

PROSPECTUS -2025-26 BACHELOR OF ENGINEERING TECHNOLOGY

&

BS PROGRAMMES

(Approved by Higher Education Commission)

In

Civil, Electrical, Electronics, Mechanical and Robotics

& AI

Engineering Technologies

&

Bachelor of Science (BS) IN COMPUTER SCIENCE Bachelor of Science (BS) IN ARTIFICIAL INTELEGENCE

Bachelor of Science (BS) in English Bachelor of Science (BS) in Physics

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1. Message from the Vice Chancellor

The establishment of the Benazir Bhutto Shaheed University of Technology (BBSUTSD) Khairpur Mirs is one of the greatest achievements of Govt. of Sindh. Technology and Skill education is the only weapon that can alleviate poverty in the province. Particularly the youngsters of Sindh province will be adorned with Technology, and hands-on practice education will enable them to earn members of the society. Keeping in consideration of the importance of Skill education, the University has continued 3 Year Diploma of Associate Engineer (DAE) in different technologies, 01 Year diploma and a series of certificate programmes.

It is indeed a great pleasure for me that the Skill Development Centre (SDC), the Benazir Bhutto Shaheed University of Technology and Skill Development, Khairpur Mirs is announcing admissions in 1st Year Diploma of Associate Engineer (DAE) in different disciplines (7th Batch) and also one-year Diploma and certificate courses in various Skill Development programs for Academic Session 2023 -24. Further, my message to the parents is to enrol their children both boys and girls in



various technical and skill programmes of this University, which are being offered. I assure that the enrolled students will acquire quality skill and technical education that contribute to change their life styles in future. The University believes in quality skilled and technical education with hands-on practice.

As the Vice Chancellor of the University, it is my preliminary responsibility to provide a congenial educational environment to our students and ensure to equip the existing labs with state-of-the-art equipment. This will provide practical exposure and hands-on practice to the students of technical and vocational education to acquire modern practical knowledge as per the requirements of National and International Labour Markets.

I am thankful to the Secretary Universities & Boards, Govt. of Sindh whose constant support will enable us to prove a world class Technical University in Sindh, Pakistan and worldwide.

PROF. DR. RASOOL BUX MAHAR Vice Chancellor

The Benazir Bhutto Shaheed University of Technology and Skill Development, Khairpur Mirs, Sindh

2. Message from the Dean Faculty of Engineering Technology and BS Programmes

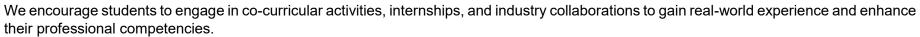
Dear students, faculty members, and esteemed visitors,

Welcome to the Faculty of Technology The Benazir Bhutto Shaheed University of Technology and Skill Development, Khairpur Mirs, Sindh.

As the Dean of the faculty, it is my utmost pleasure to extend a warm welcome to all of you. We provide a comprehensive and exceptional educational experience in the field of technology. Our faculty comprises a team of distinguished professors, experienced researchers, and dedicated support staff who are committed to nurturing talent, fostering innovation, and promoting excellence in teaching and research.

We provide state-of-the-art facilities, well-equipped labs, and access to the latest technological resources to facilitate hands-on learning and practical application of theoretical concepts.

Additionally, we emphasize a student-justified approach, focusing on individual growth, personal development, and holistic education.



As Dean, I am here to support and guide you throughout your academic journey. My aim is to create an inclusive and vibrant learning environment that encourages intellectual curiosity, critical thinking, and lifelong learning. I encourage you to take full advantage of the opportunities available at our faculty, participate actively in academic and research endeavors, and embrace the challenges that lie ahead. I invite you to explore our website to learn more about our programs, faculty members, research initiatives, and student achievements. Whether you are a prospective student, a current student, a faculty member, or an industry partner, we are here to provide you with the knowledge, skills, and resources necessary for success in the dynamic field of technology.

Once again, I extend my warmest welcome to you all. Together, let us embark on a transformative educational journey that will shape the future of technology and empower us to make a positive impact in the world.

Prof. Dr. Manthar Ali Keerio
Dean Faculty of Engineering Technology
The Benazir Bhutto Shaheed University of Technology
and Skill Development, Khairpur Mirs, Sindh



3. VISION

"To lead global technological education and embed the market-driven employable and entrepreneurial skills to empower community".

4. MISSION

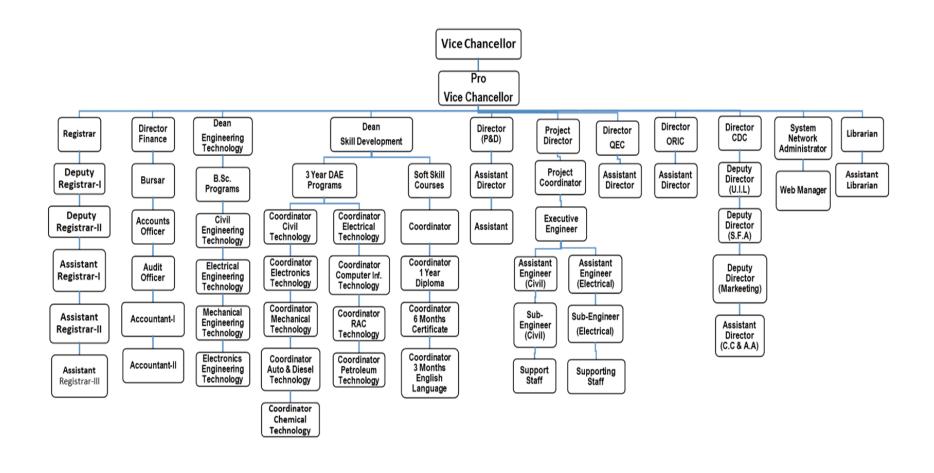
The mission of BBSUTSD Khairpur Mirs is to empower community with the hands-on technological knowledge through high quality teaching & research environment, innovative tools & techniques, and entrepreneurial & global leadership skills with the consciousness of ethical norms & values.

5. AIM & OBJECTIVES

The main aim of the University is to produce high quality technology graduates equipped with practical hands-on experience needed to serve the community. The specific objectives of the University are:

- To produce the skilled personnel to eradicate poverty and uplift the morale of the community
- To provide technical knowledge to the graduates with the state of the art practical skills required for market commercialization
- To equip graduates with technical entrepreneurial skills
- To produce workforce with global market employability
- To embed latest market-driven skills needed to uplift the society
- To produce skilled workers conscious of ethical norms & cultural values

6. ORGANOGRAM



7. ACADEMIC CALENDAR -2025-26

ACADEMIC AND EXAMINATION SCHEDULE FOR BATCH SEMESTER SYSTEM							
Duration of a Semester							
Teaching (Including Mid	16 weeks		Two Semester Duration			No of Weeks	
Semester Exam.)		21	X	2	=	42 Weeks	
Final Exam Preparation	02 week	Summer Vacation or Summer Course**		urse**	08 Weeks		
Final Exam Conduct. 03 weeks		Winter Vacation*				02 Weeks	
Total: 21 weeks Total:			52 weeks				

Minimum attendance requirement to appear in examination is 75%

Minimum number of lectures during the semester in a theory of 3CH shall be 42.

Minimum number of lectures during the semester in a Practical of 1CH shall be 42.

Tentative Academic Calender for the year 2025-2026 under Semester System								
	21-Batch	tch 22-Batch		23-Batch		24-Batch		
Batch & Semester	Semester	Semester		Semester		Semester		
	8th	6th	7th	4th	5th	2nd	3rd	
Date of Start of Classes	28-07-2025	28-07-2025	05-01-2026	28-07-2025	05-01-2026	19-05-2025	05-01-2026	
Conduct of Mid -Semester Examinations	ustrial Training	15-09-2025	23-02-2026	15-09-2025	23-02-2026	15-09-2025	23-02-2026	
Date of Suspension of Classes	dustr I Trai	17-11-2025	27-04-2026	17-11-2025	27-04-2026	17-11-2025	27-04-2026	
Display of Sessional Marks	Indi	20-11-2025	02-05-2026	20-11-2025	02-05-2026	20-11-2025	02-05-2026	
Conduct of Final Semester Examination	01-12-2025	01-12-2025	11-05-2026	01-12-2025	11-05-2026	01-12-2025	11-05-2026	
Announcement of Result (Expected)	17-01-2026	17-01-2026	02-07-2026	17-01-2026	02-07-2026	17-01-2026	02-07-2026	

^{*} Winter Vacations will start from 22/12/2025 to 04/01/2026

^{**} Summer Vacations will strat from 1st June 2026 to 26th July 2026

8. University at Glance

A. Brief History

After the creation of Pakistan there were only few Technical Institutes in the country. Keeping in view the importance of technical education, the Government of Pakistan constituted a Council of Technical Education. In June 1948 a committee of Technical Experts was formulated by that council to carry out a survey of all Technical Institutes, review Industrial Development Programmes, access requirements of technical manpower & consult the industrialists and report to the provincial & central Governments for developing more such technical programmes. The Committee recommended the scheme of polytechnics and the same was approved by the Council in September 1950.

Initially, this was a Technical Institute named as "Sir Ali Murad Technical Institute" which was later up-graded to the level of a Polytechnic Institute by the Government of West Pakistan in the year 1962. Later, it had been further up-graded as "Government College of Technology, Khairpur" in 1974 to offer the B. Tech. Degree Programmes.

The Government College of Technology was upgraded to The Benazir Bhutto Shaheed University of Technology and Skill Development in 2016. The University is offering Four year Bachelors of Engineering Technology, Bachelor of Science and three-year Diploma of Associate Engineering in different Technologies.

B. INTRODUCTION

The significance of education in technology has increased manifold for boosting of economy of a country after the industrial and computer revolutions. Economic growth through increase in agriculture & Industrial production and service sector is based on educated & skilled human resource. The skilled manpower for both production & service industry includes an Engineer, an Engineering Technologist and a Technician. An Engineering Technologist occupies an important and middle position in the pyramid of productive work force as a maintenance & operation expert. Engineering & Technology Universities produce Engineers and Engineering Technologist whereas the Colleges of Technology & Polytechnics produce Associate Engineers.

The Government of Sindh realizing the role & importance of Engineering Technologists and to provide higher education opportunities to Diploma of Associate Engineers, established the first University of Technology namely The Benazir Bhutto Shaheed University of Technology and Skill Development at Khairpur Mirs in 2016. Curriculum devised and approved by National Technology Council Islamabad is being taught to the students.

C. LOCATION

The Benazir Bhutto Shaheed University of Technology and Skill Development Khairpur Mirs is located near Civil Hospital, is one kilometer from Railway Station and is spread over 60 Acres of land.

9. INFRA STRUCTURE

- i. Admin Block (Registrar office, Examinations office & Directorate of Admissions, Project Directorate)
- ii. Academic Block (Departments of Civil, Electrical, Electronics & Mechanical Engineering Technology).
- iii. Mosque
- iv. Play Grounds
- v. Residential Colony
- vi. Hostels

OFFICERS OF THE UNIVERSITY

10

10.	OFFICERS OF THE UNIVERSITY				
S.No	Name	Designation			
1	Prof: Dr. Rasool Bux Mahar B.E, M.E Ph. D (China) Post Doc (USA)	Vice Chancellor			
2	Prof: Dr Hussain Bux Marri B.E, PGD, Ph. D (UK), Post Doc (UK)	Chairperson Department of Mechanical Engineering Technology			
3	Engr Mir Sajjad Hussin Talpur B.E (Chemical), M.E	Registrar & Director of Planning and Development			
4	Dr Aftab Ahmed Soomro B.E, M.E, Ph. D	Dean (Acting), Faculty of Skill Development			
5	Mr. Kashif Raza Rind MBA (Finance)	Director Finance			
6	Prof Dr. Manthar Ali Keerio B.E, M.E, Ph. D	Dean Faculty of Engineering Technology			
7	Engr. Muhammad Abubakar Shaikh B.E (MUET), M.E (NED)	In-charge Chairperson Department of Civil Engineering Technology			
8	Engr. Safdar Ali Abro ME Electrical	In-charge Chairperson Department of Electrical Engineering Technology			
9	Engr Shazia Feroz B. E (Electronics), M.E (Electrical Power)	In-charge Chairperson Department of Electronics Engineering Technology			
10	Syed Asim Ali Shah	In-charge Chairperson Department of English			

MPhil English

B.E (Civil)

11

12

13

Dr Mushtaq Ahmed Memon

MSc (Physics) Ph. D

Engr. Imdad Ali Siyal

Dr. Asim Ali Abro

B.E, M.E, Ph. D

Colleges

Studies

Director (Works & Services)

In-charge Chairperson Department of Basic Sciences and Related

Director Quality Enhancement Cell (QEC) & Focal Person Affiliated

14	Dr. Imdadullah Thaheem BE, ME, PhD	Director Office of Research Innovation and Commercialization (ORIC)
15	Mr. Riaz Ahmed Arain, B. Tech (Hons)	Director of Admissions (Acting)
16	Engr Abdul Shakoor Shaikh B.E, M. E	Director Students' Financial Aid Office
17	Engr. Asmatullah Memon B.E M. E	Director Industry Academia Linkages In-charge Sports
18	Syed Abul Qasim MBA (Hons)	In-charge Director Marketing & Outreach
19	Mr. Irfan Ali Memon MS (Computer Science)	Assistant Director Alumni Affairs
20	Ms. Zareen Arsalan BBA, MBA	Deputy Controller Examinations
21	Mr. Ghulam Abbas Junejo Pharm. D, MBA	Deputy Registrar
22	Mr. Waqar Ali Narejo BS, MS	System Network Administrator
23	Mr. Naveed Hussain Abro M.L.I. S	Librarian
24	Engr. Asmatullah Memon B.E M. E	In-charge Sports
25	Engr Samiullah Pathan B.E, M. E	Transport Officer
26	Mr. Ali Imran Jalbani MPA	Purchase & Procurement Officer
27	Syed Ali Taqi Shah B. Com, M.A (Economics)	Audit Officer
28	Mr. Bahram Chandio BSc (Agri) Hons., MBA, MPhil	Assistant Registrar (HR/ Establishment)
29	Mr. Sajjad Hussain Lashari BS (Computer Science)	Warden Boys Hostel
30	Ms. Rukhsana Soomro MS (English)	Warden Girls Hostel

11. UNDERGRADUATE PROGRAMMES BEING OFFERED

The University is presently offering Four-year Bachelor of Science / Bachelor of Engineering Technology in the following technologies;

- 1. Civil Engineering Technology
- 2. Electrical Engineering Technology
- 3. Electronics Engineering Technology
- 4. Mechanical Engineering Technology
- 5. Robotics & Al Engineering Technology
- 6. BS in Computer Science
- 7. BS in Artificial Intelligence
- 8. BS in English
- 9. BS in Physics

12. DEPARTMENT OF CIVIL ENGINEERING TECHNOLOGY

A. VISION

To be recognized globally as a center of excellence, which offers high quality education, technological knowledge and outreach activities with innovation and creativity in the field of Civil Engineering Technology.

B. MISSION

To provide quality engineering technological education and produce leaders in the field of Civil Engineering Technology having technical, social and ethical sense of responsibilities to serve worldwide.

13. PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

- **PEO-1** The graduates demonstrate the cutting-edge technical knowledge to uplift the civil engineering profession worldwide by following the social and ethical norms.
- **PEO-2** The graduates exhibit the capabilities of problem investigation and its analysis to propose the environmentally sustainable solutions with the life-long learning attitude.
- **PEO-3** The graduates demonstrate effective communication, leadership, teamwork, and managerial qualities in the field of civil engineering technology.

14. PROGRAM LEARNING OUTCOMES (PLOs)

- **PLO-1Engineering Technology Knowledge (SA1)**-An ability to apply knowledge of mathematics, natural science, engineering technology fundamentals and engineering technology specialization to defined and applied engineering technology procedures, processes, systems or methodologies
- **PLO-2Problem Analysis (SA2)**—An ability to identify, formulate, research literature and analyze broadly-defined engineering technology problems reaching substantiated conclusions using analytical tools, appropriate to the discipline or area of specialization.
- **PLO-3Design/Development of Solutions (SA3)**—An ability to design solutions for broadly defined engineering technology problems and contribute to the design of systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO-4Investigation (SA4)—An ability to conduct investigations of broadly-defined problems; locate, search and select relevant data from codes, data bases and literature, design and conduct experiments to provide valid conclusions.

PLO-5Modern Tool Usage (SA5)—An ability to select and apply appropriate techniques, resources, and modern and IT tools, including prediction and modelling, to broadly-defined engineering technology problems.

PLO-6The Engineering Technologist and Society (SA6)—An ability to demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technology practice and solutions to broadly defined engineering technology problems.

PLO-7Environment and Sustainability (SA7)—An ability to understand and evaluate the sustainability and impact of engineering technology work in the solutions of broadly defined engineering technology problems in societal and environmental contexts.

PLO-8Ethics (SA8)—An ability to understand and commit to professional ethics and responsibilities and norms of engineering technology practice.

PLO-9Individual and Team Work (SA9)—An ability to function effectively as an individual, and as a member or leader in diverse teams.

PLO-10 Communication (SA10)—An ability to communicate effectively on broadly defined engineering technology activities with the engineering technologist community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, give and receive clear instructions.

PLO-11 Project Management (SA11)—An ability to demonstrate knowledge and understanding of engineering technology management principles and apply these to one's own work, as a member or leader in a team and to manage projects and in multidisciplinary environments.

PLO-12 Life-long Learning (SA12)—An ability to recognize the need for, and have the ability to engage in independent and lifelong learning in specialist engineering technologies.

15. BRIEF INTRODUCTION

The Department of Civil Engineering Technology offers a four- year Bachelor of Engineering Technology program, a two-year Master of Science in Civil Engineering Technology program, a three-year Diploma of Associate Engineer in Civil Technology program, and short courses in various skill trades.

The Bachelor of Engineering Technology (Civil) program is primarily designed in such a way that it deals with essential advances in engineering technology education according to the cutting-edge requirements of the field. It comprises eight (08) semesters. During the first seven (07) semesters, the students acquire the necessary coursework for the completion of the degree program, whereas the 8th semester leads to supervised industrial training, which enhances the technical skills of students in the field.

After the successful completion of the degree program, the graduates of CET will be able to serve in sectors such as construction, cement industries, buildings, structures, highways, railways, airports, irrigation and hydraulic structures, water supply and wastewater disposal, and construction management. Moreover, the department is committed to producing technologists for the mega projects in the country like the China-Pakistan Economic Corridor (CPEC).

Being the oldest and most wide-ranging discipline in the world, the Department of Civil Engineering Technology is one of the leading departments of the University. All the classrooms and laboratories of the department are well-ventilated, electrified, and equipped with the latest essentials required for study. The department is also privileged to have the services of well-experienced and highly qualified faculty members.

Moreover, four batches of the BSc CET program have graduated. The National Technology Council (NTC) has accredited all the graduated batches. The program has also been approved by the Higher Education Commission (HEC) of Pakistan.

LABORATORIES

The department of Civil Engineering Technology has following nine (09) well-equipped laboratories:

- 1. Surveying Laboratory
- 2. Concrete Technology Laboratory
- 3. Soil Mechanics Laboratory
- 4. Environmental Engineering Laboratory
- 5. Transportation Engineering Technology Laboratory
- 6. Fluid Mechanics & Hydraulics Laboratory
- 7. Engineering Drawing Hall
- 8. Auto-CAD Laboratory
- 9. Computer and Simulation Laboratory (Shared)
- 10. Physics Laboratory (Shared)

16. FACULTY OF CIVIL ENGINEERING TECHNOLOGY

S. No.	Name with Qualification	Designation
1	Prof. Dr. Rasool Bux Mahar B.E (MUET), M.E (MUET), PhD (CHINA)	Professor & Vice Chancellor
2	Prof. Dr. Manthar Ali Keerio B.E (QUEST), M.E (MUET), PhD (QUEST)	Professor & Dean FoET
3	Engr. Muhammad Abubakar Shaikh B.E (MUET), M.E (NED), PhD (In Progress)	Assistant Professor / Chairperson
4	Engr. Shamotra Jai B.E (QUEST), M.E (USPCASW-MUET), PhD (In Progress)	Assistant Professor (On Study Leave)
5	Dr. Asim Ali Abro B.E (QUEST), M.E (China), PhD (USPCAS-W, MUET)	Assistant Professor / Director, QEC
6	Dr. Sadam Hussain Jakhrani B.E (QUEST), M.E (QUEST), PhD (Hanyang University, South Korea)	Assistant Professor / Director Postgraduate Studies
7	Engr. Jawad Akhter Siddiqui B.E (MUET), M.E (MUET)	Lecturer
8	Engr. Arun Kumar B.E (MUET), M.E (MUET)	Lecturer
9	Engr. Jabir Ali Keerio B.E (QUEST), M.E (MUET)	Lecturer
10	Engr. Akhter Ali Sargani B.E (QUEST), M.E (MUET)	Lecturer

17. SCHEME OF THE STUDY

	1st Semester								
S.N o	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
1	HUM-111	Islamic Studies / Social Ethics	Art & Humanities	2	0	2	0	50	0
2	HUM-112	Functional English	Art & Humanities	3	0	3	0	100	0
3	HUM-113	Pakistan Studies	Art & Humanities	2	0	2	0	50	0
4	MTH-110	Basic Mathematics	Deficiency Course for	3	0	3	0	100	0
5	CET-112	Surveying	Civil Engineering Technology Foundation	2	2	2	6	50	100
	Total 12 2 12 6 350 10					100			
	Grand Total					1	8	4	50

			2nd Semester							
S.N o	Course Code	Course Title	Knowledge Area/Domain		edit urs	Hour	itact s/Wee k	_	tal rks	
1	COM-121	Introduction to Computer Programming	Computing	1	2	1	6	50	100	
2	HUM-121	Communication Skills	Art & Humanities	3	0	3	0	100	0	
3	NSC-122	Applied Mathematics-I	Natural Sciences	3	0	3	0	100	0	
4	NSC-123	Applied Physics	Natural Sciences	2	1	2	3	50	50	
5	CET-121	Concrete Technology	Civil Engineering Technology Foundation	2	1	2	3	50	50	
6	CET-122	Evolution of Architecture and Engineering	Civil Engineering Technology Foundation	2	0	2	0	50	0	
	Total					13	12	400	200	
	Grand Total				17		25		600	

