / member BOASRATD shall ensure the quality and standard of the question paper set by the teacher.
- viii. To qualify a course, it is essential to pass separately in the theory and practical examinations.
- ix. The teacher shall send the final award list along with answer sheets of mid, final and practical for the course to the office of the Controller of Examinations within 10 days after the end of a semester.
- x. On receipt of the award list, the Controller of Examinations shall notify the results and send copy to the DPS.

15. Evaluation

- a) The evaluation of the students shall be done by following assessment methods for each course during each Semester. These shall be termed.
 - Quizzes/Surprise Tests/Assignment/Presentation,
 - ii. Mid-term test,
 - iii. Practical Examination/Lab.
 - iv. Semester Examination
- b) The nature of examinations shall be determined by the teacher concerned who will be responsible for the final evaluation. The grade given in the course by the teacher/examiner shall be final.

15.3 Quizzes/Surprise Tests/Assignment/Presentation:

a) At least two assignments and two surprise tests/quizzes shall be given in each course during a semester. The first assignment and first surprise test/quiz shall be given, collected and assessed within 3rd & 5th week and the Second assignment and second surprise test/quiz shall be given, collected and assessed within 12th and 14th week of the commencement of the semester.

15.4 Mid-Term test:

- a) There shall be a Mid-term Test in a course during a semester, which will be held during the 9th week after the commencement of the Semester.
- b) The duration of the Midterm Test shall not be more than one hours.
- c) The conduct (fixing of time, date and place) of Mid-term Test shall be the responsibility of the director postgraduate studies.

15.5 Practical Examination/Lab. Examination

The Practical/Lab. Examination may include:

- i. Journals, Reports-Evaluation.
- ii. Practical, Viva-Voce Examination.

15.6 Semester Examination:

- a) The Examination in all the courses shall be conducted by the Controller of Examinations.
- b) The Examination shall be open to a student who has been on the rolls of the University prior to his/her examination form is duly certified and forwarded by chairman of the Department.
- c) The duration of Examination in all the courses (irrespective of the number of credit hours) shall not be more than three hours.
- d) The Examination shall be held at the end of each semester. One week preparation leave shall be allowed to the students after the completion of 16 weeks teaching period and before the commencement of Semester Examination.
- e) The Examination schedule / Program shall be prepared by the Controller of examinations in consultation with the director postgraduate studies and approved by the Vice Chancellor.
- f) The examination schedule / program shall be notified by the Controller of examinations at least one week in advance of the commencement of the examination.
- g) After holding the final term examination each teacher shall prepare the result/awards on the prescribed award list. He/she shall retain one copy with him/her, shall send one copy to the Controller of Examinations along with scripts and question paper. The Controller of Examinations shall prepare the final result and submit it to Vice Chancellor for approval. After the approval, the result shall be notified by the Controller of Examinations and a copy of the same shall be sent to the director postgraduate studies. After deciding the appeals / written complaints/incomplete results, if any, the scripts of each test shall be kept in record by the Controller of Examinations along with the copy of final result notification.

- h) Results of each semester along with scripts shall be forwarded to Controller of Examinations, within the prescribed period as mentioned in Examinations Rules.
- i) The Controller of Examination shall be responsible for compilation/tabulation of the results and for submitting it to the /Vice Chancellor for approval before its announcement.
- j) The Controller of examination shall issue Marks / Grade certificate to each individual student appearing in the examination on the prescribed form and fees within two weeks from the date of declaration of the results on the request of the student.
- k) If the courses qualified by a candidate do not provide adequate back-ground for the degree course which he intends to take up, the deficiency* shall be met by taking one or more additional course(s) as may be prescribed/ determined by the concerned department

[Deficiency / Pre-requisite course(s) shall be mandatory to pass but it shall not be counted in calculating GPA/CGPA and shall not have any effect on the academic position of a student. However, in case of transfer of credit hours/migration from any other institution, deficiency course(s) shall be considered credit course(s).]

15.7 Distribution of Marks for each Course:

The distribution of marks (weightage of grade) in semester will be as follows:

- a) Surprise/Tests/Quizzes/assignments/any other evaluation method 20 marks
- b) Midterm Test 20 marks
- c) Semester Examination 60 marks

Total marks: 100

16. Class Attendance

The students shall be expected to attend the classes regularly and submit the home-assignment when due. A candidate with less than 75 percent attendance in any course shall not be allowed to take the final examination in that course.

A candidate with less than 75% attendance in a particular course shall not be allowed to take the Semester Examination of that course. For genuine reasons the director postgraduate studies may condone 5% shortage in attendance on the recommendations of the chairman of the Department. In exceptional cases the Vice Chancellor may further condone 5% shortage in attendance on the recommendations of the dean. Beyond this limit the academic council shall be the competent authority.

17. Absence from Examination

A student, who fails to appear in the scheduled final examination in any course after having been

allowed to take the examination for the same, shall be awarded grade .l. in that course(s). For change of grade, such student shall be allowed to take (makeup) examination in that course(s) during the next semester by the director postgraduate studies.

18. Change of Grade/ Improvement

Registration in a course for change of grade/improvement will be subject to the following conditions:

- i. A compulsory course which the student is required to repeat for obtaining a passing grade or a course selected by the student for improvement of his/her CGPA
- ii. Any other credit course in lieu of an optional course
- iii. Better grade(s), if any, will be considered for determining GPA / CGPA

19. Dissertation

Every student must be registered for dissertation after having completed 24 credit hour courses with at least 2.5 CGPA.

19.1 Research Assignment and Supervision

- i. A student will be assigned Supervisor(s) who possesses PhD Degree. However due to least number of PhD supervisors, master degree holder can be considered for nomination as supervisor. The Supervisor(s) shall be recommended by the BOASRATD. The approval of the supervisor shall be given by the Director Postgraduate Studies.
- ii. The Supervisor shall be responsible for;
- a. Initial definition/selection of the topic of the research and plan of the research assigned to the candidate.
- b. Guiding the candidate in development of the research proposal, overall monitoring and quidance, dissertation writing and other matters related to the program.
- c. Guiding the student is publishing his/her work in Journal/conference.
- iii. The research proposal for dissertation is to be evaluated by a Postgraduate Research Committee comprising of three senior faculty members including Chairman. This Committee is to be constituted by director postgraduate studies for evaluation of the proposal whenever submitted. Final approval shall be granted by the BOASRATD.
- iv. The Supervisor shall regularly monitor the progress of the candidate.
- v. The candidate shall be required to present his/her work at one seminar during the period of research.
- vi. The research work shall be carried out within the University. However, a student duly recommended by the DPS and Dean of the faculty concerned to conduct his/her complete/part of thesis research in other institution/laboratory, is allowed by the university, the helping teacher/scientist

may be taken as co-supervisor/special member on the supervisory committee of the student.

