

# PROSPECTUS

2024-2025



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# Message by the Chancellors

**Muhammad Asif Farooqui**  
**Chancellor**



It gives me immense pleasure to welcome you all to the prestigious institution, the SIMT family. At SIMT, we believe in nurturing talent, fostering innovation, and facilitating a holistic learning environment that empowers you to excel in your chosen field. As the Chancellor, I assure you of our unwavering commitment to providing top-notch education, state-of-the-art facilities, and a platform that encourages intellectual curiosity and personal growth. Our faculty comprises experienced mentors and experts dedicated to shaping the leaders of tomorrow. Remember, your time here is not just about academics; it's about embracing diversity, honing your skills, and exploring opportunities that broaden your horizons.

Engage actively in our various clubs, societies, and initiatives designed to enrich your overall university experience.

I encourage you to dream big, set ambitious goals, and utilize the resources at your disposal to realize your aspirations. Embrace challenges as stepping stones toward success and never hesitate to seek guidance and support from our faculty and staff. Together, let's create a vibrant community driven by passion, innovation, and excellence. Your journey at SIMT is the foundation for a promising future, and I am excited to witness your growth and achievements. Wishing you all a fulfilling and enriching academic year ahead.

**Warm regards,**



# Rector`s Message

**Pro. Dr, Ashad Habib Malik**

**Rector**



I feel pleasure in mentioning that Sindh Institute of Management and Technology (SIMT) is firmly committed to impart quality education at an affordable fee structure to turn out world class professionals and assure a bright future ahead in their professional life. Graduates from SIMT can go out and serve with distinction within and outside the country and be able to contribute.

The Institute's infrastructure is continuously being expanded. Central library and laboratories are upgraded with the latest state-of-the-art equipment. I am delighted to welcome you to join the academic fraternity at Sindh Institute of Management and Technology for starting a new chapter in your life and career. SIMT is centrally located in the heart of industrial area of Karachi. Apart from education, great emphasis is laid on character building, moral values, team spirit, tolerance, harmony and love for our country and its people.

Our seasoned faculty and industry experts are engaged in arranging internships, industrial visits, motivational talks, direct interaction with employers for placements, skill development seminars/workshops and other social events. Our technology-based research creates a longer lasting impact. Our endeavors aim at increasing the entrepreneur's yields to enrich economy and create new avenues for educating our youth on modern lines.

SIMT has highly qualified, multi-dimensional experienced, excellent mix of academia & industry and dedicated Post-Doc and PhD faculty members who offer modern teaching and research facilities to students, who are enrolled in an array of disciplines of computer science, engineering, technology and business with state-of-the-art modern engineering, technology and artificial intelligence-based tools.

**Warm regards.**



# Vision

**To encourage innovation through latest research,  
technology and teaching methods to facilitate  
industry compatible leaders for socio- economic  
development**



# Mission

**SIMT is Committed for Quality Education through Innovative Academic Programs Focusing on Research and Learning in Competitive Environment for Socio-Economic Uplift of Pakistan.**

# University Key Management

S.No	Name	Designation
1	Mr. Muhammad Asif Farooqui	Chairman
2	Prof. Dr. Arshad Habib Malik	Rector & Dean
3	Prof. Dr. Sana Arz Bhutto	Dean Business Administration
4	Dr. Abdul Hameed	HOD Business Administration
5	Dr. Kamran Joyo	HOD Engineering Technology
6	Dr. Razi Ahmed	HOD Computer Science
7	Ms. Sumaira Bashir Ahmed	Registrar
8	Mr. Habib Ullah Rajpar	Director Finance
9	Ms. Saba Imam	Controller of Examination
10	Mr. Raza Jafri	Director QEC
11	Dr. Sana Arz Bhutto	Director ORIC



# Introduction of SIMT

Sindh Institute of Management & Technology (SIMT), is chartered by Government of Sindh as Degree Awarding Institute under the Act XIV of March 2015 and recognized by the Higher Education Commission, Islamabad. SIMT is located at PLOT No:29, SECTOR 16, KORANGI INDUSTRIAL AREA, KARACHI, PAKISTAN and is being run by a group of qualified business professionals and educationists.

SIMT promotes better education, conducts research and develops top professionals in the fields of Business Administration, Computer Sciences, Information Technology, Education, & Technologies as well as Social Sciences. The Management and the Faculty Members of SIMT are highly qualified, professionals and experienced in their relevant fields.

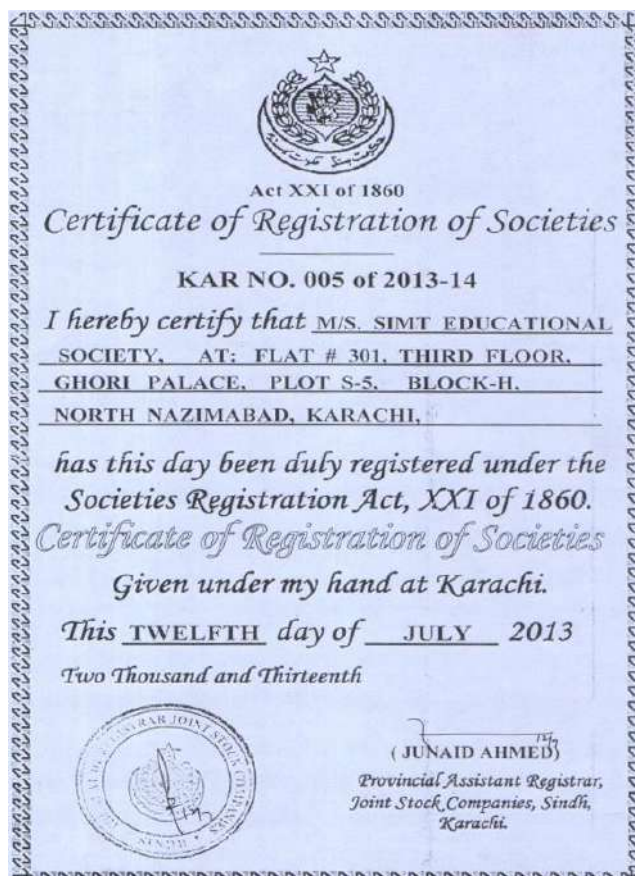
In order to impart quality education which is at par with international standards, SIMT has developed unified templates as per guidelines of HEC for the development and revision of curricula in the above mentioned fields.

The steps taken would serve the purpose of meeting not only our national but social and economic needs, and it would also provide the level of competency specified in Pakistan Qualification Framework to make it compatible with international educational standards.

## Introduction of SIMT Educational Society (Regd.)

**SIMT Educational Society (Regd.)** has been established for the promotion of education and its Chairman **Mr. Muhammad Asif Farooqui** has intensive experience of almost 18 years in the field of education from school level to higher education and he has some other avenues as well. He is a visionary personality having vast experience in business as well as educational institutes. He is a veteran educationist and intelligent businessman of the city.