	3rd Semester										
S.No	Course Code	Course Title	Knowledge Area/Domain		edit urs		-		tal rks		
1	HUM-211	Professional Ethics	Art & Humanities	2	0	2	0	50	0		
2	NSC-212	Applied Mathematics-II	Natural Sciences	3	0	3	0	100	0		
3	CET-211	Environmental Technology	Civil Engineering Technology Foundation	2	1	2	3	50	50		
4	CET-212	Fluid Mechanics	Civil Engineering Technology Foundation	2	1	2	3	50	50		
5	CET-213	Mechanics of Solids	Civil Engineering Technology Foundation	2	1	2	3	50	50		
6	CET-214	Civil Engineering Drawing, Drafting and Interpretation	Civil Engineering Technology Foundation	1	2	1	6	50	100		
	Total						15	350	250		
	Grand Total					27		600			

4th Semester

S.N o	Course Code	Course Title	Knowledge Area/Domain		Credit Hours		Contact Hours/Wee k				tal rks
1	NSC-221	Fundamentals of Applied Economics	Natural Sciences	3	0	3	0	100	0		
2	HUM-221	Human Skills	Art & Humanities	2	0	2	0	50	0		
3	HUM-222	Technical & Scientific Writing	Art & Humanities	3	0	3	0	100	0		
4	CET-221	Transportation and Highway Technology	Civil Engineering Technology Breadth	2	1	2	3	50	50		
5	CET-222	Soil Mechanics	Civil Engineering Technology Foundation	1	2	1	6	50	100		
6	CET-223	Structural Principles	Civil Engineering Technology Breadth	2	0	2	0	50	0		
7	CET-224	Construction Safety Management	Civil Engineering Technology Breadth	1	1	1	3	50	50		
	Total						12	450	200		
	Grand Total					26		650			

	5th Semester											
S.N o	Course Code	Course Title	Knowledge Area/Domain	Cre Ho		Con Hours		-				
1	CET-311	Hydrology	Civil Engineering Technology Depth	1	1	1	3	50	50			
2	CET-312	Reinforced and Pre-stressed Concrete	Civil Engineering Technology Depth	2	1	2	3	50	50			
3	CET-313	Construction Equipment and Jobsite Practices	Civil Engineering Technology Breadth	2	1	2	3	50	50			
4	CET-314	Computer Aided Drawing and Building Information Modelling	Civil Engineering Technology Depth	1	2	1	6	50	100			
5	CET-315	Geotechnical Site Investigation and Foundations	Civil Engineering Technology Depth	1	1	1	3	50	50			
6	CET-316	Basic Electro-Mechanical Technology	Civil Engineering Technology Breadth	2	1	2	3	50	50			
	Total					9	21	300	350			
	Grand Total					3	0	65	50			

			6th Semester						
S.N o	Course Code	Course Title	Knowledge Area/Domain		edit urs		ntact rs/Week		
1	CET-321	Irrigation Technology	Civil Engineering Technology Depth	2	1	2	1	50	50
2	CET-322	Construction of Steel Structures	Civil Engineering Technology Depth	2	1	2	3	50	50
3	CET-323	Quantity Surveying and Estimation	Civil Engineering Technology Depth	1	2	1	6	50	100
4	CET-324	Maintenance and Repair of Civil Works	Civil Engineering Technology Breadth	1	1 1		3	50	50
5	MGM-321	Technopreneur ship	Management Science	2	0	2	0	50	0
6	CET-325	Project Part-I	Civil Engineering Technology Depth	0	3	0	9	0	100
	Total					8	22	25 0	350
	Grand Total					3	0	60	00

	7th Semester											
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours			tact /Week	Total Marks				
1	CET-411	GIS and Remote Sensing	Civil Engineering Technology Breadth	2	1	2	3	50	50			
2	CET-412	Ground Improvement Techniques	Civil Engineering Technology Depth	2	1	2	3	50	50			
3	CET-413	Construction Project Administration	Civil Engineering Technology Breadth	2	1	2	3	50	50			
4	CET-414	Water Supply Systems	Civil Engineering Technology Depth	2	1	2	3	50	50			
5	CET-415	Project Part -II	Civil Engineering Technology Depth	0	3	0	9	0	100			
	Total						21	200	300			
	Grand Total					29		500				

			8th Semeste	r					
Sr. No	Course Code	Course Title	Nature	Credit Hours		Contact Hours / Week		Total Marks	
NO	Code			Th	Pr	Th	Pr	Th	Pr
1	CET-421	Supervised Industrial Training (16 Weeks Training) 8x5 = 40 Contact Hrs/Week	Major-based Depth	0	16	0	40	00	800
		Total		0	16	0	40	00	800
		Total (2 nd Semester-4 th Year)		1	6	40		800	
	Total (4 th Year)			32		66		1300	
	Grand Total (1 st Year to 4 th Year)			128		220		4700	

18. DEPARTMENT OF ELECTRICAL ENGINEERING TECHNOLOGY

Electrical Engineering Technology (EET) is an engineering technology field that implements the principles of electrical engineering. It deals with the design, application, installation, manufacturing, operation or maintenance of electrical systems. However, EET is a specialized discipline that has more focus on application, theory, and applied design, and implementation unlike electrical engineering which only focuses on a generalized emphasis on theory and conceptual design of electrical systems. Electrical engineering technology is the largest branch of engineering technology and includes a diverse range of sub-disciplines, such as, electronics, telecommunication, and power systems.

The students learn various subjects in this program including Linear Circuit Analysis, Electrical Network Analysis, Power Generation Systems, Electrical Instruments, Electrical Machines, Digital Logic Design, Electrical Power Transmission and Distribution, Power Electronics, Microprocessor Theory and Interfacing, Power System Protection, Power System Control, Power System Analysis, High Voltage Technology, Industrial Drives and PLC, Electrical Machine Design, and other related subjects. Our Technologist may find suitable positions in Civil Aviation Authority, WAPDA, OGDCL, NTDC, PAEC, Military Engineering Services (MES), and also in many private sector companies.

This program at the Department of Electrical Engineering Technology is accredited by National Technologist Council (NTC) and recognized by Higher Education Commission of Pakistan.

The department of Electrical Engineering Technology has following dedicated laboratories:

- 1. Electrical Power lab
- 2. Electrical Machines Lab
- 3. Applied Electricity Lab
- 4. Wiring Lab
- General Electrician Lab

A. Vision:

To enhance the quality of teaching and research in the domain of electrical engineering technology and prepare a **technologically** skilled community at the global level.

B. Mission:

The mission of Department of Electrical Engineering Technology is to produce graduates equipped with technical and communication skills driven by the knowledge of modern scientific methods, tools, and techniques necessary for solving global technology problems.

19. Program Educational Objectives

- PEO-1 Graduates utilizing their professional approach to solve the electrical technology issues of the society.
- PEO-2 Graduates engraved with state of the art technical & managerial skills to serve the community.
- PEO-3 Graduates having strong commitment to ethical & moral practices as a team leader or as an individual.

20. FACULTY OF ELECTRICALENGINEERING TECHNOLOGY

S. No	Name	Designation
1.	Engr. Safdar Ali Abro	Assistant Professor
	B.E (Electrical), M.E (Electrical Power Engineering)	Chairperson
2.	Dr. Ghulam Jawad Sirewal	Assistant Professor
	B.E (Electrical), Ph.D. (South Korea)	, 100,000,111 1 10,000 0.
3.	Dr. Hassan Ali Soomro	Assistant Professor
0.	B.E (Electrical), Ph.D. (Malaysia)	7.030301111 1 10103301
4.	Engr. Ali Raza Chachar	Assistant Professor
4.	B.E (Electrical), M.E (Electrical Power Engineering)	Assistant Floressor
5.	Engr. Muzammil Hussain	Assistant Professor
Э.	B.E (Electrical), M.E (Electrical Power Engineering)	Assistant Professor
6.	Engr. Sayed Ali Shan	Lecturer
0.	B.E (Electrical), M.E (Electrical Power Engineering)	Lecturer
7.	Engr. Aftab Ali Samejo	Lasturar (On Study Lagya)
7.	B.E (Electrical), M.E (Electrical Power Engineering)	Lecturer (On Study Leave)
8.	Engr. Furgan Latif Memon	Lacturar
δ.	B.E (Electrical), M.E (Electrical Power Engineering)	Lecturer
0	Engr. Khalid Hussain Shah	Lasturan
9.	B.E (Electrical), M.E (Electrical Power Engineering)	Lecturer

21. SCHEME OF THE STUDY

			1 st Semester						
S#	Course Code	Subject	Nature		Credit Hours		ly Contact lours	Ma	arks
		·		Th	Pr	Th	Pr	Th	Pr
1	HUM-111	Islamic Studies/Ethics	Humanities	2	0	2	0	50	0
2	NSC-111	Calculus & AG	Natural Science	3	0	3	0	100	0
3	NSC-112	Applied Physics	Natural Science	2	1	2	3	50	50
4	HUM-112	Pakistan Studies	Humanities	2	0	2	0	50	0
5	EET-112	Electrical Workshop	Engineering Foundation	0	2	0	6	0	100
6	COM-111	Computer Proficiency	Computer Science	1	2	1	6	50	100
			10	5	10	15	300	250	
	Gra			15		25	5	50	

	2 nd Semester											
S#	Course Code	Subject	Nature	Cred	it Hours		y Contact ours	N	arks			
	Code			Th	Pr	Th	Pr	Th	Pr			
1	HUM-121	Communication Skills	Humanities	3	0	3	0	100	0			
2	NSC-121	Linear Algebra & Differential Equations	Natural Science	3	0	3	0	100	0			
3	MET-121	Mechanical Engineering Technology	Engineering Foundation	2	1	2	3	50	50			
4	EST-121	Electronics Devices & Circuitsn	Major Based Breadth	2	1	2	3	50	50			
5	EET-123	Linear Circuit Analysis	Major Based Breadth	3	1	3	3	100	50			
	Total			13	3	13	9	400	150			
	Grand Total			16		22		550				

	3 rd Semester											
S#	Course Code	Subject	Nature	Credit	Hours	Weekly Ho	Contact urs	Ма	rks			
				Th	Pr	Th	Pr	Th	Pr			
1	HUM-212	Technical Report Writing	Humanities	3	0	3	0	100	0			
2	EET-215	Digital Logic Design	Major Based Breadth	2	1	2	3	50	50			
3	EET-212	Electromagnetic Fields	Major based Depth	2	0	2	0	50	0			
4	EET-216	Instrumentation & Measurement	Major Based Breadth	2	1	2	3	50	50			
5	EET-214	Electrical Machines	Major Based Depth	3	1	3	3	100	50			
6	EET-217	Electrical Network Analysis	Major Based Depth	2	1	2	3	50	50			
			14	4	14	12	400	200				
	Gr		18		26		600					

	4 th Semester											
S#	Course Code	Subject	Nature	Credit	Hours	Weekly Ho		Ma	rks			
				Th	Pr	Th	Pr	Th	Pr			
1	COM-221	Computer Programming	Computer Science	1	1	1	3	50	50			
2	EET-222	Power Generation Systems	Engineering Foundation	2	1	2	3	50	50			
3	EET-223	Electrical Power Transmission	Major based Depth	2	1	2	3	50	50			
4	EET-224	Electrical Power Distribution & Utilization	Major based Depth	2	1	2	3	50	50			
5	EET-225	Power Electronics	Major based Depth	2	2	2	6	50	100			
	Total				6	09	18	250	300			
	Grand Total				5	27		55	50			

	5 th Semester											
S#	Course Code	Subject	Nature		Credit Hours		Contact urs	Marks				
				Th	Pr	Th	Pr	Th	Pr			
1	MGM-312	Organizational Behavior	Humanities	2	0	2	0	50	0			
2	EET-311	High Voltage Technology	Major based Depth	2	1	2	3	50	50			
3	EET-312	Control Technology	Major based Depth	2	1	2	3	50	50			
4	EET-313	Power System Protection	Major based Depth	2	1	2	3	50	50			
5	EST-314	Microprocessor Theory & Interfacing	Major based Breadth	2	1	2	3	50	50			
6	MET-316	Environment, Health, and Safety	Engineering Foundation	1	1	1	3	50	50			
			11	5	11	15	300	250				
	(_	1	6	2	6	55	50				

	6 th Semester											
S#	Course Code	,	Nature	Credit Hours		Weekly Ho		Marks				
				Th	Pr	Th	Pr	Th	Pr			
1	MGM-411	Technopreneurship	Management Science	3	0	3	0	100	0			
2	EST-321	Communication System Technology	Major based Breadth	2	1	2	3	50	50			
3	EET-322	Industrial Drives & PLC	Major based Depth	2	2	2	6	50	100			
4	EET-323	Project-I	Major based Depth	0	3	0	9	0	100			
5	EET-324	Renewable Energy Technology	Major based Depth	2	1	2	3	50	50			
	Total			9	7	9	21	250	300			
	Grand Total				16		30		50			

	7th Semester										
S#	Course Code	Subject	Nature	Credit Hours		Weekly Ho	Contact urs	Marks			
O.I.	Journal Court	Cubject	Huturo	Th	Pr	Th	Pr	Th	Pr		
1	EST-411	Artificial Intelligence	Major based Depth	2	1	2	3	50	50		
2	EET-412	Power System Control & Stability	Major based Depth	3	0	3	0	100	0		
3	EET-413	Power Economics & Management	Major based Depth	3	0	3	0	100	0		
4	EET-414	Project-II	Major based Depth	0	3	0	9	0	100		
5	EET-415	Electrical Machines Design & Maintenance	Major based Depth	2	1	2	3	50	50		
		Total		10	5	10	15	300	200		
	Grand Total				5	2	5	500			

	8 th SEMESTER											
No. Course Code		Subject	Nature	Credit Hours		Total Contact Hours		Ma	rks			
	Code			TH	PR	TH	PR	TH	PR			
1	EET-421	16 Weeks Supervised Industrial / Field Training	(8x6=48 Hrs / Week)	0	16	0	48	00	800			
Distribution of 800 Marks = Training Performance (600) + Viva Voce (200)												
		Viva Voce							200			
		Further Detail of Distril	bution of Marks for Training	Perform	ance							
		Student Report							350			
Industrial Trainer									200			
Industrial Visit by Academic Supervisor*									50			
	Total				16	0	48	0	800			
	Grand Total				6	4	-8	80	00			

	SUMMARY									
	Bachelor of Electrical Engineering Technology									
Semester	Cred	dit Hours								
Semester	тн	PR								
1st	10	5								
2nd	13	3								
3rd	14	4								
4th	9	6								
5th	11	5								
6th	9	7								
7th	10	5								
8th	0	16								
Total	76	51								
Grand Total		127								

22. DEPARTMENT OF ELECTRONICS ENGINEERING TECHNOLOGY

Electronics Engineering Technology is intricately woven into many sectors of industry which effects our daily life. Electronics Engineering Technology is an engineering technology field that implements and applies the principles of Electrical Engineering. Electronics Engineering Technology deals with the design, application, installation, manufacturing, operation or maintenance of electrical/electronic(s) systems. Electronics Engineering Technology is one of the most evolving fields. It has evolved from telegraph communication to wireless

communication to satellite communication to fiber-optic telecommunication and data rate has reached up to several 100 MBs per second. The evolution of digital computers from ancient abacus digital computer to latest super computers is also because of development of Electronics Engineering Technology. Electronics Engineering Technology has enabled every production, processing, and manufacturing industry from manual to automatic control. Electronics Engineering Technology is responsible for the safe take-off and landing off superjets. In short Electronics Engineering Technology has brought human life on the bed of roses.

To carry on this development electronic engineering professionals are needed. If you're a critical thinker who enjoys putting things together and integrating multiple systems, then a degree in Electronics Engineering Technology could be the beginning of your new career. The BBSUTSD's Electronics Engineering Technology degree is a skill-based degree with hands on labs, simulation under the supervision of foreign qualified and industry experienced faculty. Beginning with electrical fundamentals, the Electronics Engineering Technology program encompasses the knowledge of variety of subjects of diverse field like Electronic Circuits & Devices and their applications, Electronics Circuit Design, Digital Logic Design, Microprocessors & Interfacing, Automation and Robotics, Communications System Technology, Signal & Systems, Industrial Electronics, Power Electronics, VLSI Design, Artificial Intelligence and Machine Learning, Instrumentation & Control, FPGA based systems, Wave Propagation and Antennas, Computer Communication & Networking. The program is accredited by National Technologist Council (NTC) and Higher Education Commission (HEC) of Pakistan.

The department of Electronics Engineering Technology has following dedicated laboratories:

- 1. Electronic Devices and Circuits Laboratory
- 2. Instrumentation and Control Laboratory
- 3. Modelling and Simulation Laboratory
- 4. Project Development Laboratory

A. Vision

To develop competent technologists and responsible professionals in Electronics Engineering Technology to face the current and future challenges of technological development.

B. MISSION

To blend technical knowledge with practical skills and innovative mindset to develop a problem solving approach, and provide quality education and research to address national and international challenges by seeking continuous improvement of knowledge skills, and implanting right ethical values.

23. PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: Develop the capability to grab the fundamentals of science and electronics engineering technology for determining, investigating and solving the technological problems of the society with practical and futuristic approach.

PEO 2: Produce graduates having strong technical and interpersonal skills to adapt the future trends of technology using modern tools and techniques and serve as dynamic professionals.

PEO 3: Follow the process of continuous learning, ensure ethical values and pledge to sustainability of the global environment

24. FACULTY OF ELECTRONICS ENGINEERING TECHNOLOGY

S.NO	NAME WITH QUALIFICATION	DESIGNATION				
1	Engr. Shazia Feroz B.E , M.E (MUET), Ph.D (In Progress)	Assistant Professor/ Chairperson				
2	Dr. Muhammad Saleem Memon B.E (MUET), MS and Ph.D (South Korea)	Assistant Professor				
3	Dr. Muhammad Hanif Ahmed Khan Khushik	Assistant Professor				
3	B.E (NED), M.E (MUET), Ph.D (China)	(On study Leave)				
4	Engr. Kundan Kumar	Assistant Professor				
7	B.E (MUET), M.E (HAMDARD)	[On Lien]				
5	Engr. Ghalib Raza Solangi	Assistant Professor				
3	B.E, M.E (MUET+AAU Denmark)	[Study Leave]				
6	Engr. Ronak Ali Baladi	Assistant Professor				
· ·	B.E (Sukkur IBA University), ME (Bahria University)					
7	Engr. Izhar Hussain Memon	Lecturer				
1	B.E,M.E (Sukkur IBA University)	[Study Leave]				
8	Engr. Saadia Kulsoom Memon	Locturor				
0	B.E, M.E (MUET, Jamshoro)	Lecturer				
0	Engr. Arif Hussain Lakho	Lacturar				
9	B.E, ME (Sukkur IBA University)	Lecturer				

25. SCHEME OF THE STUDY1

1st Se	mester								
S.No.	Course Code	Course Title	Knowledge Area/Domain	Credit Hours			ontact rs/Week	Total Marks	
01	NSC -111	Applied Calculus	Natural Sciences	2	0	2	0	50	0
02	HUM-111	Islamic Studies	Humanities	1	0	1	0	50	0
03	HUM-112	Ethics	Humanities	1	0	1	0	50	0
04	NSC-112	Applied Physics	Natural Sciences	2	1	2	3	50	50
05	COM-111	Introduction to Computing	Computing	1	2	1	6	50	100
06	EST-111	Electronic Workshop	Foundation	0	2	0	6	0	100
01	EET-113	Electrical Circuits	Foundation	2	1	2	3	50	50
	Total				6	9	18	300	300
	Grand Total				15		27	600	

2nd Se	2nd Semester										
S.No.	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Conta Hours/W		Total Marks			
01	EET-121	Linear Circuit Analysis	Foundation	2	1	2	3	50	50		
02	NSC-121	Differential Equations	Natural Sciences	2	0	2	0	50	0		
03	HUM-121	Pakistan Studies	Humanities	3	0	3	0	100	0		
04	EST-122	Solid State Electronics	Foundation	2	0	2	0	50	0		
05	COM-121	Computer Programing	Computing	0	1	0	3	0	50		
06	MGM-121	Technology Economics & Management	Management Sciences	3	0	3	0	100	0		
07	ECS-121	Professional Ethics	Social Sciences	3	0	3	0	100	0		
	Total					15	6	450	100		
	Grand Total					21		55	50		

3rd Se	3rd Semester										
S.No.	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks			
01	EET-211	Electrical Network Analysis	Foundation	2	1	2	3	50	50		
02	NSC-211	Linear Algebra	Natural Sciences	2	0	2	0	50	0		
03	EST-211	Digital Electronics	Foundation	1	1	1	3	50	50		
04	ECS-211	Organization Behavior	Social Sciences	3	0	3	0	100	0		
05	MET-211	Technical Drawing	Computing	0	1	0	3	0	50		
06	EST-212	Electronic Devices	Foundation	2	1	2	3	50	50		
07	EST-213	IC Fabrication	IDTE	2	1	2	3	50	50		
	Total				5	12	15	350	250		
	Grand Total					2	7	60	00		

4th Se	4th Semester										
S.No.	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Con Hours		Total Marks			
01	EET-221	Electrical Machines	Breadth	2	1	2	3	50	50		
02	GCE-221	Technical Report Writing	Humanities	3	0	3	0	100	0		
03	EST-221	Instrumentations and Measurements	Breadth	2	1	2	3	50	50		
04	EST-222	Amplifiers and Oscillators	Breadth	2	1	2	3	50	50		
05	EST-223	Microprocessors and Microcontrollers	Breadth	2	1	2	3	50	50		
06	EST-224	Signal and Systems	Foundation	2	1	2	3	50	50		
	Total				5	13	15	350	250		
	Grand Total				18		28		600		

5th Se	mester								
S.No.	Course Code	Course Title	Knowledge Area/Domain	rledge Area/Domain Credit Hours		Con Hours		Total Marks	
01	EST-311	Communication Systems	Breadth	1	1	1	3	50	50
02	EST-312	Control Systems	Breadth	2	1	2	3	50	50
03	NSC-311	Numerical Analysis	Natural Sciences	3	1	3	3	100	50
04	MGM-311	Principles of Marketing	Management Sciences	3	0	3	0	100	0
05	EST-313	Industrial Electronics	Depth	2	1	2	3	50	50
06	EST-314	Renewable Energy	Foundation	2	1	2	3	50	50
		Total		13	5	13	15	400	250
	Grand Total					2	8	65	50

6th Se	mester								
S.No.	Course Code	Course Title	Knowledge Area/Domain	Credit H	ours	Con Hours		Total	Marks
01	EST-321	Power Electronics	Breadth	2	1	2	3	50	50
02	EST-322	Industrial Automation	Breadth	2	1	2	3	50	50
03	EST-323	VLSI Technology	Breadth	2	1	2	3	50	50
04	EST-324	Embedded Systems	Depth	2	1	2	3	50	50
05	EST-325	Nanotechnology	Depth	2	0	2	0	50	0
07	EST-326	Project-I	Project	0	3	0	9	0	150
		Total		10	7	10	21	250	350
		Grand Total		17		3	1	60	00

7th Se	mester								
S.No.	Course Code	Course Title	Knowledge Area/Domain	Credit	Credit Hours		ontact rs/Week	k Total Marks	
01	MGM-321	Entrepreneurship	Management Sciences	3	0	3	0	100	0
02	EST-411	Robotics Technology	Depth	2	1	2	3	50	50
03	EST-412	Artificial Intelligence	Depth	2	1	2	3	50	50
04	EST-413	Electronics Troubleshooting and Testing	Depth	0	2	0	6	0	100
05	EST-414	Cyber Physical Systems and Security	IDTE	2	1	2	3	50	50
06	EST-415	Project-II	Project	0	3	0	9	0	150
		Total		9	8	9	24	250	400
	Grand Total				7		33	65	50

8th Se	emester								
S.No. Course Code Course Title Knowledge Area/Domain							ontact rs/Week	Tot	al Marks
01	EST-421	Supervised Industrial Training (Compulsory)	Industrial Training	0	16	0	16	0	800

26. DEPARTMENT OF COMPUTER SCIENCE

A. CHAIRPERSON MESSAGE

Computer Engineering Technology has changed the face of the world with its various upcoming technologies in diverse fields of industry and education. Today's technological advancements require technology professionals, who can help companies to administer cutting edges technologies like Big Data, Internet of things (IoT), and virtualization needs. The Department is keen to keep up with the rapid changes and latest advancements in the IT domain. Accordingly, the faculty exerts continuous efforts for the development of its learning, teaching, research, and curriculum resources aligned with Higher Education Commission (HEC) and National Technology Council (NTC) guidelines. With a watchful eye on the needs of local and global markets, The Department of Computer Engineering Technology will work hard to fulfill these needs by producing graduates who are highly skilled and properly trained to serve their community. The department aims at meeting the demands of Computer professionals in the public & private sectors and will striving hard to provide high-quality education to all by maintaining strong links with industry and professionals. It is fortunate to have diversified faculty, graduated from top-ranked national and international institutions. Our graduates will secure prominent positions in well-reputed firms and shall contribute their share towards societal development. The Department of Computer Engineering Technology will ensure the active participation of the students in co-curricular and extra-curricular activities at national and international levels.

