

# Department of Technology

Technology can be a powerful tool for transforming learning. It can help affirm and advance relationships between educators and students, reinvent our approaches to learning and collaboration, shrink long-standing equity and accessibility gaps, and adapt learning experiences to meet the needs of all learners. The Department of Technology focuses on students to prepare them an efficient engineering technologist and to compose him/her professionally trained in certain aspects of development and implementation of a respective area of technology in order to boost industrialization, economic growth of society, and empower all students to be successful citizens of Pakistan. Department of Technology since its establishment is playing a vital role by providing outstanding graduates to the society and is acting as incubators of exploration and invention. Department of Technology is one of the largest department with in the university with a thriving undergraduate student's population. The syllabus is continually under development and review as per HEC and NTC guidelines. We are collaborators in learning, seeking new knowledge and constantly acquiring new skills alongside our students. We have set a vision for creating learning experiences that provide the right tools and supports for all learners to thrive. We have state of the art laboratories, Library and other allied facilities where students can enhanced their practical skills. Also, industrial/field visits are arranged on regular basis to boost and prepare the students for market.

## Programs Offered:

### BSc Engineering Technology in

- Civil
- Electronics
- Mechanical
- Electrical

## Vision

Producing Technologist who can help in transforming the country in a Technologically Advanced Society

## Mission

Striving for Excellence by Embedding Quality in Technology Programs through Skills Development thereby Boosting the Industrialization, Economic Growth and Reduction of Unemployment.

# Bachelor of Science in Civil Engineering Technology

Minimum Duration : 8 Semesters, 4 Years  
Maximum Duration : 16 Semesters, 8 Years  
Minimum CGPA required to earn degree 2.00

Program Code 149  
Number of Courses 32  
Credit Hours 136

## Outcome Based Education (OBE) System:

OBE is an educational process that focuses on what students can do or the qualities they should develop after they are taught. OBE involves the restructuring of curriculum, assessment and reporting practices in education to reflect the achievement of high order learning and mastery rather than accumulation of course credits. It requires that the students demonstrate that they have learnt the required skills and contents.

The department has established an OBE committee to successfully implement OBE system. The committee is responsible for developing the CLOs (Course Learning Outcomes) for the courses and rubrics for Laboratories and Final Year Projects (FYP). Several trainings sessions and workshops were conducted to train the faculty members and lab engineers to be able to adopt OBE system.

## Eligibility :

3 Years Diploma of Associate Engineers from Technical Board in the relevant technology or F.Sc Pre-Engineering from any Intermediate Board with at-least 50% marks or equivalent qualification.

Candidate need to pass an aptitude Test/ Interview conducted by the university.

	Course Code	Course Title	Cr. Hrs.
SEMESTER ONE	GH101	Islamic Studies or	2-0
	GH102	Value Ethics (for Non Muslim)	2-0
	MA103	Applied Mathematics-I	3-0
	CT101	Surveying-I	2-2
	CS102	Introduction to Computer Fundamentals	2-1
	CT102	Civil Engineering Drawing	1-2
	CT103	Occupational Health & Safety Management	2-0
SEMESTER TWO	GH103	Pakistan Studies	2-0
	MA104	Applied Mathematics-II	3-0
	CT104	Concrete Technology	2-2
	CT105	Applied Mechanics	2-1
	CT106	Materials & Methods of Construction	2-2
SEMESTER THREE	CT 201	Architecture and Town Planning	2-0
	CT 202	Quantity Surveying & Contract Documents	1-2
	CT 203	Soil Mechanics	2-1
	ENG 201	Communication Skills	3-0
	CT 204	Fluid Mechanics	2-1
	CT 205	Mechanics of Solids	2-2

## ► Bachelor of Science in Civil Engineering Technology

### Program Educational Objectives (PEOs) :

- PEO-1: Excel in their engineering technology career in the public and private sectors or academia by applying the knowledge acquired in mathematical, computing and engineering technology principles and enhancing their skills.
- PEO-2: Engage themselves toward lifelong learning and the pursuit of post graduate or other professional education.
- PEO-3: To implement civil engineering technology designs after considering safety, sustain ability, economic and social impacts of engineering decisions.
- PEO-4: Demonstrate professionalism, ethics, and ability to work in inter and multi disciplinary team and to adapt to the latest trends and technology.