**SIMT Educational Society is registered under the Society Act XXI of 1860**



# About Us





**BBA (4Years)****MBA (2Years)**

# Business Administration

## Department of Business Administration

### Program Offered

The Department of Business Administration is currently offering the following programs:

**Associate Degree in Commerce (2 years)**

**BBA (4 years)**

**MBA (2 years)**

### ASSOCIATE DEGREE IN COMMERCE

#### ZERO SEMESTER FOR UNDERGRADUATE PROGRAMS

A 'Zero Semester' for undergraduate programs facilitates the candidate's seeking admission towards Associate Degrees. Such candidates having prescribed qualification/degree but having less than 45% marks or CGPA less than 2.0 out of 4, as applicable, can enroll for 'Zero Semester' and upon achieving the prescribed completions requirements can become eligible for subsequent admission towards undergraduate programs.

#### Duration

It is a one-semester (18 weeks) duration program.

#### Admission Eligibility Criteria

Candidates who have earned relevant qualification/degree prescribed in admission eligibility criteria with less than 45% marks or CGPA less than 2.0 out of 4, as applicable.

#### Assessment of Study Progress

The students' study progress evaluation mechanism is based on continuous assessment throughout the semester by giving assignments, quizzes, Graded Discussion Boards (GDBs), mid-term and final term exams. The mid-term and final term exams are conducted at SIMT and usually count for 80 to 85% of the total marks for a course.

#### Completion of Zero Semester

The candidates will be required to pass all prescribed courses in a single semester and achieve a semester GPA of at least 2.00 out of 4 in order to become eligible to apply for admission towards desired study program, wherein applicable.

#### Important Note

1. The courses and their number may be changed from time to time by the Institute.
2. Students enrolled in the Zero Semester will be bound to obey the rules and regulations of the Institute.
3. Zero Semester for Undergraduate programs, once qualified will remain valid for all subsequent admissions in the relevant program

## Courses of Study

1. MTH 001: Elementary Mathematics
2. ENG 002: Elementary English
3. CS 003: Computer Proficiency

MTH 001: Elementary Mathematics	
Lecture No.	Description
1	Logic
2	Truth Table
3	Logic Equivalence, Laws of the Algebra of Propositions, Translating Word Statements to Symbolic Notation & Vice Versa
4	Biconditional Statements and their Equivalence
5	Arguments, Valid and In Valid arguments
6	Sets, Venn Diagram and Membership Table
7	Operations on sets, Venn Diagrams for operations on sets
8	Ordered Pairs, Relations and Matrix Representation of a matrix
9	Types of relations and Directed graph
10	Reflexive and antisymmetric relations and partially ordered relations
11	Functions, Domain Codomain and Range
12	Types of function
13	Sequence, Arithmetic and Geometric Sequence
14	Series, Sum of Arithmetic and Geometric Series

Lecture No.	Description
15	Performing basic arithmetic operations using Microsoft Excel
16	Basic calculations of percentages and investments using Microsoft Excel
17	Discount, Simple and compound interest, Average due date
18	Annuity, Accumulated value, Accumulation Factor, Discount Factor, Discounted value
19	Matrix, its Dimension and Types of matrix
20	Operations on Matrices
21	Merchandising

Statistics	
Lecture No.	Description
22	Introduction to Statistics
23	Data Representation
24	The Central Tendency of a dataset
25	Median, Empirical Relation, Quartiles
26	Geometric mean, Harmonic mean & relationship between them
27	Measures of Dispersion
28	Mean Deviation, Standard Deviation and Variance & Coefficient of variation
29	Permutations, Combinations
30	Definitions of Probability
31	Relative Frequency, Axiomatic Definition & Laws of Probability
32	Independent and Dependent Events, Multiplication Theorem & Marginal Probability

<b>CS 003: Computer Proficiency</b>	
<b>Lecture No.</b>	<b>Description</b>
1	Introduction of Training Environment and Computer Basics
2	Input
3	Input Devices
4	Output
5	Storage
6	Hardware
7	Software
8	Software
9	Information Highway and Security

<b>Module 2: Using the Computer and Managing Files</b>	
<b>Lecture No.</b>	<b>Description</b>
10	Computer Environment
11	Computer Environment
12	Desktop
13	Managing Files
14	Managing Files (continued)
15	Managing Files (continued)
16	Managing Files (continued)
17	Managing Files (continued)
18	Print Management

<b>Module 3: Word Processing</b>	
<b>Lecture No.</b>	<b>Description</b>
19	Using the Application
20	Main Operations
21	Main Operations
22	Formatting
23	Objects
24	Mail Merge and Prepare Outputs

<b>Module 4: Spreadsheets</b>	
<b>Lecture No.</b>	<b>Description</b>
25	Using the Application
26	Working with Cells
27	Working with Cells (continued)
28	Working with Cells (continued)
29	Worksheets (continued)
30	Formulas and Functions
31	Formatting
32	Charts/Graphs
33	Prepare Outputs

<b>Module 5: Presentation</b>	
<b>Lecture No.</b>	<b>Description</b>
34	Getting Started
35	Developing a Presentation
36	Text and Images
37	Charts/Graphs, Drawn Objects
38	Slide Show Effects
39	Prepare Outputs

Module 6: Information and Communication	
Lecture No.	Description
40	The Internet
41	Web Navigation
42	Web Searching
43	Electronic Mail
44	Messaging
45	Mail Management

### **PROGRAM REVIEW**

- An associate's degree is an undergraduate academic degree awarded by community colleges upon completion of a course of study usually lasting two years.
- An associate's degree is equivalent to the first two years of a four-year college or university degree.
- This degree forms the foundation of a bachelor's degree by allowing students to complete all of the general education requirements prior to (Possible) transfer to a four year university.

### **BENEFITS OF THE PROGRAM**

#### **Terminal Degree:**

- The students, who do not want to continue with four years University, can utilize their 'Degree' to get the job (placement) in the market.

#### **Transfer Degree:**

- The curriculum is designed primarily for students who wish to transfer to a four-year college or university to complete the degree in Bachelor of Business Administration/Bachelor of Commerce.



**Sindh Institute of Management and Technology**  
**Model for the Program**

S.No	Categories	No. of Courses Min-Max	Credit Hours Min-Max	Credit Hours Percentile
1	Compulsory Requirement (no Choice)	8	24	29%
2	Discipline Specific Foundation Courses	4	12	18%
3	Major Courses including Project/Internship	8	24	44%
4	Electives	2	6	9%

**Total Number of Credit Hours: 66**

**Duration: 2 Years**

**Semester Duration: 16 - 18 weeks**

**Course Load per Semester: 15-18 Credit Hours**

**Avg. No. of Courses per Semester: 5 - 6**

### **ELIGIBILITY CRITERIA FOR ADMISSION**

- HSC or equivalent with at least 2<sup>nd</sup> Division 45% marks, at the time of appearing for test and interview.
- Candidates who have appeared in final exam of HSC or equivalent can also apply for admissions.
- These candidates will be provided provincial admission to associate program, in case if their final year results are found not meeting the minimum requirements, their provisional admission will stand cancelled.