Engr. Shazia Feroz

B. VISION

The vision of the Department of Computer Engineering Technology is to be recognized as a center of excellence in the domain of computing by empowering students to gain strong technical competence and offer cutting-edge solutions to local and global technology problems using emerging technologies.

C. MISSION

The Department of Computer Engineering Technology aims to produce qualified technologists and skilled manpower by focusing on contemporary and essential knowledge and technical skills through collaborations with the government, industry, and other stakeholders. It will adopt a holistic approach to improve students' ethical conduct, lifelong learning, problem-solving, economic leadership, and communication abilities.

27. PROGRAM EDUCATIONAL OBJECTIVES

PEO-1

Demonstrate hands-on skills to design, implement, troubleshoot and maintain software/hardware related to field of Computer Engineering either independently as a freelancer/entrepreneur or as an employee of the relevant Computer Technology Industry.

PEO-2

Show professional integrity and commitment to social and ethical as well as environmental responsibilities.

PEO-3

Demonstrate leadership to efficiently work as a manager/team lead in a multi-disciplinary environment through effective communication and interpersonal skills.

PEO-4

Demonstrate continuous professional growth and passion to keep to-date with emerging technologies.

28. PROGRAM EDUCATIONAL OBJECTIVES

(I) Engineering Technology Knowledge (SA1)

An ability to apply knowledge of mathematics, natural science, Engineering Technology fundamentals and Engineering Technology specialization to defined and applied Engineering Technology procedures, processes, systems or methodologies.

(II) Problem Analysis (SA2)

An ability to Identify, formulate, research literature and analyze broadly-defined Engineering Technology problems reaching substantiated conclusions using analytical tools appropriate to the discipline or area of specialization.

(III) Design/Development of Solutions (SA3)

An ability to design solutions for broadly- defined Engineering Technology problems and contribute to the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

(IV) Investigation (SA4)

An ability to conduct investigations of broadly-defined problems; locate, search and select relevant data from codes, data bases and literature, design and conduct experiments to provide valid conclusions.

(V) Modern Tool Usage (SA5)

An ability to Select and apply appropriate techniques, resources, and modern technology and IT tools, including prediction and modelling, to broadly-defined Engineering Technology problems, with an understanding of the limitations.

(VI) The Engineering Technologist and Society (SA6)

An ability to demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to Engineering Technology practice and solutions to broadly defined Engineering Technology problems.

(VII) Environment and Sustainability (SA7)

An ability to understand and evaluate the sustainability and impact of Engineering Technology work in the solution of broadly defined Engineering Technology problems in societal and environmental contexts.

(VIII) Ethics (SA8)

Understand and commit to professional ethics and responsibilities and norms of Engineering Technology practice (IX) Individual and Team Work (SA9)

An ability to Function effectively as an individual, and as a member or leader in perse teams.

(X) Communication (SA10)

An ability to communicate effectively on broadly defined Engineering Technology activities with the Engineering Technologist community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

(XI) Project Management (SA11)

Bachelor of Engineering Technology & BS Program

BBS-UTECH Khairpur Mirs

An ability to demonstrate knowledge and understanding of Engineering Technology management principles and apply these to one's own work, as a member or leader in a team and to manage projects in multidisciplinary environments (XII) Lifelong Learning (SA12)

An ability to recognize the need for, and have the ability to engage in independent and life-long learning in specialist Engineering Technologies.

29. FACULTY OF COMPUTER SCIENCE

S.NO	NAME WITH QUALIFICATION	DESIGNATION
1.	Engr. Shazia Feroz B.E , M.E (MUET), Ph.D (In Progress)	Assistant Professor/ Chairperson
2.	Dr. Muhammad Saleem Memon B.E (MUET), MS and Ph.D (South Korea)	Assistant Professor
3.	Dr. Muhammad Hanif Ahmed Khan Khushik B.E (NED), M.E (MUET), Ph.D (China)	Assistant Professor (On study Leave)
4.	Engr. Ghalib Raza Solangi B.E, M.E (MUET+AAU Denmark)	Assistant Professor [Study Leave]
5.	Engr. Ronak Ali Baladi B.E (Sukkur IBA University), ME (Bahria University)	Assistant Professor (On Study Leave for PhD)
6.	Engr. Izhar Hussain Memon B.E,M.E (Sukkur IBA University)	Lecturer [Study Leave]
7.	Engr. Saadia Kulsoom Memon B.E, M.E (MUET, Jamshoro)	Lecturer
8.	Engr. Arif Hussain Lakho B.E, ME (Sukkur IBA University)	Lecturer
9.	Mr. Sajjad Ali Lashari. BS (CS), MS (CS)	Lecturer/Coordinator
10.	Mr.Asad Hameed Soomro BS (CS), MS (CS)	Lecturer
11.	Ms. Shagufta Naz BS (CS), MS (CS)	Lecturer (Study Leave)

30. Course Scheme for BSc Computer Science

1st Semester 1st Year

S. #	Previous Course Code	Proposed course code	Subject	Nature	CreditHours		Hours		ntact Mar	
					TH	PR	H	PR	TH	PR
1	CST-111	COT-111	Introduction to Computing	Engineering Foundation	1	2	1	6	50	100
2	HUM112	HUM112	Electronics Workshop	Engineering Foundation	0	2	0	6	00	100
3	NSC-111	NSC-111	Applied Calculus & Analytical Geometry	Natural Science	3	0	3	0	100	00
4	EST-111	EST-111	Basic Electronics	Engineering Foundation	2	1	2	3	50	50
5	HUM-111	HUM-111/HUM 112	Islamic Studies/Ethics	Humanities	2	0	2	0	50	00
6	NSC-112	NSC-112	Applied Physics	Natural Sciences	2	0	2	0	50	00
Tota	I				10	05	10	15	300	250
Gran	Grand Total				15		2	22		50

S. #	Previous CourseCode	Proposed course code	Subject	Nature	CreditHours		Con	ekly itact urs	Ма	rks
					TH	PR	TH	PR	TH	PR
1	CST-121	COT-121	Programming Fundamental	Engineering Foundation	2	2	2	6	50	100
2	EST-121	EST-121	Digital Electronics	Engineering Foundation	2	1	2	3	50	50
3	HUM-122	HUM-122	Pakistan Studies	Humanities	2	0	2	0	50	00
4	HUM-121	HUM-121	Communication skill	Humanities	2	0	2	0	50	00
5	CST-121	COT-121	Discrete Structure	Engineering Foundation	2	1	2	3	50	50
6	NSC-121	NSC-121	Linear Algebra & Differential Equations	Natural Science	3	0	3	0	100	00
Total	Cotal				13	4	13	12	350	200
Grand	Grand Total				17		25		550	

31. BACHELOR OF SCIENCE (ARTIFICIAL INTELLIGENCE)

(Under the umbrella of Electronics Engineering Technology)

A. CHAIRPERSON MESSAGE

Artificial Intelligence (AI) is revolutionizing industries and academia, driving significant advancements in technology and innovation. Today's AI landscape demands skilled professionals who can leverage cutting-edge technologies like machine learning, data analytics, and automation. The Department of Electronics Engineering Technology is dedicated to embracing the rapid evolution of AI. Our faculty is committed to enhancing learning, teaching, research, and curriculum resources to meet the standards set by the Higher Education Commission (HEC) and the National Technology Council (NTC). Understanding the local and global demand for AI expertise, our department aims to produce highly skilled AI graduates prepared to excel in the public and private sectors. We prioritize delivering top-quality AI education and maintaining robust industry connections. Our faculty, with diverse backgrounds from esteemed national and international institutions, ensures a comprehensive and enriching academic environment. Graduates of our BS(AI) program is poised to secure key positions in leading organizations, driving societal progress through their AI capabilities. The Department of Electronics Engineering Technology is committed to fostering well-rounded AI professionals, encouraging active participation in national and international co-curricular and extra-curricular activities.

Dr. Shazia Feroz

Chairperson, Department of Electronics Engineering Technology

B. VISION

Our mission is to nurture graduates who possess the analytical prowess to dissect, design, and develop effective AI solutions. Through a comprehensive curriculum and hands-on experiences, we aim to equip our students with the skills and knowledge necessary to contribute meaningfully to society. As future AI professionals, our graduates will not only navigate the complexities of this dynamic field but will also be catalysts for positive change.

C. MISSION

Our vision is to cultivate a community of AI professionals who lead the way in advancing technology for the betterment of society. We aspire to be a hub where creativity, innovation, and ethical considerations converge to shape the future of artificial intelligence. In envisioning a world transformed by AI, our program strives to produce graduates who are not only proficient in their technical expertise but are also passionate advocates for using AI to address pressing global challenges. Join us in shaping a future where artificial intelligence is a force for positive transformation.

32. Program Learning Outcomes (PLOs)

Academic Education	To prepare graduates as computing professionals
Knowledge for Solving Computing Problems	Apply knowledge of computing fundamentals, knowledge of a computing specialization, and mathematics, science, and domain knowledge appropriate for the computing specialization to the 16 abstraction and conceptualization of computing models from defined problems and requirements
Problem Analysis	Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines
Design/ Development of Solutions	Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations
Modern Tool Usage	Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations
Individual and Team Work	Function effectively as an individual and as a member or leader in diverse teams and in multi-disciplinary settings
Communication	Communicate effectively with the computing community and with society at large about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions
Computing Professionalism and Society	Understand and assess societal, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice
Ethics	Understand and commit to professional ethics, responsibilities, and norms of professional computing practice
Life-long Learning	Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional

33. FACULTY OF BACHELOR OF SCIENCE (ARTIFICIAL INTELLIGENCE)

S.NO	NAME WITH QUALIFICATION	DESIGNATION
1	Engr. Shazia Feroz B.E , M.E (MUET), Ph.D (In Progress)	Assistant Professor/ Chairperson
2	Mr. Asad Hameed Soomro	Lecturer
3		

34. Course Scheme for BS Artificial Intelligence

			1st Semester						
S.No Course Code		Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
	3		Th	Pr	Th	Pr	Th	Pr	
1	GE-111	Computer Fundamentals	GER	2	1	2	3	50	50
2	CS-111	Programming Fundamentals	Core	3	1	3	3	100	50
3	GE-112	Pakistan Studies	GER	2	0	2	0	50	0
4	GE-113	Calculus & Analytical Geometry	GER	3	0	3	0	100	0
5	GE-114	Applied Physics	GER	2	1	2	3	50	50
6	GE-115	Mathematics-I	Deficiency Course	3	0	3	0	100	0
	Total				3	15	9	450	150
	Grand Total				8	24	4	60	00

			2nd Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
					Pr	Th	Pr	Th	Pr
1	CS-121	Object Oriented Programming	Core	3	1	3	3	100	50
2	MT-121	Linear Algebra	Maths	3	0	3	0	100	0
3	CS-122	Digital logic design	Core	3	1	3	3	100	50
4	GE-121	Functional English	GER	3	0	3	0	100	0
5	GE-122	Islamic Studies / Ethics	GER	2	0	2	0	50	0
6	GE-123	Discrete Structure	GER	3	0	3	0	100	0
7	GE-124	Mathematics-II	Deficiency Course	3	0	3	0	100	0
	Total					20	6	650	100
	Grand Total				2	2	6	75	50

		3rd	I Semester						
S.No Course Code		ourse Code Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
			_	Th	Pr	Th	Pr	Th	Pr
1		Data Structures	Core	3	1	3	3	100	50
2		Computer Networks	Core	2	1	2	3	50	50
3		Software Engineering	Core	3	0	3	0	100	0
4		Multivariable Calculus	Math	3	0	3	0	100	0
5		Natural Sciences (Applied Physics)	GER	2	1	2	3	50	50
6		Ideology and Constitution of Pakistan	GER	2	0	2	0	50	0
		Total		15	3	15	9	450	150
	Grand Total 18							60	00

			4th Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
			_	Th	Pr	Th	Pr	Th	Pr
1		Database Systems	Core	3	1	3	3	100	50
2		Operating Systems	Core	2	1	2	3	50	50
3		Analysis of Algorithms	Core	3	0	3	0	100	0
4		Artificial Intelligence	Core	2	1	2	3	50	50
5		Programming for AI	Core	3	0	3	0	100	0
6		Probability and Statistics	Math	3	0	3	0	100	0
		16	3	16	9	500	150		
	Grand Total 19 25 650								50

		5th Sem	nester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		To Ma	
	Code		Area/Domain	Th	Pr	Th	Pr	Th	Pr
1		Information Security	Core	3	0	3	0	100	0
2		Computer Organization and Assembly Language	Core	2	1	2	3	50	50
3		Machine Learning	D-Core	3	0	3	0	100	0
4		Natural Language Processing	D-Core	3	0	3	0	100	0
5		Web Programming for Al	D-Core	3	0	3	0	100	0
6		Introduction to Management	Math	3	0	3	0	100	0
		Total		17	1	17	3	550	50
	Grand Total 18 20 600								

		6th Se	emester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Con Hours		Total Marks	
			Th	Pr	Th	Pr	Th	Pr	
1		Artificial Neural Network and Deep Learning	D-Core	3	0	3	0	100	0
2	2 Computer Vision D-Core					3	0	100	0
3		Human Computer Interaction	D-Elective	3	0	3	0	100	0
4		Multimedia Mining	D-Elective	3	0	3	0	100	0
5		Civics and Community Engagement	GER	3	0	3	0	100	0
6	6 Technical & Business Writing Math						0	100	0
		Total	18	0	18	0	600	0	
		Grand Total		1	8	1	8	60	00

			7th Semester						
S.No	Course	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total	Marks
	Code		Area/Domain	Th	Pr	Th	Pr	Th	Pr
1		Final Year Project - I	Core	0	3	0	9	0	100
2		Knowledge Representation & Reasoning	D-Core	3	0	3	0	100	0
3		Introduction to Marketing	Elective Supporting Course GER	3	0	3	0	100	0
4		Generative Artificial Intelligence	D-Elective	3	0	3	0	100	0
5	MLOPS (Machine Learning				0	3	0	100	0
6		Entrepreneurship	GER	3	0	3	0	100	0
	Total					15	9	500	100
	Grand Total				8	2	4	60	00

35. BACHELOR OF ENGINEERING TECHNOLOGY (B.E-TECH) ROBOTICS AND ARTIFICIAL INTELLIGENCE

A. Program Overview

The Bachelor of Engineering Technology (B.E-Tech) in Robotics and Artificial Intelligence (AI) is a specialized 4-year undergraduate program that integrates Electronics Engineering Technology principles with the latest advancements in robotics and artificial intelligence technologies. The program is designed to provide students with a deep understanding of both the hardware and software aspects of intelligent systems, robotics, and automation.

B. Main Feature of the BE-Tech in Robotics and Artificial Intelligence Program

The BE-Tech program combines Electronics Engineering principles with **Robotics** and **Artificial Intelligence** (AI) technologies, offering a comprehensive foundation in both hardware and software. By aligning with Industry 4.0, the program equips students with the skills to design, develop, and implement cutting-edge robotic systems and AI-powered solutions that are driving advancements in automation, smart manufacturing, and digital transformation across industries.

- Students will gain foundational knowledge in electronics engineering, focusing on Circuit Design, Digital Logic, Embedded Systems, Control Systems, IoT and Industrial Automation. These core areas form the foundation for developing and applying robotics and AI technologies.
- This program then aims to equip students with specialized knowledge and Skill-set in Robotics and AI technologies including areas such Robot Design, Operation and control systems, Autonomous navigation, Machine learning Techniques, Deep learning algorithms, Computer vision, image processing, natural language processing and data analytics, empowering them to develop advanced robotics and AI solutions.
- Students will also gain practical experience in **building** and **programming** robots, as well as designing **Al-based intelligent** systems capable of interacting with the physical world. They will work with sensors, controllers, and actuators to create systems that perceive their environment, make intelligent decisions, and perform tasks autonomously. Through hands-on

projects, students will develop strong **programming skills** in languages such as Python, C++, and MATLAB, enabling them to write algorithms and code for robot control, data processing, and intelligent decision-making

The program offers vast opportunities in robotics, artificial intelligence, and automation across various sectors, including manufacturing, healthcare, government, and consulting firms. With the increasing demand for robotics, students can pursue higher education and entrepreneurship in intelligent systems.

C. Career Prospects:

Graduates of the BE-Tech in Robotics and AI program are equipped with a versatile skill set that opens up a wide range of career opportunities across industries. Some of the key career prospects include:

- Automation Engineer: Specialize in automating industrial processes and improving system efficiency using robotics and Al.
- Control Systems Technologist: Develop control systems and algorithms for robots, ensuring precise, real-time decision-making for autonomous operations.
- Robotics Technologist: Design, develop, and maintain robotic systems for diverse applications in manufacturing, healthcare, and autonomous systems.
- Al Engineer/Researcher: Develop intelligent systems capable of learning, reasoning, and decision-making in industries like finance, healthcare, and autonomous systems.
- Embedded Systems Engineer: Work on the design and integration of hardware and software for robotic systems and IoT devices.
- Machine Learning Engineer: Develop machine learning models and algorithms to solve complex problems across industries.
- Research and Development (R&D): Work in academic, governmental, or private sector R&D labs focused on advancing robotics, AI, and automation technologies.

36. Mapping of Vision & Mission with PEOs

Vision & Mission	PEO 1	PEO 2	PEO 3	PEO 4
University Vision:				
To lead global engineering technology, science, and humanities education aimed at market-driven	✓	✓	✓	✓
employable and entrepreneurial skills to empower community.				
University Mission:				
To empower the community with hands-on technological knowledge through a high-quality teaching	./	./	./	./
& research environment, innovative tools & techniques, and entrepreneurial & global leadership skills	•	•	•	•
with the consciousness of ethical norms & values.				
Program Mission:				
Leveraging modern tools (e.g., ROS, Machine Learning frameworks, and embedded systems) to				
address Al-driven automation, manufacturing, and healthcare needs, while fostering lifelong	✓	✓	✓	✓
learning, innovation, entrepreneurship, and leadership through effective collaboration and				
communication.				

PEO#	Statement
PEO 1	Technical Competence & Problem Solving Graduates will apply core principles of robotics, artificial intelligence, mathematics, and engineering science to analyze, design, implement, and evaluate intelligent systems that meet evolving market-driven needs in automation, manufacturing, healthcare, and related domains.
PEO 2	Professional Practice & Ethical Responsibility Graduates will demonstrate proficiency with contemporary tools, platforms, and methodologies (e.g., ROS, machine-learning frameworks, embedded systems) in professional settings, while upholding ethical norms, sustainability principles, and societal responsibilities in system development and deployment.
PEO 3	Innovation, Entrepreneurship & Lifelong Learning Graduates will engage in continuous professional development, research, and entrepreneurial activities—leveraging cutting-edge technologies to create value, drive innovation, and address real-world challenges in both local and global contexts.
PEO 4	Communication & Leadership in Multidisciplinary Teams Graduates will effectively communicate technical concepts and project outcomes, and lead or collaborate within diverse, multidisciplinary teams—fostering inclusive leadership, stakeholder engagement, and project management best practices.

37. Program Learning Outcomes (PLOs)

Program outcomes are the statements that describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills and attitude that the students acquire while progressing through the program. The program must demonstrate that the students have attained a certain set of knowledge, skills and behavioral traits, at least to some acceptable minimum level. Specifically, it is to be demonstrated that the students have acquired the following graduate attributes but not limited to:

- (i) **Engineering Technology Knowledge (SA1):** An ability to apply knowledge of mathematics, natural science, Engineering Technology fundamentals and Engineering Technology specialization to defined and applied Engineering Technology procedures, processes, systems or methodologies.
- (ii) **Problem Analysis (SA2):** An ability to Identify, formulate, research literature and analyze broadly defined Engineering Technology problems reaching substantiated conclusions using analytical tools appropriate to the discipline or area of specialization.
- (iii) **Design/Development of Solutions (SA3):** An ability to design solutions for broadly- defined Engineering Technology problems and contribute to the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- (iv) **Investigation (SA4):** An ability to conduct investigations of broadly-defined problems; locate, search and select relevant data from codes, databases and literature, design and conduct experiments to provide valid conclusions.
- (v) **Modern Tool Usage (SA5):** An ability to Select and apply appropriate techniques, resources, and modern technology and IT tools, including prediction and modelling, to broadly-defined Engineering Technology problems, with an understanding of the limitations.