### Program Learning Outcomes (PLOs) System :

- PLO-01 **Technology Knowledge:** To apply knowledge of mathematics, sciences and civil engineering fundamentals.
- PLO-02 **Problem Analysis:** To identify, formulate and analyze complex engineering problems creatively and innovatively
- PLO-03 **Implementation of Design of Solution:** To develop and design solutions or processes using integrated & interdisciplinary approaches.

#### SEMESTER FOUR

Course Code	Course Title	Cr. Hrs.
ENG 212	Technical Report Writing	3-0
CT 206	Transportation Engineering	2-2
CT 207	Water Supply & Waste Water Management	2-2
CT 218	Surveying-II	2-1
CT 209	Theory of Structures	2-1

#### SEMESTER FIVE

Course Code	Course Title	Cr. Hrs.
CT301	Hydrology	2-1
CT311	Reinforced Concrete Structure	2-1
CT312	Construction Machinery	2-1
CT313	Computer Aided Building Modeling and Design	1-2
MGT302	Project Management	3-0
CT314	Foundation Engineering	2-1

#### SEMESTER SIX

Course Code	Course Title	Cr. Hrs.
CT315	Pre Stressed & Precast Concrete Technology	2-1
CT316	Geology & Earthquake Engineering	2-1
CT317	Irrigation and Hydraulic Structures	2-1
CT318	Steel Structures	2-1
RES391	Project Phase - I	0-3

#### SUMMER SEMESTER

Course Code	Course Title	Cr. Hrs.
RES 392	Project Phase II	0-3

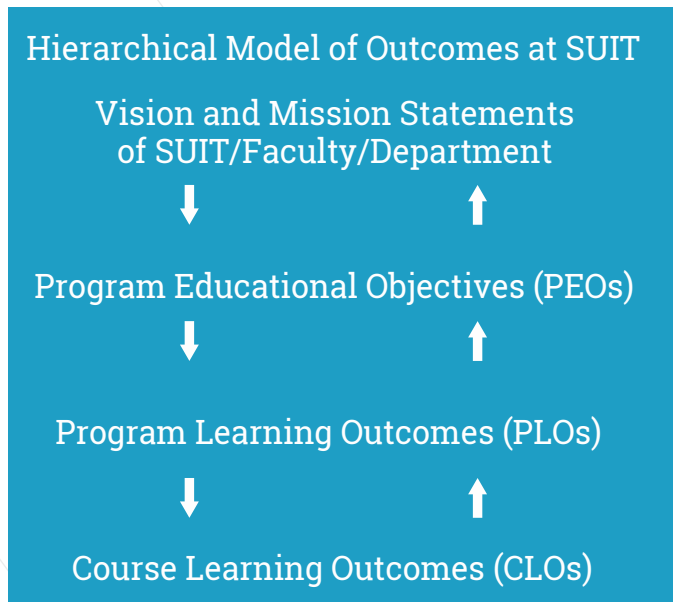
- PLO-04 **Investigation:** To identify basics and opportunities in entrepreneurship related to engineering practice.
- PLO-05 **Modern Tool Usage:** To utilize the advance techniques, competent skills, appropriate methods and tools to implement engineering development.
- PLO-06 **The Technology and Society:** To conduct professional and ethical responsibilities.
- PLO-07 **Environment and Sustainability:** To identify design principles for efficiency, health & safety, and sustainable development.
- PLO-08 **Ethics:** To conduct professional and ethical responsibilities.
- PLO-09 **Individual and Team Work:** To function effectively both as individuals and in a group in the capacity of a leader or a team member.
- PLO-10 **Communication:** To communicate effectively with the engineering community and with the society at large. To design and conduct experiments, as well as to analyze and interpret data.
- PLO-11 **Project Management:** To describe the impact of engineering solution in societal, cultural, global & environmental context.
- PLO-12 **Life-Long Learning:** An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