## SCHEME OF STUDY FOR ASSOCIATE OF ARTS IN COMMERCE

### Associate Degree in Commerce

S.No	Compulsory Requirement (General Education Core Courses)	Credit hours
1	English-I (English Composition and Comprehension-I)	3+0=3
2	English-II (English Composition and Comprehension-II)	3+0=3
3	Urdu	3+0=3
4	Business Communication	3+0=3
5	Business Research Methods	3+0=3
6	Islamic Studies/Ethics & Pakistan Studies	2+1=3
7	English-III (Communication & Presentation Skills)	3+0=3
8	Introduction to Computers	2+1=3
<b>Total Credit Hours</b>		<b>24</b>

S.No	Discipline Specific Foundation Courses	Credit hours
1	Principles of Accounting	3+0=3
2	Introduction to Business	3+0=3
3	Principles of Management	3+0=3
4	Applied Mathematic & Statistics	3+0=3
<b>Total Credit Hours</b>		<b>12</b>

S.No	Major Courses	Credit hours
1	Cost & Advance Accounting	3+0=3
2	Financial Accounting	3+0=3
3	Economic Analysis & Policies	3+0=3
4	Money & Banking	3+0=3
5	Introduction to Business Finance	3+0=3
6	Auditing & Income Tax Law	3+0=3
7	Business & Industrial Law	3+0=3
8	Research Project	3+0=3
<b>Total Credit Hours</b>		<b>24</b>

S.No	Elective	Credit hours
1	Elective-I	3+0=3
2	Elective-II	3+0=3
<b>Total Credit Hours</b>		<b>06</b>

S.No	List of Elective	Credit hours
1	Psychology	3+0=3
2	Leadership	3+0=3
3	Islamic Banking	3+0=3
4	Human Resource Management	3+0=3
5	Marketing Management	3+0=3
6	Supply Chain Management	3+0=3
<b>Total Credit Hours</b>		<b>06</b>

## BACHELOR IN BUSINESS ADMINISTRATION (BBA)

The Department of Business Administration of SIMT offers a complete 4-year (8 semesters) BBA course with special emphasis on marketing, finance and human resource management.

Students are necessitated to successfully complete 44 courses with 138 credit hours including 6 credit hours of research project. These courses are suitably divided into 8 semesters. The first and the last semesters hold 5 courses each while the rest hold 6 courses each. Students should follow the schedule. But in extreme cases the schedule may be relaxed. The maximum time limit of fulfilling the criteria is seven years.

It is mandatory for the BBA students to do minimum 6-week internship in any organization and produce a detailed report of minimum 1900 words. Internship should start after the 4<sup>th</sup> semester.

### Admission eligibility & procedure for BBA

Having the Inter certificate with 45% marks or 3 level passes (excluding General Paper) under a recognized Board or an equivalent from a recognized institution may be the eligibility criteria for admission at SIMT. The candidates have to go through a written test and interview to finally buy the entrance ticket.

## CURRICULUM PLAN

SEMESTER-I				
S. No	Course code	Course Title	Pre-requisite	Credit hours
1	ASC 100	Basic Mathematics	None	3
2	CSC 181	Introduction to Computers	None	3
3	HMT 105	Pakistan & Islamic Studies	None	3
4	HMT 101	English-I	None	3
5	BUS 101	Introduction to Business	None	3
<b>Total</b>				<b>15</b>

SEMESTER-II				
S. No	Course code	Course Title	Pre-requisite	Credit hours
1	ECN 101	Principles of Economics	None	3
2	HMT 102	English-II	HMT 101	3
3	ACT 211	Principles of Accounting	None	3
4	MKT 321	Principles of Marketing	None	3
5	MGT 201	Principles of Management	None	3
6	HMT 302	Psychology	None	3
<b>Total</b>				<b>18</b>

SEMESTER-III				
S. No	Course code	Course Title	Pre-requisite	Credit hours
1	HMT 301	Sociology	None	3
2	ACT 202	Financial Accounting	ACT 211	3
3	ASC 162	Business Mathematics	ASC 100	3
4	MGT 311	Organizational Behavior	MGT 201	3
5	HMT 215	Business Communication	HMT 102	3
6	ASC 304	Statistics	None	3
<b>Total</b>				<b>18</b>

SEMESTER-IV				
S. No	Course code	Course Title	Pre-requisite	Credit hours
1	MGT 321	Human Resource Management	MGT201	3
2	HMT 401	Business Research Methods	ASC 304	3
3	HST 315	Business and Industrial Law	None	3
4	ECN 107	Economic Analysis & Policies	ECN 101	3
5		Elective-I		3
6	FIN 201	Introduction to Business Finance	ACT 202	3
<b>Total</b>				<b>18</b>

SEMESTER-V				
S. No	Course code	Course Title	Pre-requisite	Credit hours
1		Project—I		3
2	MKT 411	Marketing Management	MKT321	3
3	MGT 510	Total Quality Management	None	3
4	ACT 421	Managerial Accounting	ACT202	3
5	ACT 301	Cost Accounting & Adv. Accounting	ACT211	3
6		Elective-II		3
<b>Total</b>				<b>18</b>

SEMESTER-VI				
S. No	Course code	Course Title	Pre-requisite	Credit hours
1	MGT 541	Strategic Management	MKT 411	3
2	MGT 431	Entrepreneurship	MKT 411	3
3	MGT 531	Project Management	MKT 411	3
4	FIN 311	Financial Management	FIN 201	3
5		Elective-III		
6	MGT 621	Business Policy	None	3
<b>Total</b>				<b>18</b>

SEMESTER-VII				
S. No	Course code	Course Title	Pre-requisite	Credit hours
1	MKT 321	Consumer Behavior	MKT 411	3
2	ESM 101	Quantitative Skills	None	3
3		Internship-I		3
4		Internship-II		3
5	MGT 231	Personal Management/Self-Management	None	3
6	MGT 300	Law of Taxation	None	3
<b>Total</b>				<b>18</b>

SEMESTER-VIII				
S. No	Course code	Course Title	Pre-requisite	Credit hours
1		Project-II		3
2	MKT 506	Strategic Marketing	MGT 321	3
3	SCM 421	Supply Chain Management	MKT 411	3
4	MGT 322	Operations Management	MKT 411	3
5	MIS 222	Management Information Systems	CSC 181	3
6		Elective-IV		3
<b>Total</b>				<b>18</b>

## **MASTER'S IN BUSINESS ADMINISTRATION (MBA)**

The Department of Business Administration offers MBA degree program with Marketing, Human Resource Management, Finance, Project Management, Islamic Banking, Supply Chain Management, Information System and Hospitality. Duration of the program varies with what the candidate has already accomplished academically (See the eligibility criteria)

### **Admission eligibility & procedure for MBA**

All students of these categories have to go through a written test followed by Viva to get an admissibility ticket.