- (vi) The Engineering Technologist and Society (SA6): An ability to demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to Engineering Technology practice and solutions to broadly defined Engineering Technology problems.
- (vii) **Environment and Sustainability (SA7):** An ability to understand and evaluate the sustainability and impact of Engineering Technology work in the solution of broadly defined Engineering Technology problems in societal and environmental contexts.
- (viii) **Ethics (SA8):** Understand and commit to professional ethics and responsibilities and norms of Engineering Technology practice
- (ix) **Individual and Team Work (SA9):** An ability to Function effectively as an individual, and as a member or leader in diverse teams.
- (x) **Communication (SA10):** An ability to communicate effectively on broadly defined Engineering Technology activities with the Engineering Technologist community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- (xi) **Project Management (SA11):** An ability to demonstrate knowledge and understanding of Engineering Technology management principles and apply these to one's own work, as a member or leader in a team and to manage projects in multidisciplinary environments.
- (xii) **Lifelong Learning (SA12):** An ability to recognize the need for, and have the ability to engage in independent and life-long learning in specialist Engineering Technologies.

38. Program Education Objectives (PEOs) to Program Learning Outcomes (PLOs) Mapping

Program Learning Outcomes (PLOs)/Graduate		Program Education	n Objectives (PEOs	5)
Attributes	PEO 1	PEO 2	PEO 3	PEO 4
PLO 1 Engineering Technology Knowledge	3	2	3	0
PLO 2 Problem Analysis	3	3	0	0
PLO 3 Design/Development of Solutions	3	2	3	1
PLO 4 Investigation	3	2	1	2
PLO 5 Modern Tool Usage	3	3	2	0
PLO 6 Engineering Technologist and Society	1	3	3	3
PLO 7 Environment and Sustainability	1	1	3	2
PLO 8 Ethics	0	3	3	2
PLO 9 Individual and Team Work	0	1	2	3
PLO 10 Communication	2	0	0	3
PLO 11 Project Management	1	1	2	3
PLO 12 Lifelong Learning	2	1	3	3

^{**}Rating level: No Emphasis = 0, Very little Emphasis = 1, Moderate Emphasis = 2, Strong Emphasis = 3

39. SCHEME OF THE STUDY

			1st Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
				Th	Pr	Th	Pr	Th	Pr
1	MTH-110	Basic Mathematics - I	Natural Science	0	0	0	0	0	0
2	GCE-111	Functional English	Humanities & Social Sciences	3	0	3	0	100	0
3	NSC-112	Applied Physics	Natural Science	2	1	2	3	50	50
4	GE-111	Computer fundamentals	Computing	2	1	2	3	50	50
5	RAI-111	Introduction to Robotics and Al	Foundation	3	0	3	0	100	0
06[1]	HUM-111/ HUM-112	Islamic Studies/Ethics	Humanities & Social Sciences	2	0	2	0	50	0
7	NSC-111	Natural Sciences	3	0	3	0	100	0	
		15	2	15	6	450	100		
		17		21		550			

		2n	d Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
				Th Pr		Th	Pr	Th	Pr
1	CS-121	Programming Fundamentals	IDTE	2	1	2	3	50	50
2	NSC-121	Linear Algebra & Differential Equations	Natural Science	3	0	3	0	100	0
3	GCE-121	Communication and presentation Skills	Humanities & Social Sciences	3	0	3	0	100	0
4	HUM-122	Pakistan Studies	Humanities & Social Sciences	2	0	2	0	50	0
5	RAI-121	Basic Electronics	Foundation	2	1	2	3	50	50
6	RAI-122	Engineering Mechanics	IDTE	2	1	2	3	50	50
	Total					14	6	400	150
	Grand Total					23	3	55	50

			3rd Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
					Pr	Th	Pr	Th	Pr
1	RAI-211	Digital Logic Design	Breadth	3	1	3	3	100	50
2	RAI-212	Sensors and Data Acquisition	Breadth	2	1	2	3	50	50
3	RAI-213	Data Structures and Algorithms	Breadth	2	1	2	3	50	50
4	MET-214	Mechanical System Design	IDTE	2	1	2	3	50	50
5	NSC-211	Discrete Structure	Natural Science	3	0	3	0	100	0
		12	4	12	12	350	200		
_	Grand Total				6	2	4	55	50

			4th Semester						
S.No Course Code		Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
			•	Th Pr		Th	Pr	Th	Pr
1	NSC-221	Probability and Statistics	Natural Science	3	0	3	0	100	0
2	RAI-221	Artificial Intelligence	Breadth	2	1	2	3	50	50
3	RAI-222	Embedded System Design	Breadth	2	1	2	3	50	50
4	RAI-223	Control System	Breadth	2	1	2	3	50	50
5	GCE-221	Technical Writing	Humanities & Social Sciences	3	0	3	0	100	0
6	MGM-221	Organizational Behavior	Humanities & Social Sciences	2	0	2	0	50	0
	Total					14	9	400	150
	Grand Total					23	3	55	50

		5th	n Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
			Th	Pr	Th	Pr	Th	Pr	
1	MET-311	Pneumatics and Hydraulics Systems	IDTE	2	1	2	3	50	50
2	RAI-311	Data Science	Depth	2	1	2	3	50	50
3	RAI-312	Machine Learning Techniques	Depth	3	1	3	3	100	50
4	RAI-313	Robotic System & Programming	Depth	2	1	2	3	50	50
5	MGM-311	Entrepreneurship	Management Sciences	3	0	3	0	100	0
6	MGM-312	3	0	3	0	100	0		
			15	4	15	12	450	200	
	Grand Total					2	7	65	50

			6th Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
			, and the second	Th	Pr	Th	Pr	Th	Pr
1	RAI-321	Human-Robot Interaction	Depth	2	1	2	3	50	50
2	RAI-322	Wireless Sensor Networks	Depth	2	1	2	3	50	50
3	RAI-323	Deep Learning	Depth	2	1	2	3	50	50
4	RAI-324	IoT-Based Intelligent System Design	Depth	2	1	2	3	50	50
5	RAI-325	International Relations	Humanities & Social Sciences	3	0	3	0	100	0
6	RAI-326	Final year project I		0	3	0	9	0	100
	Total					11	21	300	300
	Grand Total					3	2	600	

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			7th Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
					Pr	Th	Pr	Th	Pr
1	RAI-411	Robotics in Healthcare	Depth	2	0	2	0	50	0
2	RAI-412	Generative AI	Depth	2	1	2	3	50	50
3	RAI-413	Soft Robotics	Depth	2	1	2	3	50	50
4	RAI-414	Cloud Computing	Depth	2	0	2	0	50	0
5	RAI-415	Web and App Development	Depth	2	1	2	3	50	50
6	RAI-415	Final year project II		0	3	0	9	0	100
	Total					10	18	250	250
	Grand Total					2	8	50	00

	8th Semester									
S. No.	Course Code Course		Nature	Credit	Hours					
				TH	PR					
01	RAI-421	16 Weeks Supervised Industrial / Field Training	(8x5=40 Hrs / Week)	00	16					
			00	16						
	Grand Total									
	Total CHs									

40. DEPARTMENT OF MECHANICAL ENGINEERING TECHNOLOGY

The aim of department of Mechanical Engineering Technology (MET) is to apply a practical approach by developing strong technical, analytical and problem-solving skills using engineering principles and technological developments for the creation of useful products and machines, which can improve the living standard of the community.

The goal of the department of Mechanical Engineering Technology is to provide students with a fundamental, well-rounded and application-oriented education focused on the domains of knowledge, skills and attitude of existing and new developments in Mechanical Engineering Technology.

The department of Mechanical Engineering Technology offers a 4 year Bachelor of Engineering Technology program in the field of Mechanical Engineering Technology. The Bachelor of Engineering Technology (Mechanical) program followed the Outcome Based Education (OBE) system to meet the criteria of National Technology Council (NTC) as per Sydney accord. For the implementation of OBE, all the tests, assignments and semester examinations assessed by specific course learning outcomes (CLOs) related to each subject.

Bachelor of Mechanical Engineering Technology program comprises two phases, the first phase consist of seven semesters in which students will learn the course having the theoretical knowledge and practical skills of the subjects of MET in the Campus as well as field visits. While in 2nd phase consist of one Semester (8th Semester) having Supervised Industrial/Field Training, where students can apply their theoretical and Practical knowledge to enhance their industrial as well as technical skills of real world applications by hands-on experience from well-known National and Multinational Organizations of the Country.

The department of Mechanical Engineering Technology has a well-organized student's centered society named as American Society of Mechanical Engineers (ASME). This society is actively engaged in conducting seminars, workshops, trainings, short courses, curriculum & extra curriculum activities for development of the department as well as providing a culture of technical education in the society.

The department of Mechanical Engineering Technology signed an MoU with the MUET SZAB campus Khairpur Mirs for partnership.

After successful completion of degree program, the graduates of MET will be able to serve in the various sectors and not limited to, Defence industries (Pak Army, Pak Navy, PAF and POF), Automobile industries (Toyota, Pak Suzuki Motors, Honda Motors, Nissan, Hino Pak etc), Oil and Gas industries (OGDCL, SSGC), Power industries (WAPDA, KESC), Communication industries (Railway, PIA, CAA), Process industries (Engro, FFC, Sugar, Cement, Chemical etc), Agro industries, Karachi Shipyard & Engineering Works, HMC Taxila, Steel Mills and

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other well-known national & multinational organizations, and numerous opportunities will be offered in the on-going mega projects of China Pakistan Economic Corridor (CPEC).

The Bachelor of Engineering Technology (Mechanical) program is accredited by National Technology council (NTC) and recognized by Higher Education Commission of Pakistan.

S.N o	Name with Qualification	Designation
1	Dr. Hussain Bux Marri B.E (MUET Jamshoro), PGD (MUET Jamshoro), Ph.D, Post-Doc (UK) hussain.marri@bbsutsd.edu.pk	Professor / Dean (FoET) (on Contract)
2	Dr. Aftab Ahmed Soomro B.E (MUET Jamshoro), M.E (UET,Taxila), Ph.D (Malaysia) aftabsoomro@bbsutsd.edu.pk	Associate Professor / Chairperson
3	Engr. Abdul Shakoor Shaikh B.E (MUET Jamshoro), M.E (MUET Jamshoro) engr.ashakoor@bbsutsd.edu.pk	Assistant Professor
4	Engr. Ayaz Ali Mandhan B.E (MUET Jamshoro), M.E (SAU Tandojam) <u>ayazmandan@bbsutsd.edu.pk</u>	Assistant Professor
5	Dr. Imdadullah Thaheem B.E (QUEST, Nawabshah), M.E (MUET Jamshoro), Ph.D (South Korea) imdadthaheem@bbsutsd.edu.pk	Assistant Professor

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6	Mr. Rukhsar Ali Mazari B.Tech (Hons) (MUET Jamshoro) rukhsarali@bbsutsd.edu.pk	Lecturer	
7	Engr. Ali Mustafa Shah B.E (QUEST), (MUET Khairpur Mirs) <u>mustafa@bbsutsd.edu.pk</u>	Lecturer	
8	Engr. Abdul Qadir Channa B.E (QUEST), M.E (MUET Jamshoro), Ph.D (Study Leave) abdulqadir@bbsutsd.edu.pk	Lecturer	
9	Mr. Riaz Ahmed Arain B.Tech (Hons) (MUET Jamshoro) mriazarain@bbsutsd.edu.pk	Lecturer (on Contract)	
10	Engr. Asmatullah Memon B.E (QUEST, Nawabshah), M.E (MUET Jamshoro) <u>asmatmemon@bbsutsd.edu.pk</u>	Lecturer	

A. Chairperson Message

Every age is the age of application of knowledge and skills to contribute in concerned filed of interest. Technical education and skills are the specialized knowledge and expertise to perform a specific tasks by use of specific tools and programs to solve the real world problems in all fields. It can open the doors of employability and enhance the living style of peoples.

Bachelor of Engineering Technology (Mechanical) program is the practical application of science and engineering in the field of Mechanical Technology to solve the broadly-defined real world problems.

A professional graduate of mechanical engineering technologist's job responsibilities is to acquire technical knowledge with hands-on practical Skills. During and after graduation he/she can apply their abilities in using technical equipment to make the products used in daily life, selling technical products, serving as manufacturers' technical representatives, or supervising varied construction projects and manufacturing processes.

B. Program Vision:

The Program Vision of the Mechanical Engineering Technology is to be recognized globally as a Centre of Excellence which offers high quality education, technological knowledge and outreach activities with innovation and creativity in the field of Mechanical Engineering Technology.

C. Program Mission:

The mission of the Bachelor of Mechanical Engineering Technology Program is to produce competent graduates, by imparting academic knowledge, technical skills, hands-on experience, and industrial exposure, to make them employable and leading entrepreneurs, to achieve sustainable socio-economic development

41. Program Educational Objectives (PEOs) of Mechanical Engineering Technology

- **PEO 1:** Graduates be able to apply knowledge of Mechanical Engineering Technology for identifying, addressing and solving broadly defined technological problems for socio-economic development.
- **PEO 2:** Graduates be able to produce by their analytical and technological skills through state-of-the-art experimental work that empowers them for developing innovative ideas for technological and sustainable professional growth in mechanical and allied disciplines.
- **PEO 3:** Graduates be able to demonstrate intellectual curiosity and actively pursue the acquisition of new skills and entrepreneurial abilities to contribute with ethical norms and commit to handle professional situations in their lives and work.

42. PLOs

PLO1: Engineering Technology Knowledge (SA1): An ability to apply knowledge of mathematics, natural science, Engineering Technology fundamentals and Engineering Technology specialization to defined and applied Engineering Technology procedures, processes, systems or methodologies.

PLO2: Problem Analysis (SA2): An ability to Identify, formulate, research literature and analyze broadly-defined Engineering Technology problems reaching substantiated conclusions using analytical tools appropriate to the discipline or area of specialization.

PLO3: Design/Development of Solutions (SA3): An ability to design solutions for broadly- defined Engineering Technology problems and contribute to the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PLO4: Investigation (SA4): An ability to conduct investigations of broadly-defined problems; locate, search and select relevant data from codes, data bases and literature, design and conduct experiments to provide valid conclusions.

PLO5: Modern Tool Usage (SA5): An ability to Select and apply appropriate techniques, resources, and modern technology and IT tools, including prediction and modelling, to broadly-defined Engineering Technology problems, with an understanding of the limitations.

PLO6: The Engineering Technologist and Society (SA6): An ability to demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to Engineering Technology practice and solutions to broadly defined Engineering Technology problems.

PLO7: Environment and Sustainability (SA7): An ability to understand and evaluate the sustainability and impact of Engineering Technology work in the solution of broadly defined Engineering Technology problems in societal and environmental contexts.

PLO8: Ethics (SA8): Understand and commit to professional ethics and responsibilities and norms of Engineering Technology practice

PLO9: Individual and Team Work (SA9): An ability to Function effectively as an individual, and as a member or leader in diverse teams.

PLO10: Communication (SA10): An ability to communicate effectively on broadly defined Engineering Technology activities with the Engineering Technologist community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO11: Project Management (SA11): An ability to demonstrate knowledge and understanding of Engineering Technology management principles and apply these to one's own work, as a member or leader in a team and to manage projects in multidisciplinary environments.

PLO12: Lifelong Learning (SA12): An ability to recognize the need for, and have the ability to engage in independent and life-long learning in specialist Engineering Technologies.

LABORATORIES	WORKSHOPS
Technical Drawing Lab	Machine Shop
CAD/CAM Lab	Fitting Shop
Engineering Mechanics Lab	Welding Shop
Mechanics of Machines Lab	Woodwork Shop
Hydraulic & Fluid Mechanics Lab	Foundry Shop
Thermodynamics Lab	Forging Shop
Material Testing Lab	
Heating, Ventilation & Air Conditioning Lab	
Automobile Lab	
Fuel Testing Lab	

Labs Detail with pictures The department of Mechanical Engineering Technology equipped with following state of the art laboratories and workshops:

SCHEME OF THE STUDY

			1. 1 st Y	ear 1 st Semester (1 st Se	emester)					
No	Course Code	Subject	Pre-		Credit	Hours	Weekly Contact Hours		Ма	rks
			requisite	requisite		PR	H	PR	TH	PR
4	HUM-111	Islamic Studies	None	None Humanities :		0	2	0	50	00
HUM-112 Ethics None Huma			пинтапшеѕ	2	U	2	U	50	00	
2	2 NSC-114 Applied Calculus and Analytical Geometry None Natural Science		Natural Science	3	0	3	0	100	00	
3	NSC-112	Applied Physics	None	Natural Science	2	1	2	3	50	50
4	NSC-113	Applied Chemistry	None	Natural Science	2	1	2	3	50	50
5	CSC-111	Computer Fundamentals	None	Computer Science	1	2	1	6	50	100
6	6 MET-111 Workshop Technology None			Engineering Foundation	1	2	1	6	50	100
	Total					6	11	18	350	300
	Grand Total					7	2	9	65	50

		1	st Year 2 nd Semes	ter (2 nd Semester)					
S No	Course	Subject	Pre-requisite	Nature	Credit	Credit Hours		Contact urs	Marks	
	Code	,			TH	PR	TH	PR	TH	PR
1	HUM-122	Pakistan Studies	None	Humanities	2	0	2	0	50	00
2	2 NSC-121 Linear Algebra and Differential Analytical Geometry Calculus and Analytical Geometry				3	0	3	0	100	00
3	EET-121	Electrical Technology	None	Engineering Foundation	2	1	2	3	50	50
4	MET-121	Technical Drawing and Graphics	None	Engineering Foundation	1	2	2	6	50	100
5	MET-122	Engineering Mechanics	None	Engineering Foundation	2	1	2	3	50	50
6	6 MET-123 Health safety & Environment None Engineering Foundation				2	1	2	3	50	50
	Total						13	15	350	250
		Grand Total	1	7	2	.8	60	00		

		2nd	Year 1st Semeste	er (3rd Semester						
S. No.	Course Code	Subject	Pre-requisite	Pre-requisite Nature		Credit Hours		Weekly Contact Hours		rks
					TH	PR	TH	PR	TH	PR
1	HUM-211	Communication Skills	None	Humanities	3	0	3	0	100	0
2	MET-211	CAD/CAM	Technical Drawing and graphics	Major based Breadth	0	2	0	6	0	100
3	MET-212	Basic Thermodynamics	None	Engineering Foundation	2	1	2	3	50	50
4	MET- 213	Mechanics of Materials	None	Engineering Foundation	2	1	2	3	50	50
5	MET- 214	Industrial Materials	None	Engineering Foundation	2	1	2	3	50	50
6	6 MET-215 Total Quality Management None Management Science					1	2	3	50	50
	Total						11	18	300	300
	_	1	7	2	.9	60	00			

	2 nd Year 2 nd Semester (4 th Semester)									
S. No.	Course Code	Subject	Pre-requisite	Nature	Credit Hours		Weekly Contact Hours		Ma	rks
			TH	PR	TH	PR	TH	PR		
1	HUM-221	Technical Writing	Communication Skills	Humanities	3	0	3	0	100	00
2	2 NSC-221 Probability and Statistics None Natural Science				3	0	3	0	100	00
3	MET-221	Mechanics of Machines	None	Major based Breadth	2	1	2	3	50	50
4	MET-222	Applied Thermodynamics	Basic Thermodynamics	Major based Breadth	2	2	2	6	50	100
5	5 MET-223 Fluid Mechanics and Hydraulic None Major based Breadth					2	2	6	50	100
	Total					5	12	15	350	250
	Grand Total						2	7	60	00

			3rd Year 1st S	emester (5th Sem	ester)					
S. No.	Course Code	Subject	Pre-requisite	Nature	Credit	Hours		Contact urs	Marks	
	Code				TH	PR	TH	PR	TH	PR
1	MET-311	Heat and Mass Transfer	Basic Major based Thermodynamics Depth		2	1	2	3	50	50
2	MET-312	Instrumentation and measurement	Electrical Technology	Electrical Major based		1	2	3	50	50
3	MET-313	Machine Design	Mechanics of Machine	Major based Depth	2	1	2	3	50	50
4	MET-314	Manufacturing Processes	None	Major based Depth	1	2	1	6	50	100
5	5 MFT-315 Mechanical Vibration None '		Major based Depth	2	1	2	3	50	50	
	Total					6	9	18	250	300
		Grand Total		1	.5	2	7	55	50	

		3rd Year 2nd	d Semester (6	th Semester)						
S. No.	Course Code	Subject	Pre-requisite	Nature	Credit	Hours	We Contac	ekly t Hours	Ма	rks
					TH	PR	TH	PR	TH	PR
1		Project Management	None	Management Science	2	1	2	3	50	50
2	MGM-322	Organizational behaviour	None	Management Science	3	0	3	0	100	0
3		Introduction to Automotive Systems	None	Major based Depth	2	1	2	3	50	50
4	MET-323	Heating, Ventilation & Air Conditioning (HVAC)	None	Major based Depth	2	1	2	3	50	50
5	MET-324	Energy Systems Technology	None	Major based Depth	2	1	2	3	50	50
6	MET-325	Project part-I	None	Major based Depth	0	3	0	9	0	100
			12	6	11	21	300	300		
		1	8	3	2	60	00			

	4 th Year 1st Semester (7 th Semester)									
S. No.	Course	Subject	Pre-requisite	Nature	Credit Hours		Weekly Contact Hours		Marks	
	Code	J,			TH	PR	TH	PR	TH	PR
1	MGM-411	Entrepreneurship	None	Management Science	3	0	3	0	100	0
2	MET-411	Mechatronics	Instrumentation and Control	Major based Depth	2	1	2	3	50	50
3	MET-412	Maintenance Technology	None	Major based Depth	2	1	2	3	50	50
4	MET-413	Advanced Manufacturing Technology	Manufacturing Processes	Major based Depth	2	1	2	3	50	50
5	MET-325	Project part-II	None	Major based Depth	0	3	0	9	0	100
	Total					6	9	18	250	250
		Grand	l Total		15		27		500	

	4 th Year 2nd Semester 8 th Semester										
S No	Course Code	Subject	Pre-requisite Nature	Subject Pre-requisite Nature		Credit	Hours	Conta	act Hours	Ma	ırks
3 110	Course Code	Subject	rie-requisite	Nature	TH	PR	TH	PR	TH	PR	
1	MET-421	16 Weeks Supervised Industrial / Field Training	None	(8x5=40 Hrs / Week)	0	16	0	640	00	800	
		Total			0	16	0	640	00	800	
		Grand Total			1	6		640	8	800	
			Distribution o	f 800 Marks							
	Training Performance						6	600			
Viva Voce						200					
	Further Details of Distribution of Marks of Training Performance										
	Student Report					200					
Industrial Trainer					350						
Industrial Visit by Academic Supervisor					200						
	Viva Voce						50				
Grand Total						8	00				

Program Duration

The duration of program is 4 Years including six months Supervised Industrial Training (SIT) of 8th Semester

43. DEPARTMENT OF BASIC SCIENCES & RELATED STUDIES

With the emerging market demands, the Bachelor of Engineering Technology departments are crucially complemented by the vital education of Basic Sciences & Related Studies. These include Pakistan Studies, Islamiat, Mathematics, Physics, Chemistry, Computer Science, Management Science and English. The courses are customized to align the departments with the Basic Sciences & Related Studies.