SEMESTER SEVEN

Course Code	Course Title	Cr. Hrs. 16
CT401	Supervised Industrial/ Field Training	0-16

SEMESTER EIGHT

Course Code	Course Title	Cr. Hrs. 16
CT412	Supervised Industrial/ Field Training	0-16



# Bachelor of Science in Electronics Engineering Technology

Minimum Duration : 8 Semesters, 4 Years  
 Maximum Duration : 16 Semesters, 8 Years  
 Minimum CGPA required to earn degree 2.00

Program Code 147  
 Number of Courses 32  
 Credit Hours 139

## Eligibility :

3 Years Diploma of Associate Engineers from Technical Board in the relevant technology or F.Sc Pre-Engineering from any Intermediate Board with at-least 50% marks or equivalent qualification.

Candidate need to pass an aptitude Test/ Interview conducted by the university.

## Outcome Based Education (OBE) System:

OBE is an educational process that focuses on what students can do or the qualities they should develop after they are taught. OBE involves the restructuring of curriculum, assessment and reporting practices in education to reflect the achievement of high order learning and mastery rather than accumulation of course credits. It requires that the students demonstrate that they have learnt the required skills and contents. OBE and OBA (Outcome Based Assessment) Learning where the students were given awareness about the OBE system. The department has established an OBE committee to successfully implement OBE system. The committee is responsible for developing the CLOs (Course Learning Outcomes) for the courses and rubrics for Laboratories and Final Year Projects ( FYP). Several trainings sessions and workshops were conducted to train the faculty members and lab engineers to be able to adopt OBE system.

SEMESTER ONE	Course Code	Course Title	Cr. Hrs. 16
		GH101	Islamic Studies or
	GH102	Value Ethics (for Non Muslim)	2-0
	MA103	Applied Mathematics I	3-0
	GS101	Applied Physics (Electricity and Magnetism)	2-1
	CS102	Introduction to Computer Fundamentals	2-1
	ELT101	Electronic Workshop Practice	0-1
	ELT102	Electrical Circuit Analysis	3-1

SEMESTER TWO	Course Code	Course Title	Cr. Hrs. 17
		GH103	Pakistan Studies
	MA104	Applied Mathematics-II	3-0
	ELT103	Electrical Technology-I	3-1
	ELT104	Digital Logic Technology	3-1
	CS112	Computer Programming	2-1
	ELT105	PCB Design and Fabrication workshop	0-1

SEMESTER THREE	Course Code	Course Title	Cr. Hrs. 18
		ELT211	Electrical Technology-II
	ELT201	Electronics Devices & Technology	3-1
	ENG201	Communication Skills	3-0
	ELT212	Data & Computer Communication	2-1
	ELT202	Instrumentation & Measurements	3-1

**Program Educational Objectives (PEOs) :**

- PEO-1: To be successful Electronic Technologist and serve the community competently by the application of professional knowledge and skills.
- PEO-2: To be professionals, fulfilling the academic and industrial requirements by applying modern tools, using communication skills and effective management as an individual and a team member.
- PEO-3: To understand needs of the society, follow ethical practices in a technology environment and seek continuous technological developments.

**Program Learning Outcomes (PLOs) System :**

- PLO-01 **Technology Knowledge:** An ability to apply knowledge of mathematics, science, fundamentals of technology to the implementation of solution of complex technological problems.
- PLO-02 **Problem Analysis:** An ability to understanding identification, formulation, research literature and analyze of complex technological problems reaching substantiated conclusions using first principles of mathematics, natural sciences and technologies.
- PLO-03 **Implementation of Design of Solution:** An ability to implement the design solutions for complex technological problems and systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- PLO-04 **Investigation:** An ability to investigate complex technological problems in a methodical way including literature survey, understanding the design and conduct of experiments, analysis and interpretation of experimental data and synthesis of