### **UNDERGRADUATE ELECTIVES**

#### **Finance**

<b>Code</b>	<b>Course Title</b>
FIN501	Corporate Finance
FIN502	Working Capital Management
FIN503	Taxation Management
FIN504	Companies Law
FIN505	Treasury & Fund Management
FIN506	Security Analysis
FIN507	Project Evaluation
FIN511	Analysis of Financial Statement
FIN531	Micro Finance
FIN643	Portfolio Management
FINxxx	International Finance
FIN563	Investment Banking

#### **Marketing**

<b>Code</b>	<b>Course Title</b>
MKT501	Advertising
MKT502	Sales Management
MKT503	Brand Management
MKT504	Services Marketing
MKT507	International Marketing
MKT511	Consumer Behavior
MKTxxx	Internet Marketing
MKTxxx	New Product Development
MKTxxx	Retail Marketing

#### **Human Resource Management**

<b>Code</b>	<b>Course Title</b>
MGT501	Recruitment & Selection
MGT502	Industrial Relations
MGT503	Organizational Development
MGT504	Training & Development
MGT505	Compensation Management
MGT506	Strategic Human Resource Management
MGT507	Performance Management
MGT509	Human Resource Development
MGT511	Organizational Theory & Design
MGT583	Human Resource Laws
MGT584	Motivation & Reward Management
MGT585	Strategic Leadership
MGTxxx	Human Resource Information System
MGT623	Advance Organizational Development

**Sindh Institute of Management & Technology**  
**Faculty of Business Administration**  
**MBA (2 YEARS) Degree Program (Non-Business Stream)**  
**DESIGN SUMMARY**

1	Normal Duration	<b>2 YEARS (4 SEMESTERS)</b>		
2	Total Credit Hours	66 CHs		
3	Total No. of Courses	<b>22 Courses (3 CHs each) OR 20 courses 3 CHS each + Thesis (6CHS)</b>		
4	Entry Requirement	16-year non-business education (with 45% marks+ GAT (50%) & interview		

<b>SEMESTER ZERO</b>				
S.NO	Code	MBA (2 Years) Non-Business Streams	Cr. Hours	Pre-requisite
<b>SEMESTER 1</b>				
1	ACC 511	Financial Accounting	3	
2	ECO 515	Business Economics	3	
3	MKT 513	Principles of Marketing	3	
4	MGT 512	Principles of Management	3	
5	MGT 516	Business Communication	3	
6	MTS 525	Applied Statistics	3	
		<b>Total Credits</b>	<b>18</b>	
<b>SEMESTER 2</b>				
1	ACC 521	Cost & Management Accounting	3	ACC 511
2	MGT 522	Human Recourse Management	3	
3	MGT622	Entrepreneurship	3-0	
4	FIN 525	Financial Management	3	FIN 421
5	MIS 623	Management Information System	3	
6	SCM601	Supply Chain Management	3-0	MKT 513
		<b>Total Credits</b>	<b>18</b>	
<b>SUMMER SEMESTER</b>				
<b>SEMESTER 3</b>				
1	MGT 722	Advanced Research Methods	3	
2	MKT 712	Strategic Marketing	3	MKT 513
3	FIN 711	Strategic Finance	3	
4		Elective - I	3	
5		Thesis-I	3	
		<b>Total Credits</b>	<b>15</b>	
<b>SEMESTER 4</b>				
1	MTS 723	Advanced Quantitative Analysis	3	
2	MGT 714	Leadership & Change	3	MGT 512
3	MGT 713	Advanced Strategic Management	3	
4		Elective - II	3	
5		Thesis II		
		<b>Total Credits</b>	<b>15</b>	
<b>Total Program Credits</b>			<b>66</b>	

<b>Internship:</b>	<b>Six-to-Eight-week supervised internship</b>		
<b>Degree Awarding CGPA</b>	Minimum degree awarding CGPA is 2.5 out of 4		
<b>MBA (2 Years)</b>			



Semester 1				
1	MGT 722	Advanced Research Methods	3	
2	MKT 712	Strategic Marketing	3	MKT 513
3	FIN 711	Strategic Finance	3	
4	MGT 713	Advanced Strategic Management	3	
		<b>Total Credits</b>	<b>12</b>	
Semester 2				
1	MTS 723	Advanced Quantitative Analysis	3	
2	MGT 714	Leadership & Change	3	MGT 512
3		Elective-I	3	
4		Thesis 1	3	
		<b>Total Credits</b>	<b>12</b>	
Semester 3				
1		Elective - II	3	
2		Thesis-2	3	
		<b>Total Credits</b>	<b>6</b>	
<b>Total Program Credits</b>			<b>30</b>	

**B.E**

# Electrical Engineering Technology

The Bachelor of Science degree program in Electrical Engineering Technology has been offering since 2019 at this Institute with the aim and objective to address the industry needs of technologist graduates. The Institute is functioning under the umbrella of Higher Education Commission (HEC) of Pakistan in the framework of National Technology Council (NTC). Since electricity is a basic necessity nowadays. There is sufficient scope of electrical engineering and there is a huge recruiting market in country and abroad. The curriculum of electrical technology program is compatible with NTC curriculum framework. This includes blend of natural science courses, humanities courses, core foundation, breadth, depth, elective courses, management courses, project work and emphasis on supervised industrial training. The salient features of program are mentioned in table.

<b>Minimum Duration</b>	<b>4 Years</b>
<b>Eligibility</b>	<b>Relevant DAE/HSC Pre-Engineering with minimum 50% Marks</b>
<b>One Academic Year</b>	<b>02 Semesters</b>
<b>No of Semesters</b>	<b>08</b>
<b>Each Semester Duration</b>	<b>16-18 Weeks</b>
<b>Credit Hours /Semester</b>	<b>16-18</b>
<b>Industrial Training</b>	<b>32 Credit Hour</b>
<b>Total Credit Hours</b>	<b>137</b>

### VISION

To produce Technopreneurial Leaders through Innovative and Experiential Learning Modes of Education

### Electrical Engineering Mission

To produce technically trained technologists incorporating excellent communicative and managerial skills to accomplish modern technological needs of Electrical Engineering industry and society.