19.2 Thesis Examination

- i. Thesis must be submitted latest by the 60 days grace period after the closing date of the semester as otherwise candidate admitted to a degree program shall so long as he/she has not submitted thesis, has to enroll for each semester
- ii. A student shall be entitled to submit thesis for examination after he/she has qualified the approved courses work. He/she is required to submit thesis examination fee before the submission of semi-final thesis.
- iii. The thesis shall be prepared according to the guidelines approved by the BOASRATD and shall be submitted to the office of the Director postgraduate Studies.
- iv. The thesis duly certified by the supervisory committee that the contents and form of the thesis are satisfactory for submission shall be sent to the external examiner by the office of the Controller of Examinations for evaluation. A panel of three examiners per student shall be submitted to the Controller of Examinations office by the DPS on or before the submission of thesis.
- v. The thesis shall be evaluated by a Board of Examiners comprising members of the supervisory committee and one external examiner appointed by the Vice Chancellor from the panel of names recommended by DPS. At least three members of the Boards of Examiners of whom one must be an external examiner shall "for the purpose of evaluating the thesis," hold a viva voce examination and such other tests as they consider necessary. The external examiner shall be given reasonable time to go through the contents of the thesis critically. The viva voce examination shall be conducted at least one week after the receipt of thesis by the external examiner.
- vi. The thesis evaluation shall be conducted within six months from the date of dispatch of thesis from the Controller of Examinations to the quarter concerned failing which the student will be declared/assumed fail in the thesis examination and shall be notified by the office of the Controller of Examinations. However, the Vice Chancellor may allow extension for thesis evaluation up to one year in hardship cases.
- vii. The thesis evaluation should be completed within six months from the date of dispatch of thesis by the Controller of Examinations to the quarter concerned. The Controller of Examinations shall get the approval of the external examiner from the Vice Chancellor and thesis shall be dispatched to him/her accordingly. In case of regret from the first External Examiner nominee (s), second approval of External Examiner nominee (s) shall be sought within eight weeks from the Vice Chancellor by the Controller of Examinations. However, the Vice Chancellor may allow extension for thesis evaluation up to one year in hardship cases.
- viii. Supervisor after consultation with external examiner shall write to the Controller Examination for notifying the date, time and venue of thesis evaluation.
- ix. The supervisor shall send the award list of thesis examination after counter signature of the

DPS to the office of the Controller of Examinations after making sure that the student has incorporated the suggested improvements. The Controller of Examinations shall notify the result of the student after receiving three bound copies of thesis.

- x. Original Plagiarism report along with the certificate from supervisor and declaration by the student must be submitted while submitting the thesis to the Directorate of Postgraduate Studies. The Directorate of Postgraduate Studies shall notify the dates for the semi-final and final phases of thesis submission
- xi. The color of hard bound cover of M.E. program shall be Black.
- xii. In case of disagreement between the Supervisory Committee and the External Examiner regarding the acceptance of the thesis it shall be referred to another external examiner, with the due approval of the Competent Authority (the Vice Chancellor), whose decision shall be final.
- xiii. If a candidate fails in the thesis examination, he/she may enroll again and will submit a revised thesis within six months after the date of declaration of the result of the last thesis examination, on payment of the prescribed thesis examination fee. He/she can avail this chance only once.
- xiv. If the thesis, submitted by a candidate for final evaluation, is proved to be copied/plagiarized at the time of viva-voce examination, it will be liable to be rejected on the report of Board of Examiners and the Controller of Examinations will declare the candidate fail in thesis examination. The admission of such candidate shall be cancelled and he/she shall not be readmitted under any circumstances.
- xv. If the thesis of a candidate is proved to be plagiarized after its evaluation and declaration of result, previous result of the candidate will be cancelled and he/she will be declared as fail in thesis examination. Such a candidate shall not be readmitted under any circumstances.

19.3 Attendance and Monitoring

- i. Each candidate shall be expected to attend the University regularly and submit to the Supervisor .Quarterly Progress Reports (QPR). This report has to be submitted to DPS through the Supervisor.
- ii. Any student who is unable to perform satisfactory in dissertation as reflected in QPR may be allowed by Dean on the recommendations of supervisor and chairman to complete remaining credit hours by course work provided that the maximum time period shall remain as is given in Para 8.1 (iv & v)
- iii. Any candidate failing to attend the University regularly/ or not showing sufficient progress may not be allowed to continue enrolment in the program.
- iv. A candidate, who is temporarily unable to continue research because of unavoidable circumstances, should file an application to the Chairman of the concerned Department through the Supervisor for temporary suspension from the program. Such leave of absence shall not exceed twelve months.

- v. On return after availing the leave, director postgraduate studies on the recommendation of Supervisor may allow the student to continue.
- vi. The maximum duration for completion of Master Degree with dissertation may be extended for up to twelve months on recommendations of Supervisor.

19.4 Evaluation of Dissertation

- i. A candidate may be allowed by the director postgraduate studies to submit the dissertation only after:
 - a. Fulfilling all requirements as suggested by the BOASRATD.
 - b. Pursuing research work for at least six months.
 - c. Presenting the research work in a satisfactory manner;
 - d. Fulfilling all other regulatory requirements prescribed by the University.
- ii. A candidate shall submit an application after fulfilling conditions of Section 19.2, to the director postgraduate studies for the examination and shall submit four copies of the dissertation for evaluation
- iii. The candidate shall be examined orally and will be provided an opportunity to defend his/her dissertation.
- iv. The Vice Chancellor, on the recommendation of the BOASRATD, shall nominate an Examiner's Committee comprising of at least three examiners including the Supervisor. Examiner may be from outside the University
- v. The result of final dissertation shall be declared in the following manner:
 - a. Requirement fulfilled without any corrections
 - b. Requirement fulfilled with corrections
 - c. resubmit
- vi. The Examiner's Committee shall examine and grade the dissertation: .S. for satisfactory without any corrections or with corrections; otherwise .U. for unsatisfactory.
- vii. In case of result as 19.4(v)b, one of the member of the Examiner's Committee, as nominated by the Examiner's Committee, shall certify that the corrections are carried out as recommended by the Examiner's Committee.
- viii. In the case of a failure, the Examiners' Committee shall indicate in what respect the material of the dissertation should be modified and specify period for re-submission. Committee shall also decide whether to hold subsequent examination or not.
- ix. The Examiner's Committee shall submit the result of the entire examination immediately after the oral examination and submit the result on the prescribed form to the Controller of Examinations.

19.5 Submission of Dissertation



Undergraduate Academic Regulations for Semester Systems



Regulations regarding the scheme and courses of studies, manner and method of teaching for the degree of Bachelor of Engineering/Sciences as provided under Section 46 of BUET act 1994.

Following are the guidelines, rules, procedures and Regulations to be administered by all the Faculties and Departments, running under Semester System. Each Faculty/Department in the beginning of an academic session shall arrange an "Orientation Day" to familiarize the admitted students with semester system and their degree requirements. A copy of printed semester rules shall be made available in the University Library for guidance of students.

The Regulations inscribed here are subject to amendment/change and repletion by the competent authority as and when required.

1 Title

These Regulations may be called the Balochistan University of Engineering and Technology, Semester System Scheme of studies Manner & Method of teaching, of Bachelor Degree Regulations, 2021.

2 Applicability

These Regulations shall be applicable to all undergraduate programs of Engineering/Sciences of BUET Khuzdar.