As industrial market has made the incorporation of broad development consistent with holistic understanding, it has been ensured to develop specific know-how over one's particular area of specialization. The fundamentals of Mathematics, Chemistry and Physics optimize the capability of students while understanding Information Technology (IT) and Management Sciences magnify academic and professional accomplishments.

The English Language, an international means of communication, is accorded great importance, considering all the courses having the medium of English language. The courses are tailored to meet the standards of indigenous as well as global demands. Special emphasis is placed upon refining, enhancing and grooming the communication skills which aptly necessitate grasping four fundamental skills evolving from Listening Skills, Reading Skills, Writing Skills, and Speaking Skills. Attributes, like personal, social and professional development, are inculcated to broaden the horizon so that the engineering technologists must become more effective and bankable in the competition-driven markets.

Similarly, Technical Writing holds a pivotal role to integrate the skills learnt from technology-centric courses to practically comply with formal professional writing. It is believed that technical knowledge is best utilized when it is harmonized with the English Language at par with the modern standards.

The department has a well-qualified diligent faculty engaged in enabling the graduates to acquire not only technical education but also practical academic understanding for their personal development and professional success.

The Department of Basic Sciences & Related Studies is currently equipped with the following state-of-the-art labs:

- 1. Physics Lab
- 2. Chemistry Lab
- 3. English language Lab
- 4. Computer Lab

44. FACULTY MEMBERS

S.No	Name with Qualification	Designation
01.	Dr Mushtaque Ahmed Memon MSc (Physics) U.S Jamshoro, Ph,D (Material Science & Engineering) China	Chairperson
02.	Mr. Syed Asim Ali Shah M.A , M.Phil (English) SALU	Lecturer
03.	Mr. Riaz Ahmed Mahar M.A (English) SALU	Lecturer
04.	Mr. Haresh Kumar Kataria B.S (Mathematics) SALU, M.S (Mathematics) Sukkur IBA	Lecturer
05.	Mr. Kashif Ali Dharejo B.S, M.S (Mathematics) SALU	Lecturer
06.	Mr. Syed Abul Qasim Shah B.B.A (Finance), M.B.A (Marketing) Sukkur IBA	Lecturer
07.	Mr Sanaullah Janvari B.S (Inorganic Chemistry), MPhil (Analytical Chemistry) U.S Jamshoro.	Lecturer
08.	Mr. Arif Zia Memon M.A , M.Phil (Pak Studies) SALU	Lecturer
09.	Mr Bilawal Hussain Magsi M.A (Islamic Culture) , M.Phil (Islamic Studies) SALU	Lecturer
10.	Ms. Shagufta Naz B.S (Computer Science) Sukker IBA, M.S (Computer Science) SALU	Lecturer
11.	Madam Rukhsana Soomro M.phil (English Linguistics)	Lecturer
12.	Mr. Sajjad Ali Lashari B.S (Computer Science) QUEST , M.S (in progress)	Lecturer
13.	Mr. Abdul Qadeer Leghari M.Sc. (Physics) U.S Jamshoro , M.Phil (in progress)	Lecturer
14.	Ms. Syeda Kanwal Naqvi M.Phil (HRM) SALU, PhD (in progress)	Jr. Instructor
15.	Ms. Farida Khanum Siyal M.A (English) U.S Jamshoro, M.Phil (in progress)	Jr. Instructor

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16.	Mr. Muhammad Fazal Ali Bozdar M.A (English) U.S Jamshoro, M.Phil (in progress)	Jr. Instructor	
17.			

A. VISION

The Department of Basic Sciences and Related Studies envisions becoming a center of excellence in scientific education and research. We strive to foster a dynamic learning environment that adapts swiftly to the challenges of the 21st century. Our goal is to produce globally competent professionals who contribute meaningfully to society through their expertise in basic sciences and related studies.

B. MISSION

The mission of BSRS is to empower our students with hands-on knowledge is basic sciences and related fields. We achieve this through high-quality teaching, innovative research, and practical application. By emphasizing both technical skills and effective communication, critical thinking, and problem-solving abilities, we prepare graduates to meet industry standards and succeed in their professional endeavors. Our commitment aligns with the university's mission of ethical leadership and community empowerment.

C. BRIEF INTRODUCTION OF THE DEPARTMENT

The Department of Basic Sciences and Related Studies (BSRS) at the Benazir Bhutto Shaheed University of Technology and Skill Development (BBSUTSD) is a cornerstone of academic excellence, fostering a holistic approach to education. The Department of BSRS plays a pivotal role in shaping well-rounded graduates. Comprising a diverse faculty, BSRS covers a spectrum of subjects, including natural and social sciences, arts and humanities, quantitative reasoning, Islamic studies, Pakistan studies and entrepreneurship. BSRS offers a comprehensive curriculum that equips students pursuing degrees in Bachelor of Engineering Technology, Bachelor of Science, Bachelor of Studies and Information Technology. By addressing mathematical challenges and enhancing communication skills, the department prepares graduates for success in their professional endeavors. Recognizing the evolving demands of the job market, BSRS emphasizes both technical and soft skills. Graduates emerge not only with technical expertise but also with effective communication, critical thinking and problem-solving abilities. The department ensures alignment with accreditation bodies requirements ensuring that graduates meet industry standards. Whether it's understanding the intricacies of natural phenomena or appreciating the nuances of entrepreneurship, BSRS fosters a well-rounded education. In summary, BSRS stands as a bridge between theoretical knowledge and practical application, nurturing competent professionals

who contribute meaningfully to society.

The department of Basic Sciences & Discrete Studies is currently equipped with the following labs:

- 1. Physics Lab
- 2. Chemistry Lab
- 3. Computer Lab (Shared)

45. LIST OF COURSES TAUGHT BY BSRS DEPARTMENT IN DIFFERENT PROGRAM

Course Title	Program	Credit Hours
Applied Physics	B.E(tech) Mechanical, Electrical, Electronics, Civil and BS Computer Science, BS Artificial Intelligence	2+1
Applied Chemistry / Chemistry	B.E(tech) Mechanical, BS Physics	2+1
Calculus and Analytical Geometry	B.E(tech) Mechanical, B.E(tech) Electrical, B.E(tech) Electronics, B.E(tech) Civil and BS Computer Science, BS Artificial Intelligence and BS Physics	3+0
Islamic Studies / Ethics	B.E(tech) Mechanical, B.E(tech) Electrical, B.E(tech) Electronics, B.E(tech) Civil and BS Computer Science, BS Artificial Intelligence, BS English and BS Physics	2+0
Discrete Structure	BS Computer Science and BS Artificial Intelligence	3+0
Linear Algebra & Differential Equations	B.E(tech) Mechanical, B.E(tech) Electrical, B.E(tech) Electronics, B.E(tech) Civil and BS Computer Science, BS Artificial Intelligence and BS Physics	3+0
Pakistan Studies	B.E(tech) Mechanical, B.E(tech) Electrical, B.E(tech) Electronics, B.E(tech) Civil and BS Computer Science, BS Artificial Intelligence, BS English and BS Physics	2+0
Complex Variable and Transform	B.E(tech) Electronics	3+0
Probability & Statistics	B.E(tech) Mechanical and BS Computer Science, BS Artificial Intelligence	3+0
Introduction to Management	BS Computer Science	3+0
Numerical Analysis	B.E(tech) Electrical, BS Computer Science	2+1
Entrepreneurship	B.E(tech) Mechanical, B.E(tech) Electrical, B.E(tech) Electronics, B.E(tech) Civil and BS Computer Science, BS Artificial Intelligence and BS Physics	2+0

46. PROGRAM OFFERED AT THE DEPARTMENT OF BASIC SCIENCES AND RELATED STUDIES

BS PHYSICS PROGRAM

A. VISION OF THE BS PHYSICS PROGRAM

To empower students with a deep understanding of the physical world, fostering critical thinking, innovation, and global citizenship. Our graduates will be equipped not only with scientific knowledge but also with the entrepreneurial mindset to address real-world challenges. Through cutting-edge research and community engagement, we aim to contribute to technological advancements and positively impact society.

B. MISSION OF THE BS PHYSICS PROGRAM

Our mission is to equip students with a strong foundation in physics, foster critical thinking and cultivate an entrepreneurial spirit. Through high-quality teaching, research and ethical values, we prepare graduates to lead globally and contribute to technological advancements.

47. PROGRAM EDUCATIONAL OBJECTIVES (PEOs) OF THE BS PHYSICS PROGRAM

PEO PEO STATEMENT

- PEO-1 To impart students with a conceptual understanding of the fundamental principles of physics, natural laws and their interpretation, as well as mathematical formulation of the physical phenomena in nature.
- PEO-2 To develop critical skills necessary for solving unknown problems from our physical surroundings.
- PEO-3 To develop the capability of analyzing, addressing and posing solutions to problems of natural importance and to instill a deep appreciation of the need for optimum utilization of natural resources and environment.
- PEO-4 To instill in students the habit of independent thinking, deep inquiry, and motivation for self-education.
- PEO-5 To sharpen our students' mathematical prowess making them capable of modelling, analyzing and predicting the

	behavior of physical processes.
PEO-6	To enhance our students' skills in scientific communication and the ability to clearly present physics and science in simple and clear language.
PEO-7	To introduce to students the spirit of working in interactive groups with the necessary requirements of scientific and professional ethics.
PEO-8	To develop hands-on experience in different laboratory techniques, modern instrumentation.
PEO-9	To enhance student competence in the design and conduct of experiments and analysis and presentation of experimental data and results.
PEO-10	To provide an in-depth understanding of some specialized area of physics through the option of elective courses.
PEO-11	To equip students with the necessary skill set for pursuing careers in physics education, research and industry in government or private organizations.

48. BRIEF INTRODUCTION OF THE BS PHYSICS PROGRAM

The Department of Basic Sciences and Related Studies at BBSUTSD is proud to introduce the Bachelor of Science (BS) program in Physics, starting from the 2024 batch. This four year (8 semesters) undergraduate program equips students with a solid foundation in fundamental physics principles. Beyond academic knowledge, our core aim is to instill a behavioral change in our students. We encourage personal development, fostering that benefit not only the individual but also the broader community. Our faculty of well-qualified and dynamic teachers is committed to achieving our goals. They inspire students to excel and contribute to pioneering studies. All our activities revolve around achieving excellence through boundary pushing inquiries. We impart both broad and deep knowledge in physics, equipping students for impactful careers.

Our program aims to nurture critical thinking, quantitative reasoning and creativity among students. Whether they aspire to pursue teaching, industrial or further studies, our BS Physics program prepares them for success in a dynamic scientific landscape. The BS Physics Program has following well-equipped laboratories:

- 1. Mechanics and Optics Lab
- 2. Heat and Thermodynamics Lab
- 3. Electromagnetism and Electronics Lab
- 4. Computer Lab

Sr. No.	Name with Qualification	Designation
1.	Dr Mushtaque Ahmed Memon MSc (Physics) U.S Jamshoro, Ph,D (Material Science &Engineering) China	Lecturer / Chairperson (In-charge)
2.	Mr. Abdul Qadeer Leghari M.Sc. M. Phil (Physics) U.S Jamshoro	Lecturer (Physics)
3.	Mr. Haresh Kumar Kataria B.S (Mathematics) SALU, M.S (Mathematics) Sukkur IBA	Lecturer (Mathematics)
4.	Mr. Kashif Ali Dharejo B.S, M.S (Mathematics) SALU	Lecturer (Mathematics)
5.	Mr. Syed Abul Qasim Shah B.B.A (Finance), M.B.A (Marketing) Sukkur IBA	Lecturer (Management Science)
6.	Mr. Arif Zia Memon M.A, M.Phil (Pak Studies) SALU	Lecturer (Pakistan Studies)
7.	Mr Bilawal Hussain Magsi M.A (Islamic Culture) , M.Phil (Islamic Studies) SALU	Lecturer (Islamic Studies)

49. FACULTY OF BS PHYSICS PROGRAM

50. Scheme of Studies for BS Physics Program (Batch-2025 and onwards)

		1st S	emester																
S.No	Course	Course Title	Knowledge	Credit	Hours	Contact Hours/Week		Total I	Marks										
	Code		Area/Domain	Th	Pr	Th	Pr	Th	Pr										
1	ENG-111	Functional English	Comp-1	3	0	3	0	100	0										
2	MTH-111	Calculus	Comp-2	3	0	3	0	100	0										
3	CSC-111	Introduction to Computing	Comp-3	2 1	2 1	2	2 1		2 1	2 1	2 1	2 1	2 1	1	1	2	3	50	50
4	PST-111	Pakistani Studies	Comp-4	2	2 0		0	50	0										
5	PHY-111	Mechanics-I	Found-1	2	0	2	0	50	0										
6	PHY-112	Waves and Oscillations	Found-2	3	0	3	0	100	0										
7	PHY-113	Lab Course-I (Mechanics)	Found-3	0	1	0	3	0	50										
8	8 MTH-110 Introduction to Mathematics (For Pre-Medical Students) Deficiency cours																		
		Total		15	2	15	6	450	100										
		Grand Total		1	7	2	1	55	50										

			2nd Semester						
S.No	Course Code	Course Title	Knowledge	Credit Hours			tact /Week	Total Marks	
	Code		Area/Domain	Th	Pr	Th	Pr	Th	Pr
1	CSC-121	Programming Fundamentals	Comp-5	2	1	2	3	50	50
2	MTH-121	Differential Equations	Gen - 1	3	0	3	0	100	0
3	PHY-121	Mechanics - II	Found-4	2	0	2	0	50	0
4	PHY-122	Heat & Thermodynamics	Found-5	3	0	3	0	100	0
5	ISL-121	Islamic Studies	Comp-6	2	0	2	0	50	0
6	CHM-121	General Chemistry	Gen - 2	2	1	2	3	50	50
7	PHY-123	Lab Course-II (Heat and Thermodynamics)	Found-6	0	1	0	3	0	50
	Total			14	3	14	9	400	150
	Grand Total				7	2	3	55	50

Bachelor of Engineering Technology & BS Program

BBS-UTECH Khairpur Mirs

			0.10						
			3rd Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Contact Hours/Week		Total Marks	
				Th	Pr	Th	Pr	Th	Pr
1	1 ENG-211 Communication Skills Comp-7		3	0	3	0	100	0	
2	2 MTH-211 Linear Algebra		Gen-3	3	0	3	0	100	0
3	PHY-211	Electricity and Magnetism - I	Found-7	2	0	2	0	50	0
4	PHY-212	Modern Physics	Found-8	3	0	3	0	100	0
5	CSC-211	Introduction to Artificial intelligence	Gen-4	3	0	3	0	100	0
6	6 PHY-213 Lab Course-III (Electricity and Magnetism) Found-9				1	0	3	0	50
	Total				1	14	3	450	50
	Grand Total				5	1	7	50	00

			4th Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours			tact /Week	Total Marks	
				Th	Pr	Th	Pr	Th	Pr
1	ENG-221	Academic report writing	Comp-8	3	0	3	0	100	0
2	PHY-221	PHY-221 Electricity and Magnetism - II Found - 10		2	0	2	0	50	0
3	MTH-221	Probability & Statistics	Gen-5	3	0	3	0	100	0
4	PHY-222	Optics	Found 11	3	0	3	0	100	0
5	ENS-221	Introduction to environmental science	Gen-6	3	0	3	0	100	0
6	6 PHY-223 Lab Course-IV (Optics) Found 12				1	0	3	0	50
	Total					14	3	450	50
	Grand Total				5	1	7	50	00

			5th Semester						
S.No	Course Code	Course Title Knowledge Area/Domain	Knowledge Area/Domain	Credit Hours			tact /Week	Total Marks	
			Th	Pr	Th	Pr	Th	Pr	
1	PHY-311	Mathematical Methods of Physics-I	Major-1	3	0	3	0	100	0
2	PHY-312	Electrodynamics-I	Major-2	3	0	3	0	100	0
3	PHY-313	Classical Mechanics	Major-3	3	0	3	0	100	0
4	PHY-314	Electronics-I	Major-4	3	0	3	0	100	0
5	PHY-315	Statistical Physics	Major-5	3	0	3	0	100	0
6	PHY-316	Lab Course – V (Electronics)	Major-6	0	2	0	6	0	100
			15	2	15	6	500	100	

			6th Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit	Hours	Contact Hours/Week		Total Marks	
			3	Th	Pr	Th	Pr	Th	Pr
1	1 PHY-321 Mathematical Methods of Physics II		Major-7	3	0	3	0	100	0
2	2 PHY-322 Quantum Mechanics-I		Major-8	3	0	3	0	100	0
3	PHY-323	Electrodynamics-II	Major-9	3	0	3	0	100	0
4	PHY-324	Electronics-II	Major-10	3	0	3	0	100	0
5	PHY-325	Nuclear Physics	Major-11	3	0	3	0	100	0
6	PHY-326	Lab Course-VI (Modern Physics)	Major-12	0	2	0	6	0	100
	Total			15	2	15	6	500	100
	Grand Total			1	7	2	1	60	00

			7th Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit	Hours		ntact /Week	Total	Marks
				Th	Pr	Th	Pr	Th	Pr
1	PHY-411	Quantum Mechanics-II	Major-13	3	0	3	0	100	0
2	PHY-412	Atomic & Molecular Physics	Major-14	3	0	3	0	100	0
3	PHY-413	Solid State Physics-I	Major-15	3	0	3	0	100	0
4	PHY-414	Digital Electronics	Elective-1	3	0	3	0	100	0
5	PHY-415	Solid State Physics-II	Major-16	3	0	3	0	100	0
6	PHY-416	Major-17	0	2	0	6	0	100	
	Total					15	6	500	100
		Grand Total		1	7	21		600	
			8th Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours			ntact /Week	Total	Marks
			-	Th	Pr	Th	Pr	Th	Pr
1	PHY-421	Fluid Dynamics	Elective-2	3	0	3	0	100	0
2	PHY-422	Introduction to nanoscience and nanotechnologies	Elective-3	3	0	3	0	100	0
3	PHY-423	Research Project	Major-18	0	3	0	9	0	150
4	MGM-421	Entrepreneurship		3	0	3	0	100	0
5	5 PHY-424 Computational Physics Elective-4			3	0	3	0	100	0
		Total		12	3	12	9	400	150
	Grand Total				5	2	21	5	50

Note: Research Project will be allotted in 7th semester. However, the credit hours for research projects will only be counted towards 8th semester.

51. BS ENGLISH PROGRAM

Introduction

English language plays a pivotal role in one's life and bright career. We the Benazir Bhutto Shaheed University of skills and development are very committed and curious to impart quality education with possessing strong verbal and written communication. We aim to upgrade our students in the domain of literature and linguistics.

A. VISION:

Vision is to become the center of excellence and there by inculcating positive human values through language and literature. In addition, the vision of department will be to enable the students not only keep pace with the changing and developing environment in the field of knowledge but also to become contributors to it.

B. MISSION:

- Calculating students and young scholars so that they can contribute for English language as No-native language of Pakistan.
- Enhancing the skills of communication through writing and speaking and to promote sense of research among the students.
- Developing students' a spirit of critical inquiry, capability to look beyond their parochial soundings. So that they can contribute positively in the wider social, cultural, political and ideological environment.

C. OBJECTIVES:

- To impart not only knowledge but also vision through literature and to provide constructive services for the understanding of English Language.
- To develop critical and analyzing thinking of the students not for sack of criticism but for pursuit of truth and knowledge.
- To impart morality because most of the people do well but they do not know principles behaving. Thus, morality makes us understand the principle of behavior.