### Program Educational Objectives

The objectives of BETEE program are to produce graduates who will be able to:

1. Demonstrate proficient knowledge and skills across various fields of Electrical Engineering technology, effectively achieving their professional objectives.
2. Collaborate and communicate proficiently within multi-disciplinary teams to address complex challenges in the field.
3. Apply ethical, societal, environmental, technical, and managerial considerations ensuring responsible engagement in professional practice.
4. Commit to continuous learning and innovation throughout their careers, adapting to evolving technological and industry demands while fostering personal and professional growth.

**Program Learning Outcomes**

The program Learning Outcomes are given below:

**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 Teamwork (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.

**CURRICULUM PLAN EFFECTIVE FROM YEAR 2024****FRIST YEAR**

SEMESTER-I					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	ASC 101	Calculus and Analytical Geometry	3+0	3	None
2	CSC 181	Introduction to Computers	2+1	2+3	None
3	HMT 116	Islamic Studies / Ethics	2+0	2	None
4	ASC 102	Applied Physics	3+0	3	None
5	HMT 115	Pakistan Studies	2+0	2	None
6	HMT 216	Communication Skills	3+0	3	None
SEMESTER-II					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	ADC 301	Differential Equations	3+0	3	ASC 101
2	MGT 222	Engineering Economics & Management	3+0	3	None
3	CSC 211	Data Structures and Algorithms	2+1	2+3	CSC 181
4	ENT 258	Linear Circuit Analysis	2+1	2+3	None
5	ASC 341	Linear Algebra	3+0	3	None
6	TC 114	Occupational Safety & Health	3+0	3	None

**SECOND YEAR**

SEMESTER-III					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	ASC 203	Discrete Mathematics	3+0	3	None
2	ELT 444	Technical Report Writing	3+0	3	None
3	EET 213	Electrical Workshop	0+2	0+6	None
4	EET 214	Technical Drawing	0+1	0+3	None
5	ENT 350	Electronic Devices and Circuits	2+1	2+3	ENT 258
6	CSC 212	Digital Logic Design	2+1	2+3	ENT 258
SEMESTER-IV					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	ENT 204	Instrumentation and Measurements	2+1	2+3	EET 215
2	ELT 253	Electrical Machines	2+1	2+3	EET 215
3	ELT 255	Signals and Systems	2+1	2+3	EET 215
4	EET 224	Microcontroller Systems	2+1	2+3	CSC 211
5	EET .225	Electrical Power Transmission	2+1	2+3	EET 215
6	ASC 304	Probability & Statistics	3+0	3	None

**THIRD YEAR**

SEMESTER-V					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	EET 311	Control Technology	2+1	2+3	EET 215, ENT 204, ELT 255
2	ELT 888	Communication Systems	2+1	2+3	ELT 255
3	EET 313	Electrical Power Distribution and Utilization	1+1	1+3	ELT 252
4	ENT 226	Power Electronics	2+1	2+3	ENT 350
5	EET 315	Switch Gear & Protective Devices Technology	2+1	2+3	EET 225
6	ELT 222	Project Part-I	0+3	0+9	None

SEMESTER-VI					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	MGT 311	Organizational Behavior	3+0	3	None
2	ELT 115	Industrial Control and Automation	2+1	2+3	EET 224
3	ENT 118	Telecommunication Networks	2+1	2+3	ELT 253
4	EET 323	Embedded Systems	2+1	2+3	EET 224
5	MGT 531	Project Management	3+0	3+0	None
6	ELT 333	Project Part-II	0+3	0+9	ELT 222

**FOURTH YEAR**

SEMESTER-VII					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	EET 411	16 weeks Supervised Industrial /Field Training (8x5=40 Hrs./week, 40 x 16 = 640 Hrs. /Semester	0+16	48	Studied all courses up to 6 Semester

SEMESTER-VIII					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	EET 421	16 weeks Supervised Industrial /Field Training (8x5=40 Hrs./week, 40 x 16 = 640 Hrs. /Semester	0+16	48	Studied all courses up to 7 Semester

**ELECTIVE COURSES**

DEPTH ELECTIVES					
S. No	Course Code	Course Title	Credit Hours	Contact Hours	Pre-Requisite
1	ENT 226	Power Electronics	2+1	2+3	
2	EET 315	Switch Gear & Protective Devices Technology	2+1	2+3	
3	ELT 115	Industrial Control and Automation	2+1	2+3	
4	EET 322	Telecommunication Systems Technology	2+1	2+3	
5	EET 323	Embedded Systems	2+1	2+3	
6	ELT113	Renewable Energy Systems	2+1	2+3	

**B.E**

# Mechanical Engineering Technology

The Bachelor of Science degree program in Mechanical Engineering Technology has been offering since 2019 at this Institute with the aim and objective to address the industry needs of technologist graduates. The Institute is functioning under the umbrella of Higher Education Commission (HEC) of Pakistan in the framework of National Technology Council (NTC). Mechanical engineering plays a critical role in manufactured technologies, from cars to airplanes to refrigerators. It enables you to do many daily activities with ease, as it brings helpful technologies to our modern society. There is sufficient scope of mechanical engineering and there is a huge recruiting market in country and abroad. The curriculum of mechanical technology program is compatible with NTC curriculum framework. This includes blend of natural science courses, humanities courses, core foundation, breadth, depth, elective courses, management courses, project work and emphasis on supervised industrial training. The salient features of the program are mentioned in table.

<b>Minimum Duration</b>	<b>4 Years</b>
<b>Eligibility</b>	<b>Relevant DAE/HSC Pre-Engineering with minimum 50% Marks</b>
<b>One Academic Year</b>	<b>02 Semesters</b>
<b>No of Semesters</b>	<b>08</b>
<b>Each Semester Duration</b>	<b>16-18 Weeks</b>
<b>Credit Hours /Semester</b>	<b>16-18</b>
<b>Industrial Training</b>	<b>32 Credit Hour</b>
<b>Total Credit Hours</b>	<b>134</b>

## VISION

To produce Technopreneurial Leaders through Innovative and Experiential Learning Modes of Education

## Mechanical Engineering Technology Mission

To produce technically trained technologists incorporating excellent communicative and managerial skills to accomplish modern technological needs of Mechanical Engineering industry and society.

## **Program Educational Objectives**

The objectives of BETME program are to produce graduates who will be able to:

1. Demonstrate proficient knowledge and skills across various fields of Mechanical Engineering technology, effectively achieving their professional objectives.
2. Collaborate and communicate proficiently within multi-disciplinary teams to address complex challenges in the field.
3. Apply ethical, societal, environmental, technical, and managerial considerations ensuring responsible engagement in professional practice.
4. Commit to continuous learning and innovation throughout their careers, adapting to evolving technological and industry demands while fostering personal and professional growth.
- 5.