**SEMESTER FOUR**

Course Code	Course Title	Cr. Hrs.
ENG212	Technical Report Writing	3-0
ELT203	Communication Systems & Techniques	3-1
ELT213	Microprocessor Architecture and Assembly Language	2-1
ELT214	Electromagnetic Field Theory	2-0
ELT215	Power Electronics	2-1
ELT216	Amplifier & Oscillators	2-1

**SEMESTER FIVE**

Course Code	Course Title	Cr. Hrs.
ELT301	Renewable Energy Technology	2-1
ELT302	Industrial Drives	3-1
ELT311	VLSI Technology	3-1
MGT302	Project Management	3-0
ELT312	Applied Antenna & Wave Propagation	3-1

**SEMESTER SIX**

Course Code	Course Title	Cr. Hrs.
ELT313	Industrial Automation and Robotics	3-1
ELT314	Control Technology	2-1
ELT315	FPGA Based Systems	3-1
ELT316	Industrial Electronics Application	2-1
RES391	Project Phase - I	0-3

**SUMMER SEMESTER**

Course Code	Course Title	Cr. Hrs.
RES 392	Project Phase II	0-3

► Bachelor of Science in Electronics Engineering Technology

information to derive valid conclusions.

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

PLO-06 **The Technology and Society:** An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional industrial practice and solution to complex technological problems.

PLO-07 **Environment and Sustainability:** An ability to understand the impact of professional technological solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

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

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

PLO-10 **Communication:** An ability to communicate effectively, orally as well as in writing, on technology activities with the technology community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO-11 **Project Management:** Ability to demonstrate management skills and apply technology principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

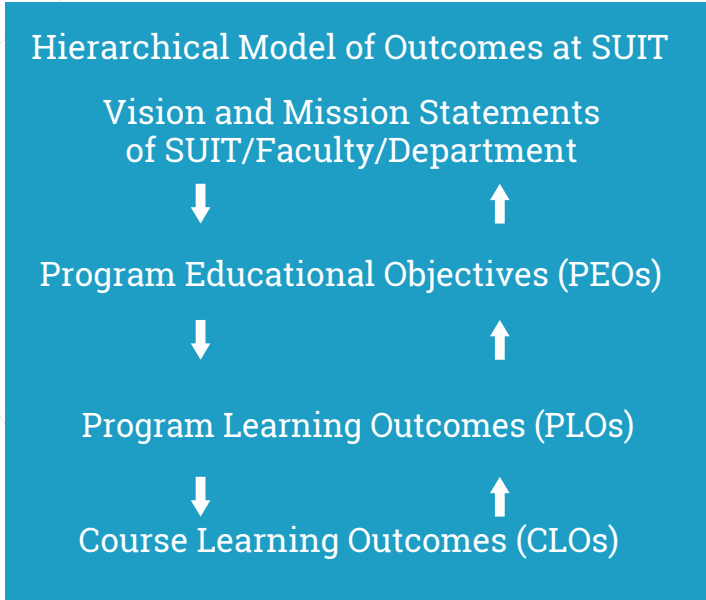
PLO-12 **Life-Long Learning:** An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

SEMESTER SEVEN

Course Code	Course Title	Cr. Hrs. 16
ELT401	Supervised Industrial/ Field Training	0-16

SEMESTER EIGHT

Course Code	Course Title	Cr. Hrs. 16
ELT412	Supervised Industrial/ Field Training	0-16



# Bachelor of Science in Electrical Engineering Technology

Minimum Duration : 8 Semesters, 4 Years  
Maximum Duration : 16 Semesters, 8 Years  
Minimum CGPA required to earn degree 2.00

Program Code 146  
Number of Courses 32  
Credit Hours 135

## Eligibility :

3 Years Diploma of Associate Engineers from Technical Board in the relevant technology or F.Sc Pre-Engineering from any Intermediate Board with at-least 50% marks or equivalent qualification.

Candidate need to pass an aptitude Test/ Interview conducted by the university.