- 3 Definitions
- a) "Academic Year" means the period of program covering two semesters.
- b) "Board of studies" means the Board of studies of the department concerned.
- c) "Board of Faculty" means the Board of Faculty of Engineering/Sciences Programs
- d) "Credit Course" means a course of study, the successful completion of which shall be a requirement of obtaining the relevant Bachelor Degree.
- e) "Credit Hour" A credit hour means teaching/earning a theory course for one hour each week throughout the semester. One credit hour in laboratory or practical work/project would require lab contact of three hours per week throughout the semester. The credit hours are denoted by two digits within brackets with a hyphen/plus in between. The first digit represents the theory part while the second (right side) digit represents the practical.
- f) "Cumulative Grade point Average" means the grade point average of a student at the end of each semester after second semester considering the grades obtained in all the courses or at the end of the entire period of study. For example in 130 credit hours course of study for the B.E/BS. degree if a student has obtained a total of 500 Quality points then his cumulative grade point average (CGPA) will be equal to 500/130=3.846.
- g) "Grade point average" means the average value of all grade points earned by a student in a semester. Grade point Average (GPA) is an expression for the performance of the student in the course he/she has taken during a particular semester. This is calculated by adding the quality points of all the courses taken in a semester divided by the total number of credit hours.
- h) "HEC" means Higher Education Commission of Pakistan
- i) "PEC" means Pakistan Engineering Council

- j) "NCEAC" means National Computing Education Accreditation Council
- k) "OBE" means Outcome Based Education
- l) "Quality points" means a product of grade point (GP) and credit hours (CH). For example if a student obtains a B grade in a course of 4 credit hours then his quality point (QP) will be calculated as follows QP=GP \times CH=3 \times 4=12
- m) "Non-Credit course" means a course of study, the successful completion of which shall not be a requirement for the Bachelor of Engineering degree.
- n) "Selection Committee" means admission Selection Committee of Balochistan University of Engineering and Technology Khuzdar, Constituted as per admission policy of BUETK.
- o) "Semester" means a period of teaching and examination of 20 weeks including all gazetted holidays.
- p) "University" means Balochistan University of Engineering and Technology Khuzdar.
- q) "Vice Chancellor" "Dean", "Registrar", "Director General QEC", "Chairman", "Controller" "Director Sports" means respectively the Vice Chancellor of the University, the Dean of the concerned faculty, the Registrar of the university, the Director General Quality Enhancement Cell, the Chairman of respective department, the Controller of Examinations and the Director Sports of the university.
- 4 General Scheme of Studies
- a) The courses of study leading to Bachelor Degree program are devoted to courses appropriate to the degree in relevant Disciplines.
- b) Practical/viva voce examinations shall be held along with the theory examinations by the University where practical work forms part of the curriculum.
- c) For programs following Outcome Based Education (OBE) System, relevant schemes of teaching, learning and assessment as described by PEC shall be followed with approval from relevant Departmental OBE Committee (DOBEC), Industrial Advisory Board (IAB), Board of Studies (BOS), Board of Faculty (BOF), and Academic Council
- 4.1 Duration of courses
- a. The courses of study leading to the degree of Bachelor of Engineering shall of four years comprise of 8 semesters. There shall be two regular semesters

(Fall and Spring) in an Academic year. The duration of each semester shall be 16-18 weeks (inclusive of 1-3 weeks of exams). The duration of preparation leave shall be decided by the Dean with the consultation of all the Chairmen and prior approval of Vice Chancellor.

- b. Semester breaks/vacations shall be allowed at the end of each semester. The duration of the semester breaks/vacations shall be decided by the Dean with the mutual consent of all the Chairmen and prior approval of Vice Chancellor.
- c. Provided that a student registered for Bachelor of Engineering degree program must successfully com-plete his/her course requirements in maximum period of 7 consecutive years otherwise his name will be removed from the rolls of the university.
- d. The semester starting with the commencement of the year shall be called the spring semester and the next semester shall be called the fall semester. In addition for a specific batch the semester shall be named as first , second, third and so on till the last semester of the bachelor of engineering degree pro-gram which shall be called the eighth (fall / spring) semester
- 4.2 Number of subjects and papers for examination:

The courses of study which a student shall be required to pass for earning the Bachelor Degree in Engineering /Sciences in various disciplines shall be as per HEC/PEC/NCEAC or any other relevant accreditation body guidelines.

- 5 Admissions:
- a) The number of seats available for admission in the 1st semester for each Academic year/session and oth-er requirements regarding eligibility of candidates for admission shall be such as announced by the Uni-versity through the University Admission Policy amended from time to time.
- b) Unless otherwise provided in Admission Policy, admission shall be made strictly on the basis of academ-ic record and pre-admission test to be conducted by the university/any recognized testing service.

5.1 Admission by Migration

Under extraordinary circumstances the Vice Chancellor, on the recommendation of the migration committee may allow migration of a student as per BUET Migration Rules amended from time to time.

5.2 Change of Technology/Discipline

No student shall be allowed to change the Technology/ Discipline once allotted by the Selection Committee as per admission policy. In circumstances the VC on the recommendations of Selection Committee may change the technology of any candidate on his own request provided that the merit of other candidates are not affected.

6 Courses of studies:

- a) The details of courses of studies with credit hours per semester for each Discipline of Engineering shall be such as may be prescribed by the university.
- b) The courses of studies and syllabi of various degree programs of the University shall be developed and recommended by the respective Board of Studies for approval of the Competent Authority. Such courses and syllabi shall become effective from the date of approval by the Academic Council or any other date as determined by the competent authority and notified by the Dean clearly mentioning the session from which it shall be effective.
- c) All the courses shall be in conformation to HEC's credit hour scheme.
- d) The students shall pursue the notified scheme of studies to be approved by the Competent Authority from time to time.
- e) No student shall take any course unless he/she has qualified/fulfilled the prerequisites for it as determined in the scheme of studies.
- f) The bachelor of engineering program in each discipline shall have a number of prescribed courses and each course shall be allocated a number of credit Hours as given in the curriculum of each discipline.
- g) The candidate is required to clear all semester courses for the Bachelor of engineering degree program and the maximum credit load allowed to be taken by a student in a semester shall be decided by the Chair-man concerned department.

6.1 Repeating of Courses:

A student shall be allowed to repeat in the following manner:

6.1.1 Repeating for Improvement:

A student shall be allowed to repeat a course for improvement of CGPA if

he/she does not attain the required CGPA at the end of Eighth semester to qualify for the award of Bachelor of Engineering degree or wishes to improve his/her CGPA whenever the course is offered.

- a) A student who obtains a 'D' grade in a course may avail the opportunity of repeating that course when-ever offered for improvement in a regular semester.
- b) A student may repeat a maximum of six courses to improve D grades during entire program of studies after 8th Semster.
- c) In case a student repeats a course, the new improved grade for CGPA calculation will be substituted for the old grade in the official records. In case the best amongst the improved and the previous grade shall be considered.
- d) Only one chance to repeat a course for the purpose of improvement for the entire degree program shall be allowed.
- e) Students have to register for the courses being repeated for improvement on the prescribed form (An-nex-IX) and paying the required fees within 10 days from the date of announcement of the result in their respective department. The Chairman shall send the details of students registered for improvement to Dean and a copy to Controller of Examination and Registrar for information.
- f) The result of repeated course(s) will be reflected in the transcript of respective semester(s) and in the subsequent semester(s) during which the course(s) was (were) improved. In case of such repetitions, the previous Grades in the courses concerned shall stand cancelled. Such course(s) shall be marked under asterisk (R) in the transcript to be issued by the University Controller of Examinations. Such students shall not be considered eligible for a position in the relevant examination.
- g) Student registered for improvement shall have to attend the regular classes of the registered subject(s) and fulfill all the requirements including attendance, submission of assignments/quizzes etc, mid se-mester examination and final examination.