## Program Learning Outcomes

The program Learning Outcomes are given below:

**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

**CURRICULUM PLAN EFFECTIVE FROM YEAR 2024**

Semester I				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	HMT 116	Islamic Studies/ Ethics	HSC or Equivalent Courses	2+0
2	ASC 102	Applied Physics		3+0
3	ASC 101	Calculus and Analytical Geometry		3+0
4	ASC 119	Applied Chemistry		3+0
5	MET 111	Workshop Technology		1+2
6	HMT 115	Pakistan Studies		2+0
			<b>Cr Hrs.</b>	
Semester II				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 181	Introduction to Computers		2+1
2	ELT 255	Engineering Drawing & Graphics		2+1
3	MET 122	Applied Mechanics		2+1
4	MET 213	Industrial Materials	MET 111	3+0
5	MEM 121	Introduction to Industrial Management		3+0
6	HMT 216	Communication Skills		3+0
			<b>Cr Hrs.</b>	
Semester III				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 101	Basic Electronics	None	2+1
2	MET 212	Computer aided drafting and Modeling	CSC 181	0+2
3	MT 102	Fluid Mechanics	None	2+1
4	MET 214	Mechanics of Material	MET 213	2+1
5	MT 105	Thermodynamics	None	2+1
6	CSC 102	Programming Fundamentals	CSC 181	2+1
			<b>Cr Hrs.</b>	
Semester IV				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	MT106	Machine Design & CAD	MET 212	2+1
2	HMT 302	Psychology	None	1+0
3	ASC 304	Probability and Statistics	ASC 101	3+0
4	MT 444	Technical Report Writing	HMT 216	3+0
5	MGT 431	Entrepreneurship	MEM 121	3+0
6	TC 114	Occupational Safety & Health	MET 213	3+0
			<b>Cr Hrs.</b>	

Semester V				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	MET 311	Heat and Mass Transfer	MT 105	2+1
2	MET 312	Energy and Power Technologies	MT 105	3+0
3	MT 222	Project-1	None	0+3
4	MET 314	Manufacturing Processes	MET 214	2+1
5	MGT 531	Project Management	MEM 121	3+0
6	MGT 222	Engineering Economics & Management	None	3+0
			<b>Cr Hrs.</b>	
Semester VI				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	ENT 204	Instrumentation and Measurement	CSC 101	2+1
2	MT 206	Mechanical Vibration	MET 314	3+0
3	MT 116	Internal Combustion Engine	MT106	2+1
4	MGT 510	Total Quality Management	None	3+0
5	MT 333	Project-II	None	0+3
			<b>Cr Hrs.</b>	
Semester VII				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	MET 411	Industrial Training-I	Quantified all courses up to 6 Semester	16
			<b>Cr Hrs.</b>	<b>16</b>
Semester VIII				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	MET 411	Industrial Training-I	Quantified all courses up to 6 Semester	16
			<b>Cr Hrs.</b>	<b>16</b>

**BSCS****Computer Science****Admission Eligibility Criteria**

Candidates who have earned relevant qualification/degree prescribed in admission eligibility criteria with less than 50% marks.

**Assessment of Study Progress**

The students' study progress evaluation mechanism is based on continuous assessment throughout the semester by giving assignments, quizzes, Graded Discussion Boards (GDBs), mid-term and final term exams. The mid-term and final term exams are conducted at SIMT and usually count for 80 to 85% of the total marks for a course.

**Courses of Study**

1. MTH 001: Elementary Mathematics
2. ENG 002: Elementary English
3. CS 003: Computer Proficiency

MTH 001: Elementary Mathematics	
Lecture No.	Description
1	Logic
2	Truth Table
3	Logic Equivalence, Laws of the Algebra of Propositions, Translating Word Statements to Symbolic Notation & Vice Versa
4	Biconditional Statements and their Equivalence
5	Arguments, Valid and In Valid arguments
6	Sets, Venn Diagram and Membership Table
7	Operations on sets, Venn Diagrams for operations on sets
8	Ordered Pairs, Relations and Matrix Representation of a matrix
9	Types of relations and Directed graph
10	Reflexive and antisymmetric relations and partially ordered relations
11	Functions, Domain Codomain and Range
12	Types of function
13	Sequence, Arithmetic and Geometric Sequence
14	Series, Sum of Arithmetic and Geometric Series

Business Mathematics	
Lecture No.	Description
15	Performing basic arithmetic operations using Microsoft Excel
16	Basic calculations of percentages and investments using Microsoft Excel
17	Discount, Simple and compound interest, Average due date
18	Annuity, Accumulated value, Accumulation Factor, Discount Factor, Discounted value
19	Matrix, its Dimension and Types of matrix
20	Operations on Matrices
21	Merchandising

Statistics	
Lecture No.	Description
22	Introduction to Statistics
23	Data Representation
24	The Central Tendency of a data-set
25	Median, Empirical Relation, Quartiles
26	Geometric mean, Harmonic mean & relationship between them
27	Measures of Dispersion
28	Mean Deviation, Standard Deviation and Variance & Coefficient of variation
29	Permutations, Combinations
30	Definitions of Probability
31	Relative Frequency, Axiomatic Definition & Laws of Probability
32	Independent and Dependent Events, Multiplication Theorem & Marginal Probability

CS 003: Computer Proficiency	
Lecture No.	Description
1	Introduction of Training Environment and Computer Basics
2	Input
3	Input Devices
4	Output
5	Storage
6	Hardware
7	Software
8	Software
9	Information Highway and Security
<b>Module 2: Using the Computer and Managing Files</b>	
10	Computer Environment
11	Computer Environment
12	Desktop
13	Managing Files
14	Managing Files (continued)
15	Managing Files (continued)
16	Managing Files (continued)
17	Managing Files (continued)
18	Print Management
<b>Module 3: Word Processing</b>	
19	Using the Application
20	Main Operations
21	Main Operations
22	Formatting
23	Objects
24	Mail Merge and Prepare Outputs
<b>Module 4: Spreadsheets</b>	
25	Using the Application
26	Working with Cells
27	Working with Cells (continued)
28	Working with Cells (continued)
29	Worksheets (continued)
30	Formulas and Functions
31	Formatting
32	Charts/Graphs
33	Prepare Outputs

<b>Module 5: Presentation</b>	
34	Getting Started
35	Developing a Presentation
36	Text and Images
37	Charts/Graphs, Drawn Objects
38	Slide Show Effects
39	Prepare Outputs
<b>Module 6: Information and Communication</b>	
40	The Internet
41	Web Navigation
42	Web Searching
43	Electronic Mail
44	Messaging
45	Mail Management

## **PROGRAM REVIEW**

- An associate's degree is an undergraduate academic degree awarded by community colleges upon completion of a course of study usually lasting two years.
- An associate's degree is equivalent to the first two years of a four-year college or university degree.
- This degree forms the foundation of a bachelor's degree by allowing students to complete all of the general education requirements prior to (Possible) transfer to a four-year university.