## Outcome Based Education (OBE) System:

OBE and OBA (Outcome Based Assessment) Learning where the students were given awareness about the OBE system. OBE is an educational process that focuses on what students can do or the qualities they should develop after they are taught. OBE involves the restructuring of curriculum, assessment and reporting practices in education to reflect the achievement of high order learning and mastery rather than accumulation of course credits. It requires that the students demonstrate that they have learnt the required skills and contents. The department has established an OBE committee to successfully implement OBE system. The committee is responsible for developing the CLOs (Course Learning Outcomes) for the courses and rubrics for Laboratories and Final Year Projects (FYP). Several trainings sessions and workshops were conducted to train the faculty members and lab engineers to be able to adopt OBE system.

### SEMESTER ONE

Course Code	Course Title	Cr. Hrs. 17
GH101	Islamic Studies or	2-0
GH102	Value Ethics (for Non Muslim)	2-0
MA103	Applied Mathematics-I	3-0
GS101	Applied Physics ( Electricity and Magnetism)	2-1
CS102	Introduction to Computer Fundamentals	2-1
ET101	Engineering Drawing	1-2
ET102	Linear Circuit Analysis	2-1

### SEMESTER TWO

Course Code	Course Title	Cr. Hrs. 18
GH103	Pakistan Studies	2-0
MA104	Applied Mathematics-II	3-0
ET103	Electronics	2-1
ET104	Basic Mechanical Technology	2-1
ET105	Electrical Instrumentations & Measurements	2-2
ET106	Electrical Machines-I	2-1

### SEMESTER THREE

Course Code	Course Title	Cr. Hrs. 16
ET201	Power Generation Systems	2-0
ET211	AC Circuit Analysis	2-2
ENG201	Communication Skills	3-0
ET212	Data & Computer Communication	2-1
ET202	Digital Electronics	2-2



## ► Bachelor of Science in Electrical Engineering Technology

### Program Educational Objectives (PEOs) :

- PEO-1: To be successful Electrical technologist and serve the community competently by the application of professional knowledge and skills.
- PEO-2: To be professionals, fulfilling the academic and industrial requirements by applying modern tools, using communication skills and effective management as an individual and a team member.
- PEO-3: To understand needs of the society, follow ethical practices in a technology environment and seek continuous technological developments.

### Program Learning Outcomes (PLOs) System :

- PLO-01: **Technology Knowledge:** An ability to apply knowledge of mathematics, science, fundamentals of technology to the implementation of solution of complex technological problems.
- PLO-02: **Problem Analysis:** An ability to understand identification, formulation, research literature and examining of complex technological problems reaching substantiated conclusions using first principles of mathematics, natural sciences and technologies.
- PLO-03: **Implementation of Design of Solution:** An ability to implement the design solutions for complex technological problems and systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- PLO-04: **Investigation:** An ability to investigate complex technological problems in a methodical way including literature survey, understanding the design and conduct of experiments, analysis and interpretation of experimental data and synthesis of information to derive valid conclusions.

#### SEMESTER FOUR

Course Code	Course Title	Cr. Hrs.
ENG212	Technical Report Writing	3-0
ET203	Electric Power Transmission	2-1
ET213	Micro-Processor Theory & Interfacing	2-1
ET214	Electromagnetic Field Theory	2-0
ET215	Power Electronics	2-1

#### SEMESTER FIVE

Course Code	Course Title	Cr. Hrs.
ET216	Electrical Power Distribution & Utilization	2-1
ET301	Switch Gear & Protective Devices	2-1
ET302	Communication Technology	2-2
ET311	Electrical Machines-II	2-2
MGT302	Project Management	3-0

#### SEMESTER SIX

Course Code	Course Title	Cr. Hrs.
ET312	High Voltage Technology	2-1
MGT303	Total Quality Management	3-0
ET313	Power System Analysis	2-0
ET314	Control Technology	2-1
ET315	Industrial Drive & PLC	2-2
RES391	Project Phase - I	0-3