52. FACULTY OF BS ENGLISH DEPARTMENT

S.NO	NAME WITH QUALIFICATION	DESIGNATION
1	Mr.Syed Asim Ali Shah Bukhari	Lecturer
2	Mr.Riaz Ahmed Mahar	Lecturer
3	Ms. Rukhsana Soomro	Lecturer
4	Mr. Fazal Ali Bozdar	Jr. Instructor
5	Miss Farida Khatoon	Jr. Instructor

53. Scheme of Study BS English

			1st Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain		edit urs	Con Hours	s/Wee	Total I	Marks
				Th	Pr	Th	Pr	Th	Pr
1	GC-101	Study Skills	General Compulsory(Foundational)	3	0	3	0	100	0
2	GC-102	Introduction to Computer Information Technology (CIT)	General Compulsory(Foundational)	3	1	3	3	100	50
3	GC-103	Islamic Studies	General Compulsory(Foundational)	2	0	2	0	50	0
4	ELL-101	English 1 Functional English	English Language and Literary (Foundational)	3	0	3	0	100	0
5	ELL-102	Introduction to Literature	English Language and Literary (Subject-Specific Foundational)	3		3	0	100	0
6	Foundational)		English Language and Literary (Subject-Specific Foundational)	3 0		3	0	100	0
	Total					17	3	550	50
		Grand 1	「otal	18		20		600	
			2nd Semester						
S.No	Course Code	Course Title	Knowledge Area/Domain	Credit Hours			tact /Week	To Ma	
				Th	Pr	Th	Pr	Th	Pr
1	GC-104	Pakistan Studies	General Compulsory(Foundational)	2	0	2	0	50	0
2	GC-105	Elementary Mathematics	General Compulsory(Foundational)	3	0	3	0	100	0
3	GC-106	Introduction Psychology	General Compulsory(Foundational)	3	0	3	0	100	0
4	ELL-104	English 2 Expository Writing	English Language and Literary (Foundational)	3	0	3	0	100	0
5	Introduction to Phonetics and Findlish Language and Literary (Subject-Speci			3	0	3	0	100	0
6	ELL-106	Literary Forms and Movements	English Language and Literary (Subject-Specific Foundational)	3	0	3	0	100	0
	Total					17	0	550	0
		1	7	1	7	55	50		

			3rd Semester							
S.No	Course Code	Course Ti	tle	Knowledge Area/Domain	_	edit ours		ntact s/Week	_	tal rks
	Code			Alea/Domain	Th	Pr	Th	Pr	Th	Pr
1	GC-201	Introduction to Information and C Technology(CIT) Skills	Computer	Foundational	2	1	2	3	50	50
2	GC-202	Islamic History and Culture		General	3	0	3	0	100	0
3	GC-203	Global Poetry		General	3	0	3	0	100	0
4	Techniques of the contraction and the contraction of the contraction o				3	0	3	0	100	0
5							3	0	100	0
6	ELL-203	Introduction to Morphology		Subject-specific	3	0	3	0	100	0
		Tota	l		17	1	17	3	550	50
		Grand T	otal		,	18	20		600	
			4th Semester		•					
S.No	Course	Course Title	Knowledge /	Area/Domain	Credit Hours		Con Hours		Total	Marks
	Code		· ·		Th	Pr	Th	Pr	Th	Pr
1	GC-204	Human Rights and Citizenship	Compulsory Gene	eral (Foundational)	3	0	3	0	100	0
2	ELL204	English 4 Academic Reading and Writing	English Language and	Literary (Foundational)	3	0	3	0	100	0
3	ELL-205	Classical and Renaissance Drama	English Language a Specific Fo	nd Literary (Subject- undational)	3	0	3	0	100	0
4	ELL-206	Classical Poetry	English Language a Specific Fo	nd Literary (Subject- undational)	3	0	3	0	100	0
5	ELL-207	Semantics	English Language and Literary ()Subject- Specific Foundational			0	3	0	100	0
6	ELL-208	Introduction to Syntax	English Language ar Specific Fo	nd Literary ()Subject- oundational	3	0	3	0	100	0
		Total			18	0	18	0	600	0
	Grand Total						1	8	60	00

54. Quality Enhancement Cell (QEC)

The Quality Enhancement Cell (QEC) at the Benazir Bhutto Shaheed University of Technology and Skill Development (BBSUTSD) Khairpur Mirs has been established in accordance with the Quality Assurance (QA) framework of the Higher Education Commission (HEC) of Pakistan. The QEC is entrusted with the responsibility of maintaining and enhancing the quality of education and research at BBSUTSD, ensuring public confidence in the degrees awarded by the University. In pursuit of this objective, the QEC carries out the following functions aimed at promoting excellence and fostering continuous improvement:

- 1. QEC is responsible for reviewing and enhancing the quality standards of the degrees conferred by the University.
- 2. QEC is responsible for promoting public confidence that the quality and standards of the award of degrees are enhanced and safeguarded.
- 3. QEC shall ensure and review the Self-Assessment Reports (SARs) prepared by each academic department of the University.
- 4. QEC has mandated to review quality standards by auditing academic standards and the quality of teaching, learning and management in each subject area.
- 5. QEC will be responsible for defining clear and explicit standards as points of reference for the reviews to be carried out. It should also help the employees to know as to what they could expect from candidates.
- 6. QEC will be responsible to develop quality assurance processes and methods of evaluation to affirm that the quality of provision and the standard of awards are being maintained and to foster curriculum, subject and staff development, together with research and other scholarly activities.
- 7. QEC will be responsible to ensure that the University's quality assurance procedures are designed to fit in with the arrangements in place nationally for maintaining and improving the quality of Higher Education.
- 8. QEC staff will get capacity-building training from HEC on the subject of quality in higher learning and will be responsible for implementing and disseminating that acquired knowledge in the learning environment of the institution.
- 9. Last but not the least, the QEC shall be responsible to conduct Institutional audit, Departmental review, Student and employer feedback, and overall quality improvements in institutional management/leadership.
- 10. QEC shall be responsible for correspondence to HEC QAA section and National & International Quality Assurance Agencies.



Dr. Asim Ali Abro Director QEC



Engr. Shamsuddin Lakho Assistant Director QEC



Mr. Nabi Bux Maitlo Data Entry Operator

55. Career Development Center – CDC

The Career Development Center (CDC) at Benazir Bhutto Shaheed University of Technology and Skill Development – BBSUTSD, Khairpur Mirs focuses on range of services including but not limited to: facilitating students and graduating classes in the overall process of self-evaluation, creating awareness about career opportunities, assisting in career profiling and job search, internships placement, increasing the employability, developing strong linkages with industry, financial aids, marketing and outreach, and supporting graduates and alumni in their career progression.

Career Development Center (CDC) prime objectives are to develop university-industry linkages for sustainability, financial aids, internships and jobs placement, and career development of students and alumni.

To achieve the proposed objectives and ensure the compliance of committed goals Career Development Center (CDC) at Benazir Bhutto Shaheed University of Technology and Skill Development – BBSUTSD, Khairpur Mirs delegate specific tasks to following attached offices.

a. Career Counseling & Alumni Affairs

The Career Counseling & Alumni Affairs office helps students and alumni to achieve lifelong professional success by offering career counseling and advisories for selecting the suitable career path. The office coordinates industry for internships and jobs placement of graduatingstudents and alumni.

b. University-Industry Linkages Office

University-Industry linkages Office serves as point of contact for industry, small and mediumenterprises (SMEs), corporations, companies, government its Institutions and allied departments, corporate, and social sector of the country and abroad. The University-IndustryLinkages (UIL) Office primarily focuses on bridging gap between Academia and Industry.

c. Marketing & Outreach Office

The Marketing and Outreach Office identifies needs, develops concepts to meet the identified needs, and communicates it to intended audience. To strategize marketing and outreach for aforementioned objectives, Office of Marketing & Outreach under the umbrella of Career Development Center takes the leading role. Marketing & Outreach Office outreach talented students by carrying outreach programs and awareness drives in various parts of the country.

d. Student Financial Aid Office

Student Financial Aid Office (SFAO) is dedicated to elevating the socio-economic suitability of the needy & meritorious students by providing access to quality education through need and merit-based scholarships, financial assistances, and interest free educational Loans. The SFAO ensures that no student should leave the university only due to financial constraints. Currently, Student Financial Aid Office at Benazir Bhutto Shaheed University of Technology and Skill Development, Khairpur Mirs managing and offering following

- HEC Need-Based Scholarship Program
- HEC Ehsaas Undergraduate Scholarship Program

- Sindh HEC Merit-Cum-Need Scholarship Program
- Sindh Endowment Fund Scholarship Program
- Institutional Need-Cum-Merit Scholarship Program
- Diya Pakistan Scholarship Program
- Khairpur District Need-Cum-Merit Scholarship Program

Team Career Development Center



Dr. Imdadullah Thaheem

Director Career Development Center



Engr Ayaz Ali Mandan

Deputy Director University-Industry Linkages



Engr Abdul Shakoor Shaikh

Deputy Director Student Financial Aid



Irfan Ali Memon

Assistant Director Career Counseling & Alumni



Syed Abul Qasim

Deputy Director Marketing and Outreach

56. SPORTS / CO. CURRICULAR COMMITTEE

Sports Section Office

The Sports Section Office at Benazir Bhutto Shaheed University of Technology and Skill Development in Khairpur Mirs plays a pivotal role in enriching the campus life of our students. Committed to promoting physical wellness, teamwork, and competitive spirit, the office organizes a variety of sports and recreational activities. Our aim is to cultivate a dynamic environment where students can excel both academically and athletically, ensuring a balanced and holistic development during their time at the university.

Games Offered:

- 1. Cricket
- 2. Volleyball
- 3. Tug of War
- 4. Badminton
- 5. 100 meter Race
- 6. Dart Board
- 7. Arm wrestling
- 8. Shot put
- 9. Ludo
- 10. Fun Games

Annual Celebrations:

Every year, our campus comes alive with thrilling sporting events that bring together students from all disciplines. These events include:

- 1. **SpoCo-Fest**: A celebration of sportsmanship and skill where students showcase their prowess in various disciplines.
- 2. **Solidarity Trophy**: A symbol of unity and camaraderie, where teams compete passionately to win the prestigious trophy.
- 3. **Freedom Trophy**: Marking our nation's independence with fervor and sporting spirit, this event is a testament to our patriotic zeal.

The Sports Section Office provides top-notch facilities, expert coaching, and organizes regular events and competitions. This ensures that every student has the opportunity to engage in their favorite sports, develop new skills, and maintain a healthy and active lifestyle.

Students Participation in Sports event.

Bachelor of Engineering Technology & BS Program

BBS-UTECH Khairpur Mirs

Students from Benazir Bhutto Shaheed University of Technology and Skill Development (BBSUTECH), Khairpur Mirs, proudly participated in the Prime Minister's University Sports Olympiad held at the Pakistan Sports Complex, Islamabad. The event, organized by the Prime Minister's Youth Programme and HEC, featured over 5,000 athletes from 46 universities competing in 12 sports. BBSUTSD's participation reflects its commitment to promoting student development, teamwork, and national unity through extracurricular engagement.







Few glimpse of Sport activities at BBSUTSD Khairpur Mirs.













Sports Section Office Bearers







Engr. Asmatullah Memon In charge-Sports Section.



Mr. Fahadullah Soomro Sports Assistant Email: sports@bbsutsd.edu.pk

57. ADMISSION RULES & REGULATIONS (POLICY GUIDE LINES)

A. ELIGIBILITY CRITERIA- ADMISSION SESSION 2025-26

- i. For admission to the Bachelor of Engineering Technology/BS Programme, the candidates must fulfil one of the following requirements with a minimum of 50% Marks:
- ii. Three years Diploma of Associate Engineer in the relevant field from Sindh Board of Technical Education, Karachi / other Technical Boards
- iii. H.S.C.(Pre-Eng/Pre-Medical) or equivalent from the Board of Intermediate Education.
- iv. The candidate has to appear in Pre Admission Test Conducted by the University

UNDERGRADUATE PROGRAMME		
Bachelor of Engineering Technology/	Duration	Eligibility / Criteria
BS Programme		
1. Civil Engineering Technology		HSc (Pre-engineering) or equivalent Minimum 50% marks
2. Electrical Engineering Technology		2. HSc (Pre-Medical) or equivalent Minimum 50% marks can also
3. Electronics Engineering Technology		apply to Engineering Technology programs on the following terms and
4. Mechanical Engineering Technology	4-Year	conditions: -
5. Robotics & Al Engineering Technology	4 I Cai	➤ They will study an additional Math course (FSc Level designed
		by the HEI) in the first Semester of the Engineering
		Technology Program The course credit hours will not be
		counted in the degree credit hours.
		3. Three Years Diploma of Associate Engineer (Minimum 50% marks
6. BS Computer Science		HSC in P. E, P.M or Equivalent, Computer Science and Three (03) Year
		Diploma of Associate Engineer (DAE) in Electrical, Electronics,
7. BS Artificial Intelligence		Telecommunication, CIT, Bio-Medical, Instrumentation and Process
7. Bo Artificial Intelligence		Control, Avionics, Instrumentation, Radar Technology, Automation,
		Radio Technology and Information Technology.
8. BS English	4-Year	HSC in P.E, P.M or Equivalent
		Intermediate in Arts, Commerce, Computer Science
		Three (03) Year Diploma of Associate Engineer (DAE) in any
		discipline. ·
9. BS Physics	4-Year	HSC in P.E, P.M or Equivalent
		➤ Three (03) Year Diploma of Associate Engineer (DAE) in any
		discipline.

- 1. 50 % reserved guota each for DAE and HSC or equivalent.
- 2. 10% reserved quota for female candidates is allocated. (Female candidates are encouraged to apply).
- 3. Hostel and Transport facilities for the students (Boys and Girls) are also available.

58. APPLICATION FORM FOR ADMISSION

Online Admission forms are available on the admission portal of the University admissions.bbsutsd.edu.pk

Guidelines for students applying for admissions session 2025-26

If you feel any difficulty in uploading your online Admission form please don't hesitate to contact the Directorate of Admissions on the following contact numbers:

PTCL No: 0234-687059

Cell No: 0301-209054 Mr Abul Qasim Assistant Director of Marketing and Outreach

Cell No: 0333-7591475 Riaz Ahmed Arain Director Admissions

Cell No: 03135452256 Mr Din Muhammad, Clerk, Admission desk

Email ID: director-admission@bbsutsd.edu.pk

Candidates are required to upload following scanned ORIGINAL documents on the Admission Portal https://admissions.bbsutsd.edu.pk of the BBSUTSD Khairpur Mirs at the time of online Registration.

59. IMPORTANT ADMISSION DATES

To be announced on Portal

How to fill online Admission form - INSTRUCTIONS:

Register by clicking the "Register" Button. The username will be your CNIC or B-form number.

Log in with your username and password and fill in the online application form.

You must upload scanned ORIGINAL documents as mentioned against the programs in below list.

Print your bank challan and submit the application fee in any branch of HBL. Upload a copy of the paid bank challan from your account. After successful registration admit card will be generated automatically and will be available for download after the closing date of online application submission. The candidate has to print out and bring an admit card on the pre-entry test date.

Bachelor of Engineering Technology & BS Program

BBS-UTECH Khairpur Mirs

Kindly provide valid and correct mobile phone numbers. All instructions/announcements will also be communicated to you through cell phone numbers.

If the below-mentioned documents are not uploaded before the due date, the submitted application form will not be considered for admission. After submitting the application form, please wait for further instructions.

60. Documents required for admission in Bachelor of Science/Bachelor of Engineering Technology

You must upload scanned ORIGINAL documents i.e:

- CNIC / B-form of the candidate.
- domicile, PRC,
- Marks Certificates of Matriculation
 - Marks Certificates of Intermediate / DAE or equivalent.

 Note: (Candidates waiting for HSC or DAE results are exempted from submission of Intermediate/DAE Marks Certificates during the registration process. However, they are required to submit their Intermediate / DAE marks certificates soon after the declaration of results).

61. Pre-admission Test

- a. All the eligible candidates are required to appear in the admission Test to be organized by the University
- b. Candidates applying against the reserved quota shall also have to appear in the Pre-admission Test.

62. Interviews & Admissions

Selected candidates will have to appear for the interview before the Admission Committee for verification of documents.

63. REGISTRATION FEE STRUCTURE BACHELOR OF SCIENCE/BACHELOR OF ENGINEERING TECHNOLOGY PROGRAM SESSION 2025-26:

REGISTRATION, PROSPECTUS, AND ADMISSION TEST FEE STRUCTURE

Rs.2000/= Rupees Two Thousand Five Hundred only (to be deposited into HBL at the time of registration)

64. FEE STRUCTURE FOR 1ST SEMESTER 1ST YEAR SESSION 2025-26

- A. BACHELOR OF ENGINEERING TECHNOLOGIES
- B. BACHELOR OF SCIENCE FOR THE COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE

S#	Detail	SEMESTER								
3#		1st	2nd	3rd	4th	5th	6th	7th	8th	
1	Admission Fee (Per Year)	12,000	-	12,000	-	12,000	-	12,000	-	
2	PERN Fee (Per Year)	2,000	-	2,000	-	2,000	-	2,000	-	
3	Smart Identity Card Fee (Per Year)	500	-	500	-	500	-	500	-	
4	Enrolment Card Fee (Once)	1,500	-	-	-	-	-	-	-	
5	HSC / DAE Marks Certificate Verification Fee (Once)	2,500	-	-	ı	ı	ı	ı		
6	University Caution Money Deposit – Refundable*	2000	-	-	ı	ı	ı	ı	ı	
7	Tuition Fee (Per Semester)	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	
8	Sports Charges (Per Semester)	500	500	500	500	500	500	500	500	
9	Development Charges (Per Semester)	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	
10	Transport Charges (Per Semester)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	
11	Library Fee (Per Semester)	1250	1250	1250	1250	1250	1250	1250	1250	
12	Medical Fee (per Semester)	500	500	500	500	500	500	500	500	
13	Lab Equipment Maintenance (Per Semester)	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	
	Total	46,000	25,500	40,000	25,500	40,000	25,500	40,000	25,500	
	GRAND TOTAL	268000								

C. BACHELOR OF SCIENCE IN ENGLISH AND PHYSICS

S#	Detail	SEMESTER							
3#	Detail	1st	2nd	3rd	4th	5th	6th	7th	8th
1	Admission Fee (Per Year)	10,000		10,000		10,000		10,000	
2	PERN Fee (Per Year)	2,000		2,000		2,000		2,000	
3	Smart Identity Card Fee (Per Year)	500		500		500		500	
4	Enrolment Card Fee (Once)	1,500		-		-		-	
5	HSC / DAE Marks Certificate Verification Fee (Once)	2,500		-		-		-	
6	University Caution Money Deposit – Refundable*	2000							
7	Tuition Fee (Per Semester)	12000	12,000	12000	12,000	12000	12,000	12000	12,000
8	Sports Charges (Per Semester)	500	500	500	500	500	500	500	500
9	Development Charges (Per Semester)	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
10	Transport Charges (Per Semester)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
11	Library Fee (Per Semester)	1000	1000	1000	1000	1000	1000	1000	1000
12	Medical Fee (per Semester)	500	500	500	500	500	500	500	500
13	Lab Equipment Maintenance (Per Semester)	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
	Total	41,750	23,250	35750	23,250	35750	23,250	35750	23,250
	GRAND TOTAL	242000							

65. FEE RETURN POLICY

- i. In case a student intends to cancel his/her admission in the university, the full tuition fee shall be refunded till the 7th day of commencement of classes.
- ii. Half of the fee shall be refundable from the 8th-15th day of commencement of classes.
- iii. After the 15th day of the commencement of classes no fee shall be returned except the caution money.

Refund of caution money can be claimed within one year after passing out from the university

66. EXAMINATION FEES

Semester Examination including Marks sheet fee: Rs.3000/=

67. HOSTEL FEE- SESSION 2025-26

1. Hostel allotment form fee (at the time of admission:	Rs.500/=
2. Hostel fee (per seat) per annum	Rs.14000/=
3. Hostel Deposit (refundable) once	Rs.1,000/=
4. Identity Card fee	Rs. 500/=
5. Utility charges per annum	Rs. 6000/=
Total	Rs.22000/=

68. PRE-ADMISSION TEST

The Pre-Admission test is mandatory for all candidates applying for admission to any program being offered by the BBSUTSD Khairpur Mirs.

A. Entry Test Pattern for Admission to BACHELOR OF SCIENCE/BACHELOR OF ENGINEERING TECHNOLOGY PROGRAM SESSION 2025-26:

- a. 60 MCQ test will be conducted from Intermediate level English, Mathematics, Physics & Chemistry subjects from students having Intermediate Pre-Engineering qualifications.
- b. 60 MCQ test will be conducted from Intermediate level English, Biology, Physics & Chemistry subjects from students having Intermediate Pre-Medical qualifications.
- c. 60 MCQ test will be conducted from Intermediate level related to Arts and Commerce subjects from students having Intermediate in Arts and Commerce.

69. MERIT CRITERIA FOR ADMISSION TO BACHELOR OF SCIENCE/BACHELOR OF ENGINEERING TECHNOLOGY PROGRAM SESSION 2025-26

Merit criteria for admission to BS/Bachelor of Engineering Technology Program for Academic Session 2025-26 be allowed on the following weightage calculations:

50% Marks secured in Pre-Admission Test 50% Marks of final Degree of the candidate

70. DEDUCTION OF MARKS DUE TO GAP IN ENTRY QUALIFICATION SESSION 2025-26

In case of a gap or repetition of Intermediate / DAE examinations, the merit will be determined as described below:

- i. Students passed Intermediate /DAE in 2023 = (1 % of the aggregate marks will be deducted)
- ii. Students passed Intermediate /DAE in 2022 = (2 % of the aggregate marks will be deducted)

iii. Students passed Intermediate /DAE in 2021 and before = (3 % of the aggregate marks will be deducted)

71. VERIFICATION OF ORIGINAL DOCUMENTS

After entrance test results all the successful candidates shall have to produce original documents before the admission interview committee of the BBUTSD. List of documents to be verified at the time of the interview is available on online Admission form.

ADDITIONAL MARKS FOR HAFIZ-E-QURAN

The candidate who has certificate of Hafiz-e-Quran issued by the MADARSA (Registered) clear the test of Hafiz taken by the University, are also considered to have additional 20 marks to be added to the marks of DAE / HSC results

72. MEDICAL FITNESS

The final selection of the candidates shall be made subject to the medical fitness Certificate of the Medical Officer (RMP) of the University.

73. CATEGORY WISE DISTRIBUTION OF SEATS IN BACHELOR OF SCIENCE/BACHELOR OF ENGINEERING TECHNOLOGY PROGRAM SESSION 2025-26

	CATEGORY/ REGION	Bachelor of Engineering Technologies							Bachelor of Sciences		
S.#		CET	EET	ESET	MET	RET	cs	A. I	BS ENG	BS Phy	
1	D.A.E Open Merit (Sindh Province)	33	20	19	19	19	19	19	19	19	
2	HSC Open Merit (Sindh Province)	33	19	20	20	20	20	20	20	20	
3	Female Candidates (HSC/DAE) (Sindh Province)	8	5	5	5	5	5	5	5	5	
4	Real sons/daughters/(brothers /sisters) of BBSUTSD Khairpur employees.	1	1	1	1	1	1	1	1	1	
5	Armed Forces	1	1								
6	Punjab		1		1	1	1	1			
7	KPK/FATA			1	1	1	1	1	1	1	
8	Balochistan	1		1					1	1	
9	Gilgit Baltistan	1		1					1	1	
10	Azad Jammu Kashmir (AJK)		1		1	1	1	1			
11	Religious Minorities	1	1	1	1	1	1	1	1	1	
12	Differently abled persons	1		1					1	1	
13	*Staff of the BBSUTSD Khairpur Mirs		1		1	1	1	1			
	TOTAL	80	50	50	50	50	50	50	50	50	

*Transfer of technology facility may be allowed against both of the two seats reserved for staff of the BBSUTSD

Legend

B.E.Tech = Bachelor of Engineering Technology
 BS = Bachelor of Science

CET = Civil Engineering Technology
EET = Electrical Engineering Technology
ESET = Electronics Engineering Technology
MET = Mechanical Engineering Technology
RET = Robotics & Al Engineering Technology

BS CS = BS in Computer Science

BS ENG = BS in English BS PHY = BS in Physics

Note: Vacant seats in any category will be filled on open merit with equal weightage for HSC & DAE. Vacant seats of DAE or HSC shall be transferred, and vice versa.