6.1.2 Repeating of Failure courses

A student may repeat failure course(s) without attending the classes provided:

a) The student has studied this course in some previous semester by fulfilling all the conditions but couldn't appear in the final examination.

- b) The student had appeared in the final semester examination by fulfilling 75% attendance criterion and had failed OR
- c) The student had completed 75% attendance of that semester but was unable to appear in the final se-mester examination because of health reason / death of kin and had reported his inability to the chair-person of the department in writing before the commencement of the final semester examination.
- d) Student has to register for the course being repeated as per section 6.1.1 (e),
- e) Student shall have to appear for final semester examinations only as per schedule of the class with which repetition of the course is registered.
- f) Student will not be evaluated for mid-semester and sessional marks (surprise tests, quizzes, assignments, lab. work etc). Sessional marks obtained in first attempt for the course will be taken into account. However, Lab Examination shall be conducted in case of Failure in that
- g) Candidate who had appeared in surprise test, quiz, assignment and Mid-Semester Examinations but remained absent in Semester Examination shall be governed by 6.1.2 provided that he/she fulfills the 75% attendance condition...
- h) Permission for repeating a course will be given by the Dean on the recommendation of the Chairman concerned.
- 6.1.3 Repeating of failure courses of 8th Semester Repeating of course/s shall only be allowed whenever the courses are being offered in respective semesters as per section 6.1.1 and 6.1.2 except for the students of eighth semester.
- 6.1.3.1. There shall be a special examination to give an opportunity to the students of 8th semester
- to repeat the subject/s (of 7th and 8th Semester) within 30 days of announcement of result of 8th semester in the following manner.
- a) The student had appeared in the final semester examination of 7th and 8th semesters and had failed.
- b) The student had completed 75% attendance of 8th semester but was unable to appear in the fi-nal semester examination because of health

reason / death of kin or an act of God and had re-ported his inability to the chairperson of the department in writing before the commencement of the final semester examination.

- c) Student will not be evaluated for mid-semester and sessional marks (surprise tests, quizzes, assignments, lab. work etc). Sessional marks obtained in first attempt for the course will be taken into account. However, Lab Examination shall be conducted in case of Failure in that.
- d) Student has to register for the course being repeated as per section 6.1.1 (e)
- 6.2 Winter Sessions/Summer Session:

There shall be a Winter/Summer Session subject to the approval of Vice Chancellor to provide opportuni-ties to the students who could not pass subject(s) in any semester.

- a. During the winter/Summer break, departments may offer at least one intensive session of maximum 48 contact hours with courses of their choice.
- b. Students who fail in particular subject(s) can register for courses offered during Winter Session.
- c. The contact hours per week during the Winter Session will be doubled to ensure that the course is completely taught in a winter session with half of the duration as compared to a regular (Fall/ Spring) semester
- d. The students can register for up to two courses during Winter Session.
- e. A student, who has taken examination in the semester immediately prior to the said Winter Session and has failed certain courses according to departmental result sheet, can register for Win-ter/Summer Session on recommendation of the chairman countersigned by the Dean.
- f. A student shall have to achieve 75% attendance target, complete tasks for sessional marks, and ap-pear for mid and final semester examinations for each course registered for Winter/Summer Session.
- g. The Dean of the faculty in consultation with the Chairman of respective department may decide about the number of students to be registered for a particular course that is being offered for Win-ter/Summer Session.
- h. There shall be registration fee for Winter Session courses which shall be notified prior to the com-mencement of Winter/Summer Session.

- 7 Freezing a Semester and Re-admission:-
- a. A student may discontinue his studies by freezing a semester under the circumstances beyond his control supported by documentary evidences (e.g. illness duly certified by a Registered Medical Practitioner countersigned by the University Medical Officer) and to be determined by the Chair-man concerned.
- b. In each case the student shall submit a written application to the chairman concerned supported by documentary evidences specifying the duration of studies to be freeze. The case for freezing of the program shall be placed before the Vice Chancellor by the chairperson of the respective department through the Dean of the Faculty
- c. If discontinuation is sought prior to enrollment in the second or subsequent semester, the student shall have not to pay the dues.
- d. A student who seeks discontinuation shall have to enroll in the program offered by the department as per the courses of studying in vogue at that time.
- e. Discontinuation shall not be allowed for more than two times in whole degree program in any case.
- f. Being allowed a semester freeze by the Vice Chancellor, the student shall resume the program sub-ject to the commencement of the relevant semester. A student already registered shall not pay the registration / admission fee in order to resume the studies. However, the student has to complete the degree requirements within 7 years from the date of his/her first admission (including the peri-od of semester being frozen)
- g. No freezing in the first semester is allowed
- 8 Manner and Method of Teaching
- 8.1 Teaching:
- a. Ordinarily the teaching shall be through lectures, tutorials/assignments, periodic quizzes, tests/examinations discussions, seminars, demonstrations, practical work in laboratories, field work, project, and any other method of instruction approved by the University.
- b. The courses shall be assigned codes according to a scheme. The course code numbers once fixed shall not be changed even if the course has

been abolished.

- c. Teaching in each Department shall be conducted by the University teachers or such other persons as may be declared to be teachers by the authority.
- d. Teaching in each Department shall be organized through courses specified for each subject.
- e. English shall be the medium of instruction and examination would be English except in the sub-jects of Islamic Studies/Ethics and Pakistan Studies, where the candidates may have an option to select Urdu or English.

8.2 Course File

Each teacher shall maintain his/her course file comprising the following:-

- i. A copy of Syllabus.
- ii. A copy of Academic Calendar.
- iii. Lecture breakdown for entire semester.
- iv. List of subjects taught, teaching notes and sample of practical printouts.
- v. Schedule of tests, assignments and Quiz.
- vi. Breakdown of laboratory experiments pertaining to the course and record of successful con-duct.
- vii. Monthly attendance and proof that it was communicated to students.
- viii. Samples of best, worst and average Assignments and Tests along with the question papers, and proof that the results of tests, assignments and Quizzes were communicated to students.
- ix. Samples of quizzes.
- x. Listing of textbook and other reference books pertaining to the course.
- xi. Record of make-up classes for any un-scheduled holiday.
- xii. Details of office hours for tutoring etc.
- xiii. Recommendation and suggestions related to the course for the next session.
- xiv. Any other relevant guideliens as per PEC/HEC/NCEAC or any other relevant accreditation body amended from time to time

The course files thus compiled shall be approved by the Director QEC and a copy of the same shall be kept as record in the Chairman office of each Department.

123

- 9 Grades:
- Grades given to a student in each course shall be of two types:
- (i) Numerical Grades:

Assessment of performance on the basis of marks fixed for a course of any credit Hours Unit, shall be termed Numerical grade (NG).

- (ii) Alphabetical Grades:
- Equivalent of numerical grade in terms of alphabets shall be termed as Alphabetical Grade (AG). Each letter carries a value in terms of numerical points of Grade point (GP).
- 9.1 Grading System:
- a) Grade points should be as follows:

A+ for 4, A for 3.7, B+ for 3.3, B for 3, B- for 2.7 C+ for 2.3, C for 2, C- for 1.7, D for 1 and F for 0 or fail and I for incomplete.