#### SUMMER SEMESTER

Course Code	Course Title	Cr. Hrs.
RES 392	Project Phase II	0-3

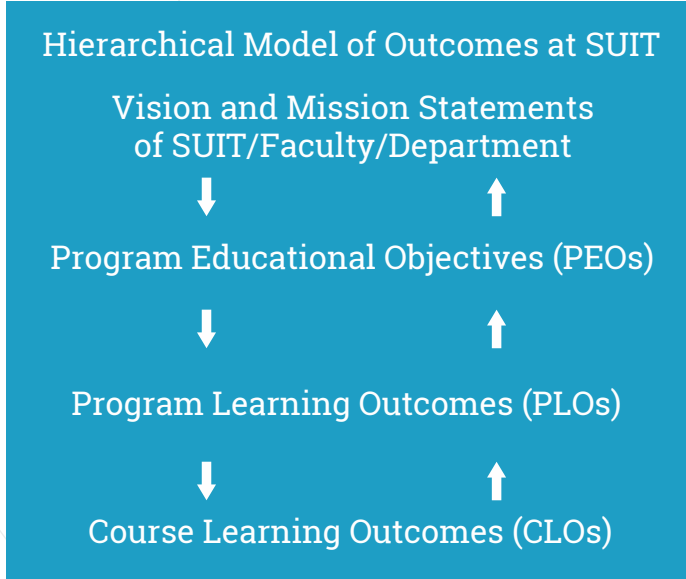
- PLO-05 **Modern Tool Usage:** An ability to create, select and apply appropriate techniques, resources and modern technological and IT tools, including prediction and modeling to complex technological activities, with an understanding of the limitations.
- PLO-06 **The Technology and Society:** An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional industrial practice and solution to complex technological problems.
- PLO-07 **Environment and Sustainability:** An ability to understand the impact of professional technological solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.
- PLO-08 **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of technology practice.
- PLO-09 **Individual and Team Work:** An ability to work effectively, as an individual or in a team, on multifaceted and /or multidisciplinary settings.
- PLO-10 **Communication:** An ability to communicate effectively, orally as well as in writing, on technology activities with the technology community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PLO-11 **Project Management:** Ability to demonstrate management skills and apply technology principles to one's own work, as a member and/or leader in a team, to manage projects in a multi disciplinary environment.
- PLO-12 **Life-Long Learning:** An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

SEMESTER SEVEN

Course Code	Course Title	Cr. Hrs. 16
ET401	Supervised Industrial/ Field Training	0-16

SEMESTER EIGHT

Course Code	Course Title	Cr. Hrs. 16
ET412	Supervised Industrial/ Field Training	0-16



# Bachelor of Science in Mechanical Engineering Technology

Minimum Duration : 8 Semesters, 4 Years  
 Maximum Duration : 16 Semesters, 8 Years  
 Minimum CGPA required to earn degree 2.00

Program Code 148  
 Number of Courses 32  
 Credit Hours 135

## Eligibility :

3 Years Diploma of Associate Engineers from Technical Board in the relevant technology or F.Sc Pre-Engineering from any Intermediate Board with at-least 50% marks or equivalent qualification.

Candidate need to pass an aptitude Test/ Interview conducted by the university.

## Outcome Based Education (OBE) System:

OBE is an educational process that focuses on what students can do or the qualities they should develop after they are taught. OBE involves the restructuring of curriculum, assessment and reporting practices in education to reflect the achievement of high order learning and mastery rather than accumulation of course credits. It requires that the students demonstrate that they have learnt the required skills and contents. OBE and OBA (Outcome Based Assessment) Learning where the students were given awareness about the OBE system. The department has established an OBE committee to successfully implement OBE system. The committee is responsible for developing the CLOs (Course Learning Outcomes) for the courses and rubrics for Laboratories and Final Year Projects ( FYP) . Several trainings sessions and workshops were conducted to train the faculty members and lab engineers to be able to adopt OBE system.