74. ADMISSION AGAINST THE RESERVED SEATS

A. Admission against the seats reserved for the employees of the University

Real sons/daughters/brothers/sisters of regular employees of the University (serving or retired, deceased or working) shall be considered for admission to first year class against the reserved seats on the following criteria,

- a. First preference will be given to real Sons/Daughters of employees who are confirmed in the University service and have at least three years continuous university service at their credit.
- b. Second preference will be given to real Sons/Daughters of employees who are confirmed in the University service and have less than three years University service at their credit.
- c. Third preference will be given to real Sons/Daughters of employees who are not confirmed in the University service and have at least three years continuous University credit at their credit

- d. Fourth preference will be given to real Brothers/Sisters of employees who are confirmed in the University service and have at least three years continuous University service at their credit.
- e. Fifth preference will be given to real Brothers/Sisters of employees who are confirmed in the University service and have less than three years continuous University service at their credit.
- f. Sixth preference will be given to real Brothers/Sisters of employees who are not confirmed in the University service and have at least three years continuous University service at their credit.
- g. Seventh preference will be given to real Sons/Daughters of employees who are not confirmed in the University service and have less than three years University service at their credit
- h. Eighth preference will be given to real Brothers/Sisters of employees who are not confirmed in the University service and have less than three years University credit at their credit

Note: The merit with regard to the category C will be determined as per policy of the University. A copy of the appointment order and confirmation order of the employee must be attached with the admission from.

B. ARMED FORCES

Candidates seeking admission on seats reserved for Armed forces should apply through G.H.Q, N.H.Q and A.H.Q. Direct applications shall not be entertained.

C. RECIPROCAL

The candidates from the other provinces, seeking admission on reciprocal basis should send their applications through their provincial authority. Direct applications shall not be entertained.

D. AJK AND GILGIT BALTISTAN

- a) They have to apply (in advance copy) for admission and submit forwarded copy from competent authority for admission in the university
- b) They have to appear in Pre-Admission Test for admission in Bachelor of Engineering Technologyat the University.

E. RELIGIOUS MINORITIES

One seat in each technology is reserved for Religious Minorities

F. DIFFERENTLY ABLED PERSONS

The candidate for **Differently abled** quota has to provide **Differently abled** certificate of approved medical board from the Government of Sindh..

G. STAFF OF THE UNIVERSITY

The staff will be allowed admission in Bachelor of Engineering Technology against reserved quota the submission of NOC and study leave from the authority

in first year on

75. CLOSING OF ADMISSION

The admission for session will be closed at the end of 04th week from the date of commencement of classes. After this period the vacant seats will not be filled at any stage.

76. CANCELLATION OF ADMISSION

Due to continuous absence from the classes for a period of one month during the session. Violation of submitted under taking.

77. N.O.C. & STUDY LEAVE FOR IN-SERVICE CANDIDATES

In service candidates applying for admission must produce Study Leave along with NOC from the competent authority at the time of admission

78. STUDENTS IDENTITY CARD

The students, after getting admission in the University will be issued University identity card.

79. FINAL AUTHORITY REGARDING ADMISSION

The decision of Admission Committee of this University in respect of admission is final and not challengeable.

80. DISQUALIFICATION

Any attempt to influence directly/indirectly for admission shall render the candidate disqualified.

The admission form is liable to be rejected if any entry is found incomplete/incorrect /misleading. The alteration or erasing should not be allowed in the form.

81. PRE-REQUISITE QUALIFICATIONS FOR ADMISSION IN BACHELOR OF ENGINEERING TECHNOLOGY DEGREE PROGRAMMES

- A. Bachelor of Engineering Technology (Civil)
 - i. HSC (Pre-Engineering)
 - ii. DAE (Civil)
 - iii. DAE (Arch.)
 - iv. DAE (Land & mine surveying)
- B. Bachelor of Engineering Technology (Electrical)
 - i. HSC (Pre-Engineering)
 - ii. DAE (Electrical)
 - iii. DAE (Electronics)
 - iv. DAE (Instrumentation & Process Control)
 - v. DAE (Telecommunication)
 - vi. DAE (Avionics)
 - vii. DAE (Instrumentation)
 - viii. DAE (Information Technology)
 - ix. DAE (Radar Technology)
 - x. DAE (Automation)
 - xi. DAE (Radio Technology)
- C. Bachelor of Engineering Technology (Electronics)
 - i. HSC (Pre-Engineering)
 - ii. HSC (CIT)
 - iii. DAE (Electrical)
 - iv. DAE (Electronics)
 - v. DAE (Telecommunication)
 - vi. DAE (Bio-Medical)
 - vii. DAE (Instrumentation & Process Control)
 - viii. DAE (Avionics)
 - ix. DAE (Instrumentation)

- x. DAE (Radar Technology)
- xi. DAE (Automation)
- xii. DAE (Radio Technology)

D. Bachelor of Engineering Technology (Mechanical)

- i. HSC (Pre-Engineering)
- ii. DAE (Mechanical)
- iii. DAE (Auto & Farm/ Diesel)
- iv. DAE (Refrigeration & Air Conditioning)
- v. DAE (Bio-Medical)
- vi. DAE (Dies & Molding)
- vii. DAE (Automation)
- viii. DAE (Power)

82. PRE-REQUISITE QUALIFICATIONS FOR ADMISSION IN BACHELOR OF SCIENCE DEGREE PROGRAMMES

A. BSc in English

- HSC in P.E
- ii. P.M
- iii. Arts
- iv. Commerce
- v. Computer Science
- vi. Three (03) Year Diploma of Associate Engineer (DAE) in any discipline

B. BSc in Computer Science

- i HSC in P.E
- ii HSC (P.M)
- iii Computer Science
- iv DAE (Electrical)
- v DAE (Electronics)
- vi DAE (Telecommunication)
- vii DAE (CIT)
- viii DAE (Bio-Medical)
- ix DAE (Instrumentation & Process Control)

x DAE (Avionics)

xi DAE (Instrumentation)

xii DAE (Radar Technology)

xiii DAE (Radio Technology)

xiv DAE (Information Technology)

& related discipline

C. BSc in Artificial Intelligence

i HSC in P.E

ii HSC (P.M)

iii Computer Science

iv DAE (Electrical)

v DAE (Electronics)

vi DAE (Telecommunication)

vii DAE (CIT)

viii DAE (Bio-Medical)

ix DAE (Instrumentation & Process Control)

x DAE (Avionics)

xi DAE (Instrumentation)

xii DAE (Radar Technology)

xiii DAE (Radio Technology)

xiv DAE (Information Technology)

& related discipline

D. BSc in Physics

- i. HSC in P.E or Equilent
- ii. HSC (P.M) or Equilent

iii. Three (03) Year Diploma of Associate Engineer (DAE) in any discipline

83. ELIGIBILITY FOR APPEARANING IN EXAMINATIONS

As per University policy, the students having class attendance less than 75% will not be eligible to appear in the final examinations. **STUDENTS SOCIETIES**

To help the students in developing the qualities of leadership and good citizenship the University encourages them to participate in all extra curriculum activities provided that such activities do not interfere in their academic progress or administration of this University. The student's societies formed and managed by the students under the supervision of the University administration will only be allowed to organize extra curriculum activities such as Sports, Dramas, Social and Literacy activities and publication of University magazine.

84. RULES OF DISCIPLINE

- i Every student shall observe the following:
 - (a) He /She must be faithful in his/her religious duties and respect the convictions of other in matters of religion and customs;
 - (b) He /She must be loyal to his/her country and refrain from doing anything which might lower its honour and prestige;
 - (c) He /She shall be truthful and honest in his/her dealings with all people;
 - (d) He /She must respect the elders and be polite to all specially to the women, the children, the old people, the weak and the helpless;
 - (e) He /She must respect his/her teachers and others in authority in the University;
 - (f) He /She must keep his/her mind clean and be clean in speech, sports and habits;
 - (g) He /She shall help his/her fellow beings especially those in distress;
 - (h) He /She must devote himself/herself faithfully to his/her studies and obey and follow the rules, instructions, guide lines issued by the University authorities from time to time He /She must observe thrift and protect property.
- ii NO STUDENT SHALL:
- (a) Smoke in his/her classroom, laboratory, workshop, library, examination hall or Convocation hall and during any academic functions;
- (b) Consume alcoholic liquor or other intoxicating drugs within the University Campus or during the instructional, sports or cultural tours or survey camps or enter any such place or attend any such tour or camp while under the influence of such intoxicants;
- (c) Organize or take part in any function within the University Campus, organize any club or society of students without permission of the University authorities:
- (d) Indulge into activities against the Islamic and Pakistan Ideology or national solidarity;
- (e) Indulge into activities promoting, prompting or involving violence or hatred or contempt;
- (f) Affiliate himself/herself with any political party or group and organize or take part in holding political gatherings and invite any politician, expelled or rusticated or debarred students, and antisocial elements in the University Campus;

- (g) Use pressure tactics or political or personal influence in seeking academic concessions or financial benefits or in other matters concerning academic and administrative functions of the University authorities;
- (h) Copy or help others in copying in examination, or cause by any means any disturbance in examinations including harassment of any teacher or other staff member or staging of walkout/boycott by himself/herself or by forcing others to do so or appear in examination in place of a bonafide eligible candidate or manage an outsider for impersonation or take unauthorized the whole or part of answer book/script out of an examination premises or tear scripts or any part thereof or indulge in substitution of Answer Books or influence any employee to indulge in any mal
- (i) Bring, keep or use any kind of weapon or fire arms or sharp tool within the University Campus;
- (j) Use or occupy fully or partially any room or any building of the University Campus un. Authorized.
- (k) Organize or take part in procession or meeting within the University Campus, prejudicial to the
- (I) Stage, incite, or participate in or abet any walk-.out, strike, or any other form of agitation against the University or its teachers or officers:
- (m) Collect any money or receive donations or pecuniary assistance for or on behalf of the University or any organization except with the written permission of the Vice-Chancellor or any other person authorized by him in this regard;
- (n) Bring, keep, or use mobile phone with built.in camera and digital dictionary within the Academic and Examination buildings of the University;
- (o) Snatch mobile phones, use mobile phone during examination/class/PR or in the Library;
- (p) Tease the girl/boy students; demonstrate indecent or immoral gestures/attitude towards Girl /boy students on the Campus;
- (q) Abuse/violate IT policies framed or to be framed from time to time.
- iii. RESPONSIBILITY TO MAINTAIN DISCIPLINE

The teachers and officers of the University or committees formed under them for the purpose and others concerned with the students in the University are responsible for the maintenance of discipline and order among the students, while under their charge, and for dealing with any disorderly behavior promptly in the manner prescribed by these regulations.

iv. DISCIPLINE COMMITTEE

The Discipline Committee shall deal with serious cases of indiscipline requiring such actions as prescribed by Regulation (@ 19).

v. ACT OF INDISCIPLINE

A teacher or an officer in whose presence or in relation to whom an act of indiscipline is committed or who obtains knowledge of such an act on report or otherwise, shall deal with the case himself/herself as he/she may be competent as provided under the Regulation 10 below, and in other case, he/she shall inform and recommend the case to the higher authorities/bodies for necessary action as prescribed.

vi. GROUNDS OF PENALTIES

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Any one or more of the penalties mentioned in Regulation 10 may be imposed on a student who is guilty of one or more of the following acts:

- a) Commits breach of any of the clauses specified in Regulations 4 or 5 above; or
- b) Disobeys the lawful order of a teacher or other person in authority in the University; or
- c) Habitually neglects his/her work or habitually absents himself/herself from the class without reasonable cause; or
- d) Willfully damages University property or the property of a fellow student or any teacher or any employee of the University; or
- e) Does not pay the fees, fines or other dues liable under the University Regulations; or
- f) Does not comply with the Regulations relating to the residence in the hostels or halls of residences; or
- g) Uses indecent language, wears immodest dress, makes indecent remarks or gestures or behaves in a disorderly manner; or commits any criminal, immoral or dishonorable act (whether committed within the University Campus or otherwise) which brings bad name to the University.
- h) Any one or more of the penalties mentioned in Regulation 10 may be imposed on a student who is guilty of one or more of the above acts/charges.
- i) The penalty or penalties imposed shall be appropriate and proportional to the nature and gravity of the above act or acts.

85. Penalties

Penalty

The penalties which may be imposed and the authority or authorities competent to impose each kind of penalty are specified below:

An officer or authority competent

to impose the penalty
Class Teacher / Workshop Instructor
do
Sports Incharge
Teacher/Officer Incharge
Chairman of the Teaching Department/ Director of the Teaching Institute.
do
Dean of the concerned Faculty on the

Bachelor of Engineering Technology & BS Program

BBS-UTECH Khairpur Mirs

	for a period not exceeding two weeks.	recommendations of the concerned Departmental Committee.					
(f)	Fine not exceeding Rs.500/-	Teacher Incharge, or Superintendent of Workshop					
(g)	Fine not exceeding Rs.5000/-	Dean of the Faculty Concerned on the Recommendation of the concerned departmental committee.					
(h)	(i) Fine not exceeding Rs.10,000/-	Vice-Chancellor on the Recommendations					
	(i) Time not exceeding its. 10,000/-	of the Dean concerned and concerned departmental committee.					
	(ii) Exclusion from the department For a period not exceeding 3 weeks	do					
(i)	Withholding of issue of character certificate	Chairman of the Teaching Department/ Director of the Teaching Institute.					
(j)	Cancellation of examination or part There-of, or debarring from appearing in any examination or part there-of.	Vice-Chancellor on the recommendations of the Discipline Committee					
(k)	Cancellation of remission of fee or University Scholarship	Vice-Chancellor on the recommendations of the Dean of the Faculty concerned.					
(I)	Suspension or removal from position of authority in the University Sports.	Vice-Chancellor on the recommendations of the Executive Committee of the University Sports Board.					
	Suspension of admission from the niversity for a period specified or specified pending the final decision.	Dean of the concerned Faculty on the recommendations of the Departmental Committee.					
(n) Unive one y	Rustication/Expulsion from the ersity for a period not exceeding rear.	Vice-Chancellor on the recommendations of the Discipline Committee					

- (o) Rustication/expulsion from the University for a period exceeding one year.
- (p) Cancellation of admission from the University.
- (q) Withholding issuance of any degree. Committee.

Syndicate on the recommendations of the Discipline Committee.

Syndicate on the recommendations of the Discipline Committee.

Syndicate on the Recommendations of the Discipline

Provided that the superior authorities shall be equally competent to impose lighter penalties with the competence of inferior authorities as prescribed above.

A. Chance of Defend

No student shall be rusticated or expelled from the University unless he/she has been allowed a reasonable chance of defending the accusation against him/her provided that if the competent authority is satisfied it may take such an action under emergency to avoid any grave consequences.

B. Appeal against penalties

- (i) An appeal against imposition of the penalties shall lie with the Vice-Chancellor, provided that where the penalty has been imposed by the Vice-Chancellor, himself, an appeal shall lie with the Syndicate. Provided that when a penalty has been imposed by the Syndicate, an application for review can be made to the Syndicate.
- (ii) No appeal by a student under these Regulations shall be entertained unless it is presented within two weeks from the date on which the decision is communicated to him/her, provided that the Vice-Chancellor may for valid reasons condone delay in any individual case.

C. Compensation

The Vice-Chancellor or any teacher or officer duly authorized by the Vice-Chancellor/Principal/Director of the Affiliated University / Institutes / Center of Excellence may direct a student to pay compensation for any loss or damage to property belonging to the University or to fellow student or to an employee of the University, caused by willful act or gross negligence of the student and if the student does not pay such compensation within a reasonable time, competent authority, as the case may be, may take suitable action against him/her for indiscipline and impose upon him/her any of the penalties prescribed by Regulation 10 above.

86. Prerequisite of Courses

- > Student has to qualify prerequisite of that course for selection of a course.
- Maximum duration to qualifying the degree programme is upto 7-years

87. REGULATIONS FOR SEMESTER SYSTEM

Regulations regarding the Courses of Studies for the Bachelor's Degree Programs of the Benazir Bhutto Shaheed University of Technology and Skill Development, under Section 32 (1) (a) of the Act,2016

- 1. **Short Title:** These Regulations may be called the Benazir Bhutto Shaheed University of Technology and Skill Development Bachelor of Degree Course Regulations, 2017. These Regulations shall be subject to the Benazir Bhutto Shaheed University of Technology General Scheme of Studies for the Bachelor Degree Course Statutes 2017.
- **2. Commencement:** These Regulations shall be deemed to have come into force with effect from the First of September 2017.
- **3. Definitions:** In these Regulations, unless expressly stated otherwise:
 - i. "University" means the Benazir Bhutto Shaheed University of Technology and Skill Development.
 - ii. "Academic Year" means the Academic Year of the University.
 - iii. "Semester" means a period of 22 weeks out of Academic Year for teaching and evaluation and/or guidance of the students of the University
 - iv. "Syndicate" means the Syndicate of the University.
 - v. "Vice-Chancellor" means the Vice-Chancellor of the University.
 - vi. "Pro-Vice-Chancellor" means the Pro-Vice-Chancellor of the University.
 - vii. "Dean" means the Dean of the concerned Faculty of the University.
 - viii. "Controller of Examinations" means the Controller of Examinations of the University.
 - ix. "Chairman" means the Chairman of a Teaching Department of the University.
 - x. "Director" means the Director of Post Graduate Studies or Director of an Institute of the University.
 - xi. "Teacher" means any Lecturer, Assistant Professor, Associate Professor or Professor teaching a subject/paper in the University or in a College/Institute affiliated to the University.
 - xii. "Internal Examiner" means the teacher/person appointed by the Competent Authority, who has been teaching the subject to the regular class/section during the Academic Year for which the examination is being conducted.

4. The courses of Study:

The Courses of Studies for the degree of Bachelor of Technology (B.tech0 shall be as given in the Regulations, which follow, provided that these Regulations shall be subject to change as approved by the Academic Council of the University from time to time.

5. Duration of Semester & Year

- (a) First YEAR, Second year, Third year and Fourth year for the degree of Bachelor of Engineering Technologywill be of one year duration (Total 4 years) each comprising of two semesters. Total Credit hours for all four years shall be 130-136.
- **(b)** There shall be two semesters in an academic year. The duration of teaching time in each semester shall be 16 weeks. The semester starting with the commencement of the academic year will be called the "First semester" and the following

semester will be called the "Second Semester".

6. Marks:

Each degree program shall carry a number of approved courses and each course shall be assigned a number of Credit Hours. The Credit Hours per semester for each discipline shall be 15-.18. The details of the course, marks / grades assigned and the condition for passing examinations shall be as prescribed by the Benazir Bhutto Shaheed University of Technology and Skill Development Bachelor Degree Regulations 2017.

10. Departmental Committee:

Each Department /Institute will have a Departmental Committee consisting of three senior most teachers of the Department/Institute including Chairman/Director to assess the progress of the students during the semester and results of all the examinations including the final semester examination. In case of any discrepancy in the results during scanning process, the concerned Committee will seek approval through the Dean and the Pro-Vice Chancellor from the Vice Chancellor to rechecking the Scripts by a Subject expert (other than the subject teacher). The final recommendations of the Departmental Committee concerning the results will be submitted through the concerned Dean and Pro Vice Chancellor to the Vice Chancellor for consideration and approval.

88. YEARLY ACADEMIC PROGRAM

Academic Program	Duration
Teaching duration of 1 st Semester	16 Weeks
Conduct of Mid Semester Examination	01 Week
Preparation and Conduct of Final 1st Semester Exam	05 Weeks
Summer Break	06 Weeks
Teaching duration of 2 nd Semester	16 Weeks
Conduct of Mid Semester Examination	01 Week
Preparation and Conduct of Final 2 nd Semester Exam	05 Weeks
Winter break	02 Weeks
Total	52 Weeks

Note:

- i. Minimum number of contact hours for a theory subject of 3 CHs per semester is 42
- ii. Minimum number of contact hours for a practical of 1CH per semester is 42.

- 89. The minimum requirement for each semester course:
 - (a) Assignments
 - (b) Tests (minimum two).
 - (c) Mid Semester Examination
 - (d) Final Semester Examination.

The Schedule of Tests, Mid Semester and Final Semester Examination shall be as under:

S.No	Activity Period	
1	Mid Semester Examination	After 08 Weeks
2	Final Semester	After 16 Weeks

90. Distribution of Marks: (Applying on all Batches with effect from August 15, 2022)

The distribution of marks for each theory and practical course is as under:

Theory

#	Activity	Theory of Maximum 100 Marks	Theory of Maximum 50 Marks
1	Sessional (Assignments/Quiz/Presentation)	20	10
2	Attendance	10	05
3	Mid Semester Examinations	20	10
4	Final Semester Examinations	50	25
	Total	100 marks	50 marks

Practical

#	Activity	Practical of Maximum 100 Marks	Practical of Maximum 50 Marks
1	Sessional (Lab Performance/ Practical general /skill competition)	20	10
2	Attendance	10	05
3	Mid Semester Examinations	20	10
4	Final Semester Examinations	50	25
	Total	100 marks	50 marks

For 8th semester (Supervised Industrial Training) the following distribution of marks have been approved:

#	Subjects	Marks
1.	Training Performance	600
2.	Viva Voce	200
	Total	800 Marks

- 1. With effect from the session starting from 15-12-2021, the new grading policy which is already applied on the Batch-20 and onwards also be applied on Batch-18 (8th semester) and Batch-19(7th and 8th semester), even if students of Batch-18 and 19 want to clear any failure subject or to improve any lower grade subject (i.e: C or C+), also new grading policy will be applicable to them.
- 2. For improving the course or clear the failure course, students' needs to repeat the course, for that purpose summer courses should be offered to the students with the course registration fees of Rs. 5000. Students can only take 2 courses in a summer program, in extreme cases maximum 3 courses can be taken. Every students needs to filled up the examination form of fee of same as of regular examinations and appear in the summer semester examinations.
 - In summer courses other than regular students of BBSUTSD, outsiders may be allowed for the same or other short courses, so that strength of students my increase.
- 3. Only for 19 Batch, the condition of C.G.P.A (i.e 2.00 CGPA) in 1st year to be promoted in the 7th semester with 20-Batch should be debarred.