Maximum Grade Point Average = 4.00 Please Note: Each course Title consists of theory and Practical, as given in the Courses of studies.

b) Equivalence between letter grading and numerical grading shall be as follows:

Grade	Marks (%)	G.P
А	85 and above	4.0
A-	80-84	3.7
B+	75-79	3.3
В	70-74	3.0
B-	65-69	2.70
C+	61-64	2.30
С	58-60	2.00
C-	55-58	1.7
D	50-54	1.0
F	<50	-
T	Incomplete	-
W	Withdrawal	-

c) Fraction of marks obtained in a course shall be rounded to the nearest mark, e.g. 60.3 shall be considered as 60 and 59.5 is to be considered as 60.

9.2 Grade Point Average:

The academic rating of a student shall be calculated on the basis of the Grade Point Average. The Grade Points obtained by a student in each course shall be multiplied by the number of credit hours specified for that course and then the Grade Point Average (GPA) shall be calculated. An example of the calculations of the GPA is given in Annexure I

- 9.3 Cumulative Grade Point Average:
- a) The Cumulative Grade Point Average (CGPA) shall be calculated at the end of the second semester and each of the subsequent semesters as explained in the Annexure-II.
- b) If a student fails to make up the deficiency in his/her Cumulative Grade Point Average in given the number of chances permitted, he/she will cease to be on the rolls of the university.
- 10 Evaluation
- a) The evaluation of the students shall be done by following assessment methods for each course during each Semester:
- i. Quiz, Surprise Test, Assignment, Presentation (Any other evaluation method as

per PEC/HEC guidelines)

- ii. Mid-Semester examination
- iii. Semester Examination and Practical /Lab Examination (Where applicable)
- 10.1 Quiz/Surprise Test/Assignment/Presentation:
- a) At least two Assignments and two surprise tests and random quizzes shall be given in each course during a semester. The first assignment and first surprise test shall be given, collected and assessed within 3rd & 5th week and the Second assignment and second surprise test shall be given, collected and assessed within 12th and 14th week of the commencement of the semester and the result finalized after inviting objections one week before the termination of the courses. The students

may be asked to give presentations/any other evaluation method as and when required by the teacher.

b) If student fails to submit an Assignment on the due date, on account of any genuine reason, the teach-er concerned may allow him/her to submit

the same within the next one week. Assignments shall not be accepted for evaluation after one week of the due date.

c) In case a student fails in a surprise test/quiz or is absent, the same shall not be re-conducted whatever may be the reason.

10.2 Mid-Semester/Term Examination:

- a) There shall be a Mid-Semester Examination in a course during a semester, which shall be held during the 9th week after the commencement of the Semester.
- b) The duration of the Mid-Semester Examination shall not be more than two hours.
- c) The conduct (fixing of time, date and place) of Mid-Semester Examination shall be the responsibility of the Chairman concerned department with the consultation of Dean.
- d) There shall be a special Mid-Semester examination to be conducted for a student in case of unavoidable circumstances as prescribed in section 10.4.1 (i-vi)
- i. The student shall be allowed by the Vice Chancellor on the recommendations of the concerned Departmental Examination Committee and endorsed by Dean to appear in special mid-semester examination to be scheduled latest by the 12th week of the semester.
- ii. Chairman concerned Department shall monitor the special examinations and ensure the stand-ards.
- e) The scripts of Mid-Semester Examination may be shown to the students after evaluation/marking. The award lists/marks sheets of the tests will be displayed on the Notice board of the Department immediate-ly after evaluation. A copy of the award lists of these tests will also be submitted by the teach-er/examiner to the Chairman of the department concerned.
- f) The final award list of Mid-Semester Examination along with the marks of Assignment, tests shall be forwarded by the teachers to the Chairman concerned within one week of the Mid-Semester Examina-tion. The Marks so communicated to the Chairman shall be final and no subsequent change shall be permitted.
- g) If any student is not satisfied with the evaluation of the Mid-Semester Examination, he/she may repre-sent to the chairman of the concerned Department within 7 days of the declaration of the result.

- h) The Chairman concerned shall place the grievance cases before the Departmental Examination Committee for recommendations. The decision of the Departmental Examination Committee after consulting the examiner concerned in the matter shall be final.
- i) Any changes in marks of a student as per the recommendations of Departmental Examination Commit-tee shall be communicated to the Dean and Controller of examination.
- Any representation after the expiry of 7 days shall not be entertained

10.3 Practical Examination/Lab. Examination

The Practical/Lab. Examination may include:

- i. Journals, Reports-Evaluation.
- ii. Practical, Viva-Voce Examination.

10.4 Final Semester Examination:

- a) The Examination in all the courses shall be conducted by the Controller of Examinations.
- b) The Examination shall be open to a student who has been on the rolls of the University provided that his/her examination form is duly certified and forwarded by the Chairman of the Department.
- c) The duration of Examination in all the courses (irrespective of the number of credit hours) shall not be more than three hours except engineering drawing, which shall be of maximum four hours.
- d) The Examination shall be held at the end of each semester. Preparation leave shall be allowed to the students after the completion of 16 weeks teaching period and before the commencement of Semester Examination as decided by the university.
- e) The Examination schedule / Program shall be prepared by the Controller of examinations in consulta-tion with the Chairman of the department concerned and approved by the Vice Chancellor on the recommendation of the Dean
- f) The Examination schedule / program shall be notified by the Controller of Examinations at least one week in advance of the commencement of the Examination.
- g) Examinations shall be conducted as per examinations regulations of the University amended from time to time

125

- h) After holding the examination and assessment by the concerned teacher, re-assessment of all final examination scripts shall be done by the concerned Department Examination Committee (DEC)
- i) Answer books shall be forwarded to Controller of Examinations, within the prescribed period as mentioned in Examinations Rules alongwith award lists as per PEC//HEC/NCEAC guidelines for the specific program.
- j) The Controller of Examination shall be responsible for compilation/tabulation of

the results and for submitting it to the /Vice Chancellor for approval before its announcement.

k) The Controller of Examination shall issue Marks / Grade certificate to each individual

student appearing in the examination on the prescribed form and fees after the

declaration of the results on the request of the student.

10.4.1 Special Semester Examination:

- i. Special semester examination shall only be conducted for a student having failed to appear in an exami-nation on medical grounds or the demise of parent, spouse, children and brother/sister or any other act of God or the student was officially allowed by university to proceed out of city to represent university in any event, or to appear in any competitive examination etc.
- ii. A student must have met the eligibility criteria to appear in the respective examination of a se-mester
- iii. The student shall have to produce the required document/s i.e. Medical certificate, death certificate of the kin referred to in section 10.4.1 (i) as above or any other relevant document asked by the chairman concerned.
- iv. A student shall have to submit an application of illness to the chairman concerned maximum within one week of termination of examination.
- v. In case of serious illness of the student, he/she must have been hospitalized in a recognized pri-vate or a public sector hospital.
- vi. A student shall have to apply to chairman concerned department to appear in a special examina-tion. The case shall be examined by the Departmental Examination Committee and recommen-dations of the committee shall be placed before the Vice Chancellor through Dean for approval.

vii. The date for the conduction of examination shall be decided by the Dean on the recommenda-tions of departmental evaluation committee maximum by the first week of forthcoming semes-ter.