## **BENEFITS OF THE PROGRAM**

### **Terminal Degree:**

- The students, who do not want to continue with four years University, can utilize their 'Degree' to get the technical job (placement) in the market.

### **Transfer Degree:**

- The curriculum is designed primarily for students who wish to transfer to a four-year college or university to complete the degree in Computer Science. The curriculum emphasizes the study of the science of computing System and in a scientific setting.

## **MARKET ORIENTATION**

Students will be able to simultaneously complete industry certifications such as SCJP, MCSD, MCAD, IEEE - (CSDA), OCI, (DBA), OCP (Developer), ISAC, CISSP, CIW Web Designing, Specialist, CCNA.



**HEC Proposed Model for the Program**

S.No	Categories	No. of Courses Min-Max	Credit Hours Min-Max	Credit Hours Percentile
1	Compulsory Requirement (no Choice)	8	20	29%
2	Discipline Specific Foundation Courses	4	12	18%
3	Major Courses including Project/Internship	10	30	44%
4	Electives	2	6	9%

**Total Number of Credit Hours:** 65 – 68

**Duration:** 2 Years

**Semester Duration:** 16 - 18 weeks

**Course Load per Semester:** 16-18 Credit Hours

**Avg. No. of Courses per Semester:** 4 - 6 (Not more than 3 lab/practical courses/semester)

**Proposed Model for the Program**

S.No	Categories	No. of Courses Min-Max	Credit Hours Min-Max	Credit Hours Percentile
1	Compulsory Requirement (no Choice)	8	20	29%
2	Discipline Specific Foundation Courses	4	12	18%
3	Major Courses including Project/Internship	10	30	44%
4	Electives	2	6	9%

**Total Number of Credit Hours:** 69

**Duration:** 2 Years

**Semester Duration:** 16 - 18 weeks

**Course Load per Semester:** 16-18 Credit Hours

**Avg. No. of Courses per Semester:** 4 - 6 (Not more than 3 lab/practical courses/semester)

**ELIGIBILITY CRITERIA FOR ADMISSION**

- HSC or equivalent with at least 2<sup>nd</sup> Division 50% marks, at the time of appearing for test and interview.
- Candidates who have appeared in final exam of HSC or equivalent can also apply for admissions.
- These candidates will be provided provincial admission to associate program, in case if their final year results are found not meeting the minimum requirements, their provisional admission will stand cancelled.

## SCHEME OF STUDY FOR ASSOCIATE OF SCIENCE IN COMPUTER SCIENCE – AS (CS)

- Computer Programming and Analysis – CPA (Software Engineering)
- Database and Information Systems Management - DISM
- Computer Communication and Networks – CCN

### Computer Programming and Analysis – CPA

S.No	Compulsory Requirement (General Education Core Courses)	Credit hours
1	English-I (English Composition and Comprehension-I)	3+0=3
2	English-II (English Composition and Comprehension-II)	3+0=3
3	Math-I (Calculus-I)	3+0=3
4	Math-II (Linear Algebra and Geometry)	3+0=3
5	Math-III (Probability and Statistics)	3+0=3
6	Islamic Studies/Ethics & Pakistan Studies	2+1
7	English-III (Communication & Presentation Skills)	3+0=3
<b>Total Credit Hours</b>		<b>21</b>

S.No	Discipline Specific Foundation Courses – CPA	Credit hours
1	Introduction to Information and Communication Technologies (ICT)	2+1=3
2	Computer Programming	2+1=3
3	Data Structure Applications	2+1=3
4	Computer Organization & Assembly Language	2+1=3
<b>Total Credit Hours</b>		<b>12</b>

S.No	Major Courses – CPA	Credit hours
1	Object Oriented Programming	2+1=3
2	Visual Programming	2+1=3
3	Software Engineering	3+0=3
4	Digital Logic Design	2+1=3
5	Fundamental of Web Programming	2+1=3
6	Advanced Object-Oriented Programming	3+1=4
7	Operating System	3+0=3
8	Advance Visual Programming	3+1=4
9	Project/Internship	0+4=4
<b>Total Credit Hours</b>		<b>30</b>

S. No	Elective – CPA	Credit hours
1	Design and Implementation of Databases	2+1=3
2	Software Project and Quality Management	3+0=3
3	Theory of Automata	3+0=3
4	Analysis of Algorithms	3+0=3
5	Object Oriented Analysis and Design	2+1=3
6	Web Programming (Server Side)	2+1=3
<b>Total Credit Hours</b>		<b>06</b>

**Database and Information Systems Management DISM**

S.No	Compulsory Requirement (General Education Core Courses)	Credit hours
1	English-I (English Composition and Comprehension-I)	3+0=3
2	English-II (English Composition and Comprehension-II)	3+0=3
3	Math-I (Calculus-I)	3+0=3
4	Math-II (Linear Algebra and Geometry)	3+0=3
5	Math-III (Probability and Statistics)	3+0=3
6	Islamic Studies/Ethics & Pakistan Studies	2+1=3
7	English-III (Communication & Presentation Skills)	3+0=3
<b>Total Credit Hours</b>		<b>21</b>

S.No	Discipline Specific Foundation Courses - DISM	Credit hours
1	Introduction to Information and Communication Technologies (ICT)	2+1=3
2	Fundamentals of Programming	2+1=3
3	Data Structure Applications	2+1=3
4	Fundamentals of Database and SQL	2+1=3
<b>Total Credit Hours</b>		<b>12</b>

S.No	Major Courses - DISM	Credit hours
1	Management Information Systems	3+0=3
2	Database Administration	2+1=3
3	Database Application Development	2+1=3
4	Information System Audit and Control	3+0=3
5	Fundamental of Web Programming	2+1=3
6	Operating Systems	3+0=3
7	Web Programming	3+1=4
8	Advance Database Management	3+1=4
9	Project/Internship	0+4=4
<b>Total Credit Hours</b>		<b>30</b>

S.No	Elective - DISM	Credit hours
1	Multimedia and Graphic Tools	2+1=3
2	Information System Security	3+0=3
3	Fundamentals of Data Warehousing and Data Mining	3+0=3
4	Developing Web Services and Server Components	2+1=3
5	Database integration with VBA	2+1=3
<b>Total Credit Hours</b>		<b>06</b>

**Computer Communication and Networks– CCN**

S.No	Compulsory Requirement (General Education Core Courses)	Credit hours
1	English-I (English Composition and Comprehension-I)	3+0=3
2	English-II (English Composition and Comprehension-II)	3+0=3
3	Math-I (Calculus-I)	3+0=3
4	Math-II (Linear Algebra and Geometry)	3+0=3
5	Math-III (Probability and Statistics)	3+0=3
6	Islamic Studies/Ethics & Pakistan Studies	2+1=3
7	English-III (Communication & Presentation Skills)	3+0=3
<b>Total Credit Hours</b>		<b>21</b>