SEMESTER ONE	Course Code	Course Title	Cr. Hrs. 19
	GH101	Islamic Studies or	2-0
	GH102	Value Ethics (for Non Muslim)	2-0
	MA103	Applied Mathematics - I	3-0
	GS102	Applied Physics (Mechanics)	2-1
	CS102	Introduction to Computer Fundamentals	2-1
	MT101	Applied Chemistry	2-1
	MT102	Engineering Statics	2-1

SEMESTER TWO	Course Code	Course Title	Cr. Hrs. 16
	GH103	Pakistan Studies	2-0
	MA104	Applied Mathematics - II	3-0
	MT103	Technical Drawing and CAD - I	2-2
	MT104	Applied Thermodynamics-I	2-2
	MT105	Workshop Technology	1-2

SEMESTER THREE	Course Code	Course Title	Cr. Hrs. 16
	MT211	Engineering Dynamics	2-1
	MA203	Probability and Statistics	3-0
	ENG201	Communication Skills	3-0
	MT201	Mechanics of Materials	2-1
	Mt202	Basic Electrical and Electronics	2-2

**Program Educational Objectives (PEOs) :**

- PEO-1: To be successful mechanical technologist and serve the community competently by the application of professional knowledge, applying modern tools and skills.
- PEO-2: The ability to confidently communicate and manage engineering information and concepts by oral presentation or technical reports, in a manner that would gain customer approval and support.
- PEO-3: To implement and use their broad knowledge of mechanical engineering technology to work in a wide spectrum of technical industries
- PEO-4: Promote student's awareness of professional ethics, ability to work in inter and multidisciplinary team, and moral responsibility, and the need

**Program Learning Outcomes (PLOs) System :**

- PLO-01: **Technology Knowledge:** An ability to apply knowledge of mathematics, science, fundamentals of technology to the implementation of solution of complex technological problems.
- PLO-02: **Problem Analysis:** An ability to understanding identification, formulation, research literature and analyze of complex technological problems reaching substantiated conclusions using first principles of mathematics, natural sciences and technologies.
- PLO-03: **Implementation of Design of Solution:** An ability to implement the design solutions for complex technological problems and systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- PLO-04: **Investigation:** An ability to investigate complex technological problems in a methodical way including literature survey, understanding the design and conduct of experiments, analysis and interpretation of experimental data and synthesis of information to derive valid conclusions.

**SEMESTER FOUR**

Course Code	Course Title	Cr. Hrs.
MT203	Machine Design	3-0
MT204	Fluid Mechanics	2-1
MT212	Applied Thermodynamics-II	2-1
MT205	Industrial Material	2-1
ENG212	Technical Report Writing	3-0
MT206	Manufacturing Processes	2-1

**SEMESTER FIVE**

Course Code	Course Title	Cr. Hrs.
MT301	Heat Transfer	2-1
MT302	Mechanical Vibration	2-1
MT311	CAD-II	0-3
MT303	Material Handling and Safety	3-1
MGT302	Project Management	3-0
MT304	Engineering Economics	2-0

**SEMESTER SIX**

Course Code	Course Title	Cr. Hrs.
MT312	Instrumentation & Control	2-1
MT313	Internal Combustion (IC) Engine	2-2
MT314	Refrigeration & Air Conditioning	2-1
MGT303	Total Quality Management	3-0
RES391	Project Phase - I	0-3

**SUMMER SEMESTER**

Course Code	Course Title	Cr. Hrs.
RES 392	Project Phase II	0-3

► Bachelor of Science in Engineering Technology Mechanical

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

PLO-06: **The Technology and Society:** An ability to apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional industrial practice and solution to complex technological problems.

PLO-07: **Environment and Sustainability:** An ability to understand the impact of professional technological solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

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

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

PLO-10: **Communication:** An ability to communicate effectively, orally as well as in writing, on technology activities with the technology community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PLO-11: **Project Management:** Ability to demonstrate management skills and apply technology principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.

PLO-12: **Life-Long Learning:** An ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

SEMESTER SEVEN

Course Code	Course Title	Cr. Hrs. 16
MT401	Supervised Industrial/ Field Training	0-16

SEMESTER EIGHT

Course Code	Course Title	Cr. Hrs. 16
MT412	Supervised Industrial/ Field Training	0-16