10.5 Distribution of Marks for each Course (Except BS (English-Language and Literature):

The distribution of marks (weightage of grade) in semester will be as follows:

10.5.1 For courses where laboratory Practical is involved:

(a)	Surprise Tests/Quizzes/Any other method	5 %Marks
(b)	Assignment	5%Marks
(c)	Mid-Semester Test	20 %Marks
(d)	Practical/Lab. Examination	20 %Marks
(e)	Semester Examination	50 %Marks
	Total:	100 Marks

10.5.1.1 The distribution of marks for Practical/Viva-Voce shall be as :-

The distribution of marks for Lab work shall be as follows

i.	Semester Work	(10 Marks)
ii.	Lab Final Examination	(10 Marks)

10.5.2 For courses where laboratory Practical is not involved:

(a)	Surprise Tests/Quizzes	10 %Marks
(b)	Assignment	05%Marks
(c)	Mid-Semester Examination	20 %Marks
(d)	Mini Project/ Presentation	05%Marks
(e)	Final Semester Examination	60 %Marks
	Total:	100 Marks

10.5.3 For courses where Theory is not involved:

(a)	*Assignment Any other Method	20 %Marks
(b)	Mid-Semester (Viva)	20 %Marks
(c)	Practical Journal	10 %Marks

(d) **Final Semester Examination

Total: 50 %Marks

100 Marks

*Assignment for the course/s where only practical work is involved shall include usual assignment, indi-vidual/ group tasks and mini projects.

**Semester examination for the course/s where only practical work is involved shall include written as well oral examination decided by the concerned teacher, and individual/group project.

10.5.4 Final year Project Examination:

The distribution of marks for final year project shall be as:

*Attendance	*Project Thesis	*Presentation and Viva Voce
20%	30%	50%

^{*}The marks of the project thesis, presentation/ viva shall be marked on the prescribe format (Annex).

The final marks shall be marked on the basis of average marks given by Project **Review and Evaluation**

Committee of concerned department. For programs under OBE, FYDP assessment shall be as per approved mechanism/rubrics inline with PEC guidelines.

Project Review and Evaluation Committee (PREC) 10.5.4.1

There shall be departmental Project Review and Evaluation Committee (PREC) to guide and supervise the students in order to complete proper and healthy projects. The said committee shall comprise of at least four senior faculty members including project supervisor and Chairman concerned department. The chairman concerned department being the chairman of the committee and two other members amongst the senior faculty members to be nominated by Dean on the recommendations of Chairman concerned. The Vice Chancellor shall be the competent authority for final approval of Committee for a period of one year. In case the Chairman him/herself is the project supervisor; the co-supervisor shall act as supervisor for the committee meeting.

The responsibilities of the said committee shall be as under:

To invite final year undergraduate project proposals from faculty members on the 10th week of every fall semester (for the students of sixth semester).

Receipt, processing and display of proposals for Final Year Projects on the 12th week of every fall semester.

To finalize final year project groups and their respective supervisor maximum till the end of every fall semester (for the students of sixth semester).

Approval/ award of Final Year Project topics after successful defense by the project groups till second week of every spring semester (for the students of seventh semester).

Observe/ direct the progress of project groups through monthly presentations.

Review and check the submitted project manuscripts in accordance vi. with University require-ments.

Approval of Final Year Project copies after modifications if necessary. vii.

viii. Final approval of the project after project examination as per annex P1 and P2.

10.5.5 Distribution of Marks for each Course BS (English-Language and Literature) only

For all courses except Research Methodology

Total marks for each namer

Total marks for each paper:	100
Final-Semester Exam:	50
Mid-term Exam:	15
Final-term paper/ major writing assignment:	10
Presentation based on Final-term paper:	05

Presentation based on Final-term paper: Ouizzes:

Class assignments three in total (summarizing/paraphrasing a piece of critical/ creative writing): 05 each. Total: 15 Total: $15 \text{ Tot$

b. For the course of Research Methodology Only

Theory: 40 marks (for Final term paper)

Practice (in class and library): 60 marks, divided as

Learning and using cataloguing system in the library:	07
Learning and using various citation styles:	80
Devising at least ten thesis statements/research problems:	10
Devising research questions:	10

05

Mock synopsis/research proposal:	10
Mock research thesis/dissertation:	15

10.6 Condition of Passing the Course

- i. In order to pass a course a candidate besides obtaining 50% marks (aggregate) in the course (Sessional+Mid-Semester+Practical/Lab work+Final Semester) must obtain at least 50% marks in Final Semester and 50% marks in Lab work (where applicable).
- ii. For passing Final Year project/Final Year Design Project Student must obtain 50% marks (Where applicable)

11 Class attendance:

- a) At the end of each Semester the Teacher concerned shall send to the Dean, through the Chairman of Department concerned, a statement giving the total number of lectures delivered and practical con-ducted by him together with the total number of lectures and practical attended by each student in his charge.
- b) A candidate with less than 75% attendance in Class lectures and lab work of a particular subject will not be allowed to appear in that subject's final Semester Examination in a semester.
- i. For genuine reasons the Dean of the faculty of Engineering may condone 5% shortage in attend-ance on the recommendations of the Chairman of the Department.
- ii. In exceptional cases the Vice Chancellor may further condone 5% shortage in attendance on the recommendations of the Dean.
- iii. Beyond this limit the academic council shall be the competent authority to condone up to maxi-mum 5% in shortage of attendance
- iv. The cases for the condonation in shortage of attendance shall only be entertained if processed on the prescribe form (Annex) and recommended by the chairman concerned
- c) In the case of a sportsperson participating in games of Provincial, National or International level, as verified by the Director sports and recommended by Chairman concerned or to participate in any event officially allowed by university, the attendance in class lectures and lab. work will be calculated on the basis of total number of lectures delivered/practical conducted in a course minus the number of total lecture days actually spent

by the sportsperson in representing the university in sports or games.

d) In the case of persons who are selected by the government or the university for proceeding on good-will missions outside the City/Province/Country, the lectures delivered in the concerned classes during the period of absence of such persons not exceeding 15 days shall be deducted from the total number of lectures delivered to the class and the required percentage of attendance for purpose of examinations shall be based on the balance of lectures.

12 Promotion to Higher Class:

a) Candidate in a particular Semester shall be allowed to proceed to the next Semester provisionally on the following basis.

From Se-mester	To Se-mester	CGPA
1st	2nd	-
2nd	3rd	1.00
3rd	4th	1.10
4th	5th	1.20
5th	6th	1.40
6th	7th	1.60
7th	8th	1.80

- b) A student failed to maintain the required CGPA in second and subsequent semesters as prescribed above shall be put on first probation to next semester.
- c) If a student fails to raise the CGPA to the required or above as prescribe in 12 (a) shall be placed on 2nd probation for the next semester.
- d) If the student who was earlier on 2nd probation fails to raise CGPA to the required or above as prescribe in 12 (a) shall be placed on the last probation.
- e) If the student fails to raise CGPA to the required or above as prescribe in 12 (a) in the last pro-bation, he / she shall not be promoted to the next semester till the attainment of required CGPA for promotion to that particular semester.
- i. A student detained in a particular semester due to low CGPA shall be allowed to repeat the courses as per section 6.1 (6.1.1, 6.1.2 and 6.1.3)

whenever such course(s) shall be offered by the Faculty provided the contents of the study program remain unchanged.