S.No	Discipline Specific Foundation Courses – CCN	Credit hours
1	Introduction to Information and Communication Technologies (ICT)	2+1=3
2	Fundamentals of Programming	2+1=3
3	Data Structure Applications	2+1=3
4	Computer Communication and Networks	2+1=3
<b>Total Credit Hours</b>		<b>12</b>

S.No	Major Courses – CCN	Credit hours
1	Network Security	3+0=3
2	Digital Logic Design	3+1=4
3	Basic Electronics	3+1=4
4	Network Administration	2+1=3
5	Wireless Network	2+1=3
6	Switching and Routing	2+1=3
7	Operating System	3+0=3
8	Computer Architecture	2+1=3
9	Project/Internship	0+4=4
<b>Total Credit Hours</b>		<b>30</b>

S.No	Elective – CCN	Credit hours
1	Broadband Communication Networks	3+0=3
2	Web Server Administration	2+1=3
3	WAN Implementation	2+1=3
4	Network and Information Systems	3+0=3
5	Network Hardware Support	2+1=3
6	System Administration	2+1=3
<b>Total Credit Hours</b>		<b>06</b>

**BACHELOR OF COMPUTER SCIENCE (BSCS)****Admission Eligibility Criteria**

Students who have passed their Intermediate Computer Science/ Pre-Engr/Pre-Medical/DAE/Intermediate with Mathematics & Physics, with minimum 50% are eligible in **BSCS**.

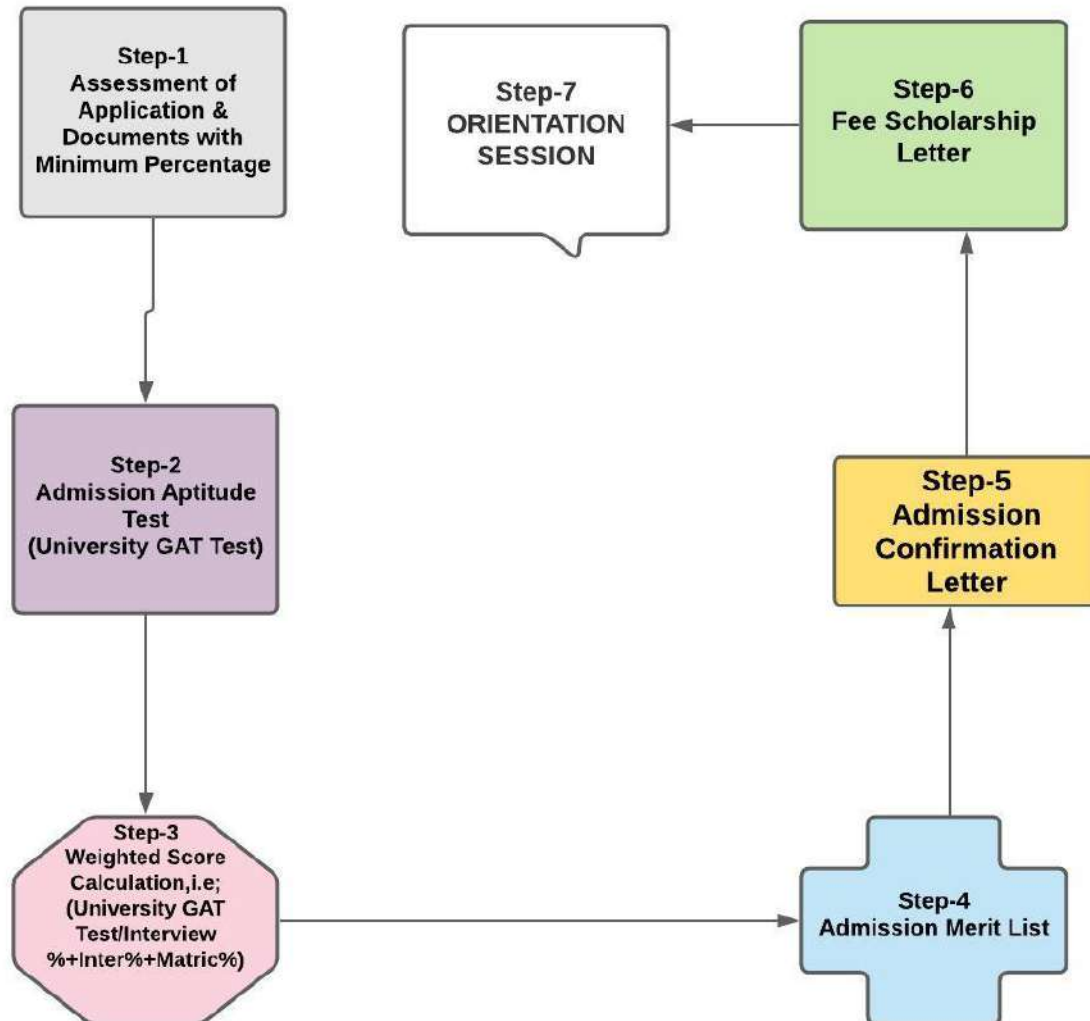
Semester I				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 101	Introduction to ICT		3-0
2	CSC 102	Programming Fundamentals		3-1
3	HMT 101	English Composition & Comprehension		3-0
4	ASC 101	Calculus & Analytical Geometry		3-0
5	ASC 102	Applied Physics		3-0
			<b>Total Credits</b>	<b>16</b>
Semester II				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 212	Digital Logic Design	Applied Physics	3-1
2	CSC 205	Object Oriented Programming	Programming Fundamentals	3-1
3	HMT 216	Communication & Presentation Skills	English Composition & Comprehension	3-0
4	ASC 304	Probability & Statistics		3-0
5	HMT 302	Psychology (UE)		3-0
			<b>Total Credits</b>	<b>17</b>
Semester III				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 103	Comp Organization & Assembly Lang.		3-1
2	CSC 211	Data Structures & Algorithms	Object-Oriented Programming	3-1
3	CSC 312	Discrete Structures		3-0
4	CSC 847	Professional Practices		3-0
5	ASC 201	Numerical Computing (CS Supporting)		3-0
			<b>Total Credits</b>	<b>17</b>
Semester IV				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 338	Design & Analysis of Algorithms	Data Structures & Algorithms	3-0
2	CSC 311	Theory of Automata		3-0
3	CSC 300	Database System	Data Structures & Algorithms	3-1
4	ASC 341	Linear Algebra		3-0
5	ACT 202	Financial Accounting (UE)		3-0
			<b>Total Credits</b>	<b>16</b>

Semester V				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 147	Compiler Construction	Theory of Automata	3-0
2	ASC 301	Differential Equations (CS Supporting)		3-0
3	CSC 322	Operating Systems	Data Structures & Algorithms	3-1
4	CSC 351	Software Engineering		3-0
5	ASC