91. Absolute Grading Method (Grade Equivalent)

a. Revised Grading Policy

GRADE	GRADE POINT	THEORY.		PRACTICAL	
GRADE		Max Marks 100	Max Marks 50	Max Marks 100	Max Marks 50
A+	4.00	>=85	>=42	>=85	>=42
А	3.75	75 to 84	37 to 41	75 to 84	37 to 41
B+	3.50	66 to 74	35 to 36	66 to 74	35 to 36
В	3.00	60 to 65	30 to 32	60 to 65	30 to 32
C+	2.50	55 to 59	27 to 29	55 to 59	27 to 29
С	2.00	50 to 54	25 to 26	50 to 54	25 to 26
F	FAIL	0 to 49	0 to 24	0 to 49	0 to 24

- Fraction Nos will be rounded off to the nearest whole Nos Where 5.4=5, 5.5=6, 5.9=6
- Subject carrying more than 100 marks in theory/Practical will be awarded grades accordingly.
- The results will be prepared on the basis of Grade point Average (G.P.A)

METHOD OF WORKING OUT G.P.

b. Credit Hours (C.H)

One credit hour (C.H) for a particular course is generally to be considered as one contact hour of teaching theory per week and for practical 1 C.H be considered as 3 contact hours

c. Quality Point (Q.P)

For computation of the (G.P.A) the quality point (Q.P) is first determine by the multiplying the value of the grade earned by the students with the Credit Hours of that course, e.g. if a student obtain "A+" grade for a three credit hours course then this quality point will be calculated as follows:

$$Q.P = 4 \times 3 = 12$$

d. Grade Point Average (G.P.A)

Grade point Average is an expression for the average performance of a student in the course he/she has offered during a particular semester. This is calculated by adding the quality points of all the courses taken, divided by the total number of Credit hours offered in a semester.

e. Cumulative Grade Point Average (C.G.P.A) in a particular year

This is a figure ranging preferably from 0.00 to 4.00 be used to indicate the performance of a student in the year concerned. A standard scale of 0.00 to 4.00 is recommended to all HEIs

C.G.P.A=

Sum of the Q.P for all the courses appeared in a particular year

Sum of the Credit Hours for all the courses appeared in a particular year

f. Cumulative Grade Point Average (C.G.P.A) for Degree

C.G.P.A = Sum over all taken courses in all Semesters (Course Credit Hours x Grade Point Earned)

Total Credit Hours taken in all Semester

g. CGPA REQUIRED FOR THE COMPLETION OF UNDERGRADUATE GRADUATE

(i) For completion of the degree, the minimum qualifying CGPA for Bachelor of Engineering TechnologyStudents are 2.00.

(ii) In case a student secures less than 2.00 CGPA (minimum qualifying CGPA) at the end of final Semester, she/he may be allowed to get re-admission in one or more courses, in which his/her Grade is below C, along with the forthcoming semester, provided that she/he is not debarred under the CGPA Improvement Regulation and time duration specified for the program.

92. Promotion/Term Back Policies:

(i) A student be promoted to the 2nd semester of the first year provided he/she has completed minimum attendance requirement and Filled up examination form and appeared in at least one of the Heads of the Final examinations (First Semester). (A theory or practical would be treated as separate heads).

If Student could not fulfill the above criteria then he/she will be treated as term back. He/she has to get re-admission with lower batch in 1st semester 1st year and has to pay half fees of the particular batch with whom he/she is going to be admitted.

ii) A student will be promoted to the 1st semester of the 2nd year (3rd semester) provided he/she has obtained C-Grade or higher in at least 50% Heads (including minimum of 02 theory heads) of 1st semester of first year in regular examination and has completed minimum attendance requirement of 2nd semester of the 1st year and has filled up examination form and appeared in at least one of the heads of final examinations (Second Semester). (A theory or practical would be treated as separate heads). Benefit of the fraction will be given to the student.

If Student could not fulfill the above criteria then he/she will be treated as term back until he/she fulfill the above mentioned criteria. If any student wants to get the re-admission in 1st semester 1st year with lower batch then he/she has to pay full fees of the particular batch with whom he/she is going to be re-admitted.

If any student term back due to shortage of attendance of 2nd semester 1st year then he/she can get the re-admission in 2nd semester of 1st year with lower batch, he/she has to pay half fees of the particular batch.

iii) A student will be promoted to the 2nd semester of the 2nd year (4th semester) provided he/she has completed minimum attendance requirement of the 3rd semester, filled up the examination form and appeared in at least one head of the final examination (Third Semester). (A theory or practical would be treated as separate heads).

If any student term back due to shortage of attendance of 1st semester 2nd year (3rd Semester) then he/she can get the re-admission in 1st semester of 2nd year with lower batch, he/she has to pay half fees of the particular batch.

(iv) A student will be promoted to the 1st semester of the 3rd year (5th semester) provided he/she has obtained C-Grade or higher in at least 50% Heads (including minimum of 05 theory heads) of 1st year (1st & 2nd Semester) prior to start of classes of 5th semester and has completed minimum attendance requirement of the 4th semester, and has filed up the examination form and appeared in at least one of the Heads of the final Examination (4th Semester). (A theory or practical would be treated as separate heads). Benefit of the fraction will be given to the student.

If Student could not fulfill the above criteria then he/she will be treated as term back until he/she fulfill the above mentioned criteria. If any student term back due to shortage of attendance of 2nd semester 2nd (4th Semester) year then he/she can get the admission in 2nd semester of 2nd year with lower batch, he/she has to pay half fees of the particular batch.

(v) A student will be promoted to the 2nd semester of the 3rd year (6th semester) provided he/she has completed minimum attendance requirement, filled up the examination form and appeared in at least one of the heads of the final examination (5th semester). (A theory or practical would be treated as separate heads).

If any student term back due to shortage of attendance of 1st semester 3rd year (5th Semester) then he/she can get the re-admission in 1st semester of 3rd year with lower batch, he/she has to pay half fees of the particular batch.

(vi) A student will be promoted to the 1st semester of the 4th year (7th semester) provided he/she has cleared all heads of first year, for 20 and onward batches, obtained C-Grade or higher in at least 50% Heads of second year (3rd & 4th Semester) (including minimum of 05 theory heads) prior to the start of the classes of 7th semester, and has completed minimum attendance requirement of the 6th Semester and has filled up the examination form and appeared in at least one of the Heads of the final Examination (6th Semester). (A theory or practical would be treated as separate heads). Benefit of the fraction will be given to the student.

If Student could not fulfill the above criteria then he/she will be treated as term back until he/she fulfill the above mentioned criteria. If any student term back due to shortage of attendance of 2nd semester 3rd year (6th Semester) then he/she can get the re-admission in 2nd semester of 3rd year with lower batch, he/she has to pay half fees of the particular batch.

(vii) A student will be promoted to the 2nd semester of the 4th year (8th semester) provided he/she has completed minimum attendance requirement, filled up the examination form and appeared in at least one of the heads of the final examination (7th semester). (A theory or practical would be treated as separate heads).

If any student term back due to shortage of attendance of 1st semester 4th year (7th Semester) then he/she can get the re-admission in 1st semester of 4th year with lower batch, he/she has to pay half fees of the particular batch.

93. Credit Transfer Policy-BBSUTSD Khairpur Mirs

Introduction:

To handle the cases of Undergraduate Students requesting credit transfer to Benazir Bhutto Shaheed University of Technology and Skill Development Khairpur Mir's (BBSUTSD) from Local/favoring educational institutions, and from within BBSUTSD Khairpur Mir's a policy/standing operation procedure (SOPs) has been formulated. All Transfer requests are evaluated and processed in the light of this policy in a controlled manner.

A. Procedure:

To handle Under extraordinary circumstances, on the recommendation of the Chairperson/Chairman of the concerned institute/department, the case will be processed by Dean for approval of the Vice-Chancellor and notified by the Register.

The Vice-Chancellor may allow the transfer of a student within BBSUTSD, from other foreign /Pakistani niversities/colleges of repute, generally under the following conditions:

- 1-The applicant can apply after completion of the first year of study.
- 2-He/she should apply to BBSUTSD, four weeks before the start date of a semester.
- 3-The applicant should be an enrolled student in his/her parent university at the time of applying for Transfer.
- 4-Possesses SSC & amp; HSSC/equivalent certificates of relevant groups with minimum 60% marks.
- 5-All Non-FSc stream candidates have to provide an equivalence certificate duly obtained from IBCC, Pakistan.
- 6-Should have academic performance of reasonably promotion policy of BBSUTSD.
- 7-Courses to be transferred have a minimum B Grade. Courses must correspond to courses offered by BBSUTSD or equivalent in depth and intensity.
- QEC Represents You & Dec Needs Your Support 8-The credits transferred are counted towards the degree requirement and the GPA of the transferred credits shall not be counted towards the calculation of CGPA.
- 9-Candidate must complete at least 60% credit hours of his degree program at BBSUTSD.
- 10-The university/college/institute from which the student requests for transfer is well known,accredited, recognized by HEC, and has a respectable standing/ranking.
- 11-Candidates applying from abroad must ensure that their institute/university is accredited from a respective accreditation body.
- 12-Transfer within BBSUTSD will be allowed to students admitted based on the BBSUTSD selection process.
- 13-Inter-institutional transfers of students within BBSUTSD will be allowed only once and managed/processed based on the laid down procedure in vogue.
- 14-BBSUTSD authorities reserve the right to reject cases without assigning any reason.
- Application must be submitted at least 4 weeks prior to the start of a regular semester.
- 15-Technology program of Engineering program of vice versa. As amended/ updated from time to time, will be applicable in the processing of all transfer cases.

B. How to Apply:

a. Download the transfer form.

https://bbsutsd.edu.pk/wp-content

- b. Duly filled transfer form may be forwarded to Undergraduate Section, Directorate of Admission, BBSUTSD Khairpur Mirs along with following:
- (1) Official transcript of semesters studied at Parent University.
- (2) Photocopy of mark sheets of Matric and FSc/equivalent examinations (equivalence certificates from IBCC, Pakistan in case of O/A level/equivalent exams).
- (3) Detailed course outlines of courses already studied.
- (4) No Objection Certificate (NOC) from Parent University.
- (5) Character certificate from Parent University.
- (6) Bank draft amounting to Rs 5000/- (Rupees five thousand) in favor of BBSUTSD Khairpur Mirs as initial transfer processing fee.
- (7) Transfer fee applicable after migration/transfer is accepted/approved by BBSUTSD Khairpur Mirs.

QEC Represents You & amp; QEC Needs Your Support

Transfer Fee PKR

Transfer from foreign universities 100,000/-

Transfer from local universities 50,000/-

Processing BBSUTSD fee 5,000/-

94. Attendance Requirement:

- (i) A student should have at least 75% attendance to appear in the Final Semester Examination of that particular subject.
- (ii) In genuine cases, maximum 10% condonation in attendance shall be the discretionary powers of the Vice Chancellor on the

- basis of an application to be scrutinized by Director/Chairman concerned and routed through respective Dean concerned / Pro-Vice Chancellor.
- (iii) The eligibility attendance of Theory/Practical for late admitted students of First Semester of First Year only shall be calculated from the date of admission.

95. Conduct of Sessional Work/Mid-Semester and Final Semester Examinations

- (i) 10/5 marks of assignment for subjects carrying 100/50 marks shall be awarded by the teacher concerned after conducting 3/2 class tests (MCQ type) and 2/1 best of 3/2 class tests shall be counted toward award of 10/5 marks. The entire record of evaluated class tests shall be submitted by the concerned subject teacher to Examinations Department at the time of submission of final results.
- (ii) At the end of each semester, the marks of attendance, sessional work, and lab work secured by the student in Theory and Practical of the concerned subject shall be announced by the concerned subject teacher by displaying sessional marks on the Notice Board.
- (iii) Mid Semester Examination will be conducted by the Examination Department in collaboration with the concerned Department/Institute.
- (iv) The mid-semester examination will be conducted only for theoretical subjects.
- (v) The time duration for mid semester examination will be 1 hour for 3 CHs course and each question paper will contain 3 questions with a choice to attempt any two, whereas, the time duration for 2 CHs course examination will be 45 minutes and the question paper will contain 3 questions with a choice to attempt any two.

96. REGULATIONS FOR CONDUCT OF EXAMINATIONS

- *Regulations regarding the conduct of Examinations of the Benazir Bhutto Shaheed University of Technology and Skill Development, under Section 32 (1) (d) of the Act, 2016.
 - 1. **Short Title:** These Regulations may be called the Benazir Bhutto Shaheed University of Technology and Skill Development (BBSUTSD) conduct of Examinations Regulations, 2017.
 - 2. **Commencement:** These Regulations shall be deemed to have come into force with effect from the First of July 2017.
 - **Definitions:** In these Regulations, unless expressly stated otherwise:
 - i. "University" means the Benazir Bhutto Shaheed University of Technology and Skill Development.

- ii. "Syndicate" means the Syndicate of the University.
- iii. "Vice-Chancellor" means the Vice-Chancellor of the University.
- iv. "Dean" means the Dean of the concerned Faculty of the University.
- v. "Controller of Examinations" means the Controller of Examinations of the University.
- vi. "Chairman" means the Chairman of a Teaching Department of the University.
- vii. "Director" means the Director of Post Graduate Studies or Director of an Institute of the University.
- viii. "Teacher" means any Lecturer, Assistant Professor, Associate Professor or Professor teaching a subject / paper in the University.
- ix. "Discipline Committee" means the Discipline Committee of the University constituted under the First Statutes appended to Benazir Bhutto Shaheed University of Technology and Skill Development Act 2016 and/ or constituted separately for the constituent with the approval of the Vice-Chancellor.
- x. "Unfair means Control Committee" means the Committee appointed by the Vice-Chancellor to scrutinize the reported cases of unfair means/ malpractice of the University & Affiliated Colleges/ Institutes for recommendation to the Discipline Committee/ Vice-Chancellor.
- xi. "Vigilance/ Inspection Committee" means the Vigilance/ Inspection Committee which may be constituted by the Vice-Chancellor for monitoring overall conduct of Examination of the University.
- xii. "Head Invigilator" means the concerned Dean, of the Faculty appointed by the Vice-Chancellor as Head Invigilator for overall monitoring of Regular Examination of Bachelor of Engineering Technologyor any other examination conducted by the University held in the University.
- xiii. "External/ Internal Head Invigilator" means the Teacher of the University (at least Associate Professor) appointed by the Vice-Chancellor as External/ Internal Head Invigilator on the recommendation of the concerned Dean for supervising overall conduct of Regular/ Supplementary Examination of the University.
- xiv. "Factotum" means the Director/ Chairman or his nominee not below the rank of Associate Professor of the concerned Department appointed by the Vice-Chancellor for conducting Regular/ Supplementary Examinations of the respective Institute/ Department.
- xv. "Invigilator" means any Teacher appointed by the concerned Factotum for conduct of Regular/Supplementary Examination of the concerned Institute/Department. In case of the External Invigilators from amongst the Teachers of the University may be appointed by the Vice-Chancellor on the recommendation of concerned Director/Chairman.
- xvi. "Tabulator/Checker" means the teacher of the University possessing experience and good understanding of examination system appointed by the Vice-Chancellor on the recommendation of the Controller of Examinations for compilation and scrutiny of results of candidates of the University.
- 4. Last dates for receipt of application forms and dates for the conduct of Term/Semester Examination of the University are notified by the Controller of Examinations with the approval of the Vice-Chancellor as per Academic Calendar or as proposed by the Academic Heads concerned, as the case may be.

- 5. Question papers for Term/ Semester Examination shall be drawn by the teachers of concerned subjects as Internal Examiners. In case of more than one subject teacher of a particular subject, the senior teacher will internally moderate the same and pass on to the Controller of Examinations duly sealed for moderation by External Examiners appointed by the University Authority.
- 6. Head Invigilators/ Factotums for Term/ Semester Examination shall be appointed by the Vice-Chancellor and Invigilators by the concerned Factotum. The number of Invigilators shall be decided by the concerned Factotum/ Head Invigilator at the ratio of 10 candidates per Invigilator with a minimum of two including subject teacher. The fraction of 0.5 or above shall be considered as 01.
- 7. For each Centre of Examination, two Head Invigilators, one internal and one external shall be appointed. The External Invigilators may also be appointed with the approval of the Vice-Chancellor for shared invigilation at the concerned University.
- 8. The overall conduct of Examination may be monitored by the Vigilance / Inspection Committees to be appointed by the Vice-Chancellor.
 - (a) No Head Invigilator, Factorum or Invigilator shall be appointed at any examination at which any of the following relatives of his/her is appearing. Wife, husband, son, daughter, grand-son, grand-daughter, brother, sister, nephew, niece, grand niece/nephew, uncle, aunt, first cousin, son/daughter of first cousin, son-in-law, daughter-in-law, brother-in-law and sister-in-law.
 - (b) The Head Invigilators, Invigilators and Factotums shall, along with their acceptance, sign a declaration to the effect that no relative of theirs, as mentioned in (a) above, is appearing at that examination at which they have been appointed to work.
- **9**. Instructions to Invigilators shall be given as per University policy.
- **10.** The Term/Semester Examination of undergraduate / diploma courses of the University shall be held in the premises of the University and that as decided by the Vice-Chancellor.
- **11.** Examination fees once paid shall not be refunded or held in reserve for a future examination, except in the following circumstances:
 - (1) When a candidate dies prior to the commencement of an examination.
 - (2) When an application form is rejected by the University.
- 12. The Vice-Chancellor shall have power to exclude any candidate from a University examination on being satisfied that he/she is suffering from an infectious or contagious disease. Whenever any candidate is thus excluded, the fee paid by him/her for admission to the examination shall be refunded to him/her.
- 13. No person other than the candidates, University Officers and/or University representatives, Head Invigilators, Factotums, Invigilators and other workers appointed for the Examinations work will be allowed to enter the premises of any Centre of an

- Examination. The Head Invigilators/ Factotums/ Invigilators/Naib Qasids shall wear the specific badges during the conduct of Examinations.
- 14. No candidate shall be admitted to the Examination, who arrives at the place of Examination late by more than a half of an hour after time fixed for a paper.
- 15. Head Invigilators/ Factorums shall instruct the Invigilators that they should take particular care to collect from candidates all answer books provided to them, whether used or unused, cross the blank pages and enter on the face cover the number of supplements used. The Invigilators must acknowledge the receipt of Blank Answer Books after proper counting prior to start of Exam.
- **16**. Head Invigilators/Factotums should see that Invigilators:
 - (a) do not engage in a conversation with the candidates during the examination and do not read what the candidates write;
 - (b) do not give any kind of explanation connected with any question set.
 - (c) do not do any private or office work during the hours of supervision, nor on any account admit outsiders to the place of examination;
 - (d) do not give copies of the question paper set to anyone who is not a candidate sitting for the examination.
 - (e) do not use mobile phone during the examination duties.
 - (f) must report the cases of candidates to Factotums/ Head Invigilators who are found indulged in unfair means/impersonation/ undisciplined acts etc. along with relevant materials/ evidence.
- 17. The Factotums/ Head Invigilators shall see that no candidate leaves his/her seat within the first half of an hour of the Examination.
- 18. The sealed envelopes containing question papers shall be opened by Head Invigilator/ Factotum concerned directly in the examination Hall not more than 15 minutes before the time fixed for each paper. The concerned Factotum/ Head Invigilator shall ensure that seals are intact prior to opening of envelopes and shall also certify accordingly.
- **19**. Question papers for various blocks should be distributed among the various invigilators not more than 5 minutes before the time fixed for each paper.
- 20. The concerned Invigilators shall report the cases in writing to Factotums/ Head Invigilators fully documented of any such candidate who is found indulged in copying/ impersonation/ misbehavior/undisciplined acts etc. The Invigilators/Factotums/Head Invigilators shall not cancel any answer of Question(s) fully or partially on any reason whatsoever.
- 21. The Factotums/ Head Invigilators shall expel any candidate found copying or for any other offence considered serious by them and report cases of expulsion and/or of offences to the Controller of Examinations for further necessary action.

- When a candidate is expelled from an examination, the Factotum/ Head Invigilator should obtain from him/her, before he/she leaves the Examination hall, an explanation, if he/she has any to make, and attach it to his/her report.
- 23. The Head Invigilator (External/ Internal) of the affiliated college/ Factorum of the University should countersign all reports made by the Invigilators at the end of the Examination in each paper.
- 24. At the conclusion of each paper, the answer books tied with supplement(s), if any, should be carefully counted and packed along with pertinent Question Paper(s) and Invigilators Report(s) in the presence of the Factotums/ Head Invigilators.
- 25. The Factotums/ Head Invigilators will be responsible for safe delivery of all answer books in the Examinations Department along with any reported case(s).
- Within a week of the conclusion of the whole Examination, the Factotum(s)/ Head Invigilator(s) shall forward to the Controller of Examinations statement showing the respective vouchers, Remuneration bills of Invigilators /Factotums/ Head Invigilators and a report on the conduct of the examination.
- 27. On receipt of a report regarding the misconduct of any candidate at any Examination, including breach of any of the Regulations or instructions laid down for the proper conduct of Examination, the Syndicate/ Vice-Chancellor shall have power to impose penalty on account of such misconduct or breach of Regulations/ Instructions on merit of the case as per recommendation of the Unfair means Control Committee/ Discipline Committee.
- 28. On recommendation of the Controller of Examinations, the Vice-Chancellor shall approve the names of Tabulators and Checkers for compilation & scrutiny of results of Regular/ Supplementary Examinations of the University. The remuneration shall be paid to concerned officials as may be fixed by the competent authority subject to completion of assigned task in all respects to be certified by the Controller of Examinations.
- 29. As soon as a result is announced, the Controller of Examinations of the University shall send copies of Result Gazettes to all concerned Deans, Directors/ Chairmen of the University, for display/ office record. The declared results shall be subject to rectification at any stage on the basis of original record if any error/ omission is found to have occurred inadvertently and as such this shall be reflected in the Marks/Grade/ Pass Certificate in the form of Note.
- The following certificates may be issued to the students by the Controller of Examinations/ authorized Dy. Controller or Asstt: Controller of Examinations on receipt of prescribed fees.
 - (i) Pass Certificate for each Degree Course
 - (ii) Marks/ Grade Certificate for each Term/ Semester.
 - (iii) Transcript.
 - (iv) Over-all Cumulative G.P.A. Certificate for all years of the course.
 - (v) Appearance Certificate.
 - (vi) POSITION / Merit Certificate.
 - (vii) Award Certificate.

97. **UNDERTAKING**

	IS/o
	R/o,
	do hereby state on solemn affirmation that I shall:
	Abide by all the rules / regulations regarding admission, conduct of Academic Program, Discipline, behavior etc. in force in University at present or to be approved and implemented in future.
	Confine my activities to the academic pursuits during my studies in the University and would not indulge in any political, Un-social activities directly or indirectly and shall be liable to be expelled from the University, in case I am found involved in any such activities.
	Never use violence or threat or pressure or any dispute with others.
	Not hold a gathering or meeting or take out processions in any part of the University campus other than the areas specified for the purpose.
	Not indulge in any kind of unfair or unlawful means / malpractice in examination and coercion by any means.
	Not bring into campus, consume or encourage, consumption of alcoholic products, drugs and narcotics not indulge in acts of moral turpitude.
	Not bring or keep any type of weapons within the University premises.
	Not damage any University property, including building, equipment, vehicles etc in any manner.
	In case of violation of any of the undertaking as herein above given by me I shall not only be liable for disciplinary action as per university rules but shall also be liable for criminal prosecution under law of land.
e:	Signature of the Applicant / Candidate

C.N.I.C NO

Date:_____