- ii. In case a student wishes to register the failure course/s for improvement shall be governed by section 6.1.2. Only the detained students shall be allowed to improve the failure courses of particular semester in which they are detained.
- f) The student eligible to continue the study program and having failed in the course(s) shall repeat the course(s) as per section 6.2 (6.1.1, 6.1.2 and 6.1.3) whenever such course(s) shall be offered by the Faculty provided the contents of the study program remain unchanged.
- d) A student, who does not attain the required CGPA of 2.00 at the end of Eighth semester to qualify for the award of Bachelor of Engineering degree, may be allowed to repeat courses in which the Grade is D whenever the courses are offered. In case of such repetitions, the previous Grades in the courses concerned shall stand cancelled. Such course(s) shall be marked under asterisk (R) in the transcript to be issued by the University Controller of Examinations. Such students shall not be considered eligible for a position in the relevant examination.

13 Award of Bachelor of Engineering Degree

The minimum requirements for the award of Bachelor of Engineering Degree in all courses shall be as fol-lows.

- a) Must have passed all semester examinations as laid down in 4.1 (read with section 7)
- b) Must have obtained at least 2CGPA at the end of 8th semester.
- c) A Candidate who has fulfilled/ undergone/ completed all the requirements as specified in these Regulations and passed all the subjects of all semester Examinations from 1st to 8th shall be eli-gible for award of degree as given in 13 a, and b and cumulative grade shall be awarded on the basis of all the eight semesters which must be at least 2.00. Division also will be based on all 8 semesters on the following percentage;

First Division -60% or above

Second Division -50% or above

Provided that the students granted exemption in subject or subjects on migration from any other University during 7th and 8th semester examination shall not be awarded any Class/Division. Such students shall be awarded only

pass Class.

d) For program under OBE, all PEC requirements are required to be met with

minimum 50% Key Performance Index (KPI)

14 Interpretation:

In case a question of interpretation of any of these rules arises, the case shall be referred to the Exami-nation Discipline Committee. The recommendations of the Committee shall be placed before Vice Chancellor for final approval. If the affected party is not satisfied by the decision of the Committee, he/she will have the right to ap-peal to the Vice Chancellor who may either decide the matter at his discretion or, if he deems it neces-sary, may place the matter before the Academic Council. The decision of the Vice Chancel-lor/Academic Council shall be final.

15 Amendments/Alterations/Additions:

These Regulations can be amended/altered by the Academic Council and whenever the need be, new Regulations can also be added.

16 Positions in the Class:

Merit Positions (first three) shall be awarded to the students in each department by the controller of examination. The merit positions shall be based on the results of all the 8 semesters on the basis of highest CGPA, provided that the students have cleared all the subjects in the first attempt and not penalized by the student disciplinary committee. In case of same CGPA of two or more students the positions shall be based on the highest percentage and in case of same percentage on the basis of highest percentage in engineering subjects.

17 Academic Calendar

An Academic Year is divided into 2 Semesters namely, Spring and Fall semesters. New Students shall be admitted to the University only once in a year. The date and timings of start of classes shall be as per aca-demic calendar and amended as per requirement subject to approval of Vice Chancellor.



Establishment of Latest Facilites During COVID-19 Pandemic

Studio Lecture Capture refers to the process of creating a video resource in a recording studio rather than in front of a live class for the purpose of presenting course content to students.

COVID 19 has resulted in a paradigm shift in teaching, learning and assessment. Online teaching has emerged throughout the world including Pakistan.

In line with HEC and PEC guidelines, Balochistan University of Engineering and Technology has taken significant steps to deal with both on campus and off campus activities with safety guidelines related with the Pandemic.

In this regard, new state of the art recording studios have been built in campus.

These Studios have all the latest equipment with smart board and high-resolution cameras along with the software facility for not only delivering online lectures but also for recording lectures.

These studios will also be used for conducting conferences and seminars. Studio Lecture Capture refers to the process of creating a video resource in a recording studio rather than in front of a live class for the purpose of presenting course content to students.

Besides that, to deal with the COVID-19 scenario, disinfection tunnels have been installed in all departments of the University. It provides a strong evidence that student's health is the top priority of the University.

These tunnels are operated and maintained by the experts of the field. In addition to that, periodical inspection is done by the University to make sure that all safety measures are in place and prompt actions are taken wherever required.





Online Lectures Recording Studios

Studio Lecture Capture refers to the process of creating a video resource—in a recording studio rather than in front of a live class—for the purpose of presenting course content to students amet malesuada eget ante Sed auctor aliquet du

The growing popularity of online classes is excellent news for the modern students who can now study all sorts of interesting topics any time of the day from their computers or mobile devices.

It also increases the opportunities and accessibility for

independent instructors who aren't restricted to a specific classroom or office on campus, or a set schedule for lectures. Instead, they can record lectures or live lessons, or create video tutorials that students can tune into anytime and offer feedback as needed.

Facilities

Integer feugiat risus purus, vel cursus sem finibus sed. Nulla rhoncus erat non sem pulvinar maximus. In sed viverra urna euismod varius felis porttitor. Duis facilisis nisi id nisl dignissim, in cursus sem finibus. Nam viverra neque in Nullam consectetur. Integer feugiat risus purus vel cursus sem finibus.

Central Library

The University has a fully furnished central Library having more than 30,000 Technical Books, Research Journals, and Magazines. The university Library has also access to many reputed online Journal through HEC digital Library. In addition to central Library, each academic department has its own departmental Library as well.

Books are issued to the students for the whole semester on their enrolment as members of the Library. The Books are required to be returned to the Library at the end of the semester. In case of loss of a book the borrowing student is required to pay double of actual price (keeping in view current market conversion) as fine for losing the book and overhead charges.











Transportation

The University transport unit has four buses and three vans which ply regularly between the campus and selected points in the City for the students as well as for the employees of the University according to the schedule issued from time to time.



Student Hostels

Balochistan University of Engineering and Technology, Khuzdar is basically a residential institution. There are eight elegantly constructed hostels. Each hostel has a capacity of more than 160 students to meet the requirements of students.







Research Laboratories

Each engineering discipline of the University has its own computer laboratory consisting state of the art computers, inter & intra-net facilities. There is also one student access center opening from morning to evening to facilitate the student to use internet and computer



Sports Facilities

The students at BUET take part actively in sports activities. To provide sports facilities to the students, a gymnasium has been constructed for indoor games, whereas grounds for outdoor games like Football, Cricket, basketball are available in the University.



Health Center

A basic health unit is also available for students and employees where a qualified doctor, Medical technicians and nurses are busy to serve the humanities from morning to night. An ambulance is also there to shift serious patients to city Hospital or any other city of the country.



Cafeteria

In addition to a cafeteria, two small size canteens are also available in the University premises, which cater to the needs of students and staff.



Auditorium

Balochistan UET, Khuzdar Established an Audtorium to facilitiate students for the all kind of activiteies.



Access Center

A new access center has been constructed to provide 24 hours internet facility to students for their projects and research work.



Students Life at University

University Life is committed to student growth and provides services and opportunities to help students succeed. It is dedicated to fostering a student community that supports integrity, safety, well-being, and behavior that is consistent with University policy. We at Balochistan University of Engineering and Technology believe in creating an environment which not only provides top quality technical education

but also contributes by producing graduates who have the vision to serve the nation in the best possible way. Highly qualified faculty of the University make sure that updated knowledge and skills are transferred to the youth. Research facilities are provided to generate new and innovative ideas and research for the betterment of humanity. Student internship programs provide students an

opportunity to have a strong bonding with the industry. To facilitate students with their financial issues, maximum scholarships are offered to the Students. Sports facilities at the University are there to groom the students in excelling in sports. Co-curricular activities, debates, quizzes, festivals are frequently organized for maximizing learning opportunities for students. Postgraduate programs



provide a continuous learning opportunity for students after completion of their undergraduate studies. Social activities are also organized by the University to make sure that students contribute to the development of the society. Study tours are arranged for the students for exposure. In general, University provides an ambience where individual's character building is done encapsulating all cognitive, affective and psychomotor domains of learning. We envisage our graduates to excel in their careers and alumni platform provides a long-lasting relation with the University.

Excellence in Education

At Balochistan University of Engineering and Technology Khuzdar, we believe in excellence of education. Excellence can not be achieved without having skilled professions.

The University has highly qualified faculty members having obtaine their degree from nationally and internationally reputued world top class universities.

Their training program are organized on regular basis so that they get all the expertise required to impart quality education. Laboratories play a vital role in engineering and science education.

All academic departments of the University are equipped with laborartories havig workstations and equipments as per requirement of the accrediations councils. Excellence in education is not possible withdout indulging into research activities.

University has a strong research culture where students of both undergraduate and postgraduate studies are cencouraged to take capstone projects during their studies.

Relevant funding and equipment to conduct top quality research





is provided on priority basis. University has it own Journal which is HEC recognized in Category Y which speaks itself of its quality.

The Vice Chancellor of the University has the vision of developing a culture in the University which maximizes excellence in education.

Why Choose Us?

We are one of the first engineering universities in the province with over 3,516 graduates serving in different organizations all over the globe.

Balochistan University of Engineering and Technology Khuzdar is a well-known public sector university providing a technical base and research platform to youngsters and contributing its due share in socio-economic uplift of Pakistan in general, and Balochistan in particular.

3516
Graduated Studednts

168
FACULTY TEACHERS

13
Acomodation Hostels for Students

We're Making Differents

Balochistan UET Khuzdar has a vision to enable youth of Pakistan and especially Balochistan to obtain higher education and excel in all fields of life not only nationally but globally. To achieve this goal, immaculate planning has been done. In the last three years, University has gained exponential growth.

New programs of Electronic Engineering, Energy Systems Engineering, Software Engineering, Information Technology, English Language and Literature have been started. As technologically skilled persons demand is going to rise because of continuous progress of the Country in industrial sector and also China Pakistan Economic Corridor (CPEC) envisaged to



make its substantial impact, new technology programs of Electrical Engineering Technology, Civil Engineering Technology, Mechanical Engineering Technology, and Computer Systems Engineering Technology have been started. BUET Khuzdar keeping in view the importance of higher education has established sub-campuses at Uthal and Turbat. These subcampuses will serve as hubs of higher education making it approachable to the far-flung areas of Balochistan. We are making difference as we take initiatives and leadership in higher education. Besides that, we are also focusing at emerging technologies like Artificial Intelligence, Internet of Things,



Ipsum consectetur adipiscing elit duis risus ligula rutrum quis tincidunt sit amet malesuada eget ante. Sed auctor ali pin volutpat ante sit amet felis tristique vistibu quise quam. Bivamus mollis justo sit amet ultricies.



research in engineering, sciences and others including in fourth industrial revolution. In skilled development, we have started programs with NAVTTC and also with Punjab Information Technology board to enrich our students and people of the region with Entrepreneurial attitude. It will make them financially independent thus contributing towards United Nations Vision 2030 and its Sustainable Development Goals (SDGs). We are member of Association of Commonwealth Universities United Kindgom which provides opportunities of mutual co-operation in terms of education, research, seminars, conferences and exposure to the developed nations of the world.

We are making difference as we believe in quality education, research, innovation leading to socio economic development of the country and beyond.



Financial aid for Students

BUETK Khuzdar provides various opportunities to the students of both undergraduate and postgraduate level in terms of financial assisting with the help of HEC, federal and provincial Governments, NGOs and through industrial linkagess.



BALOCHISTAN SCHOLARSHIP DIRECTORATE

Government of Balochistan pays every student enrolled in BUET Khuzdar under Balochistan Scholarship Directorate program. It aims to provide quality education opportunities and to groom highly talented young students of Balochistan.



HEC NEEDS BASED SCHOLARSHIP

Higher Education Commission facilitates the needy and deserving students through Need Based Scholarships. The Needs Based Scholarship program covers funds for expenses including Tuition Fee, Lodging, Transportation and Other Academics Costs.



OGDCL NEED BASESD SCHOLARSHIPS

HEC in partnership with Oil & Gas Development Company limited (OGDCL) offers scholarships for destitute students to support financially deserving students. The goal of program is to support financially students, widen access to quality education.



EHSAAS UNDERGRADUATE SCHOLARSHIP

Ehsaas Scholarship project is a paradigm shift in a policy of the Government of Pakistan to support undergraduate level students who after completing FA/FSc./Intermediate are unable to pursue university education due to limited financial resources. Unlike past financial assistance schemes that were aimed at MS or PhD programs, the Ehsas Undergraduate Scholarship Project focuses on the most critical segment, namely the 4-5 year undergraduate programs, which contributes the most to income of the individual who completes the bachelors degree.

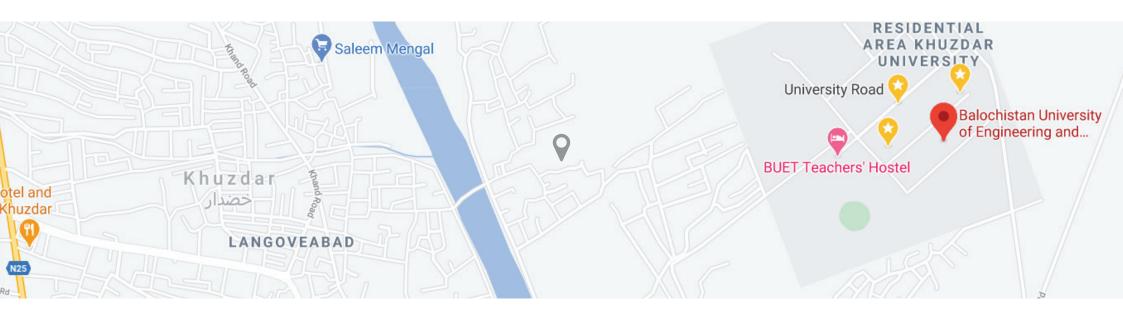


Balochistan UET Khuzdar has become 24th University of Pakistan to become member of Association of Commonwealth Universities, UK after fulfilling all their requirements. This initiative taken by the Worthy Vice Chancellor shall provide a great opportunity for the students, and faculty regarding international collaborations in teaching, research, potential for internships, Scholarships, webinars etc and an exposure of the University globally. We shall be actively participating in international events organised by ACU, UK



BUET Khuzdar students actively participates in funding opportunities provided by Ignite. Each year many project wins grants on merit based on innovative ideas linked to fourth industrial revolution and beyond





Get in Touch!

Balochistan UET, Khuzdar Airport Road

Po Box 98100

Phone: +(92) 848 550 271

Fax:+(92) 848 41 2834

Email: info@buetk.edu.pk

Fb: Facebook/buetkofficial

Tw:Twitter/buetkofficial

In: Linkedin/@buetk

WWW.BUETK.EDU.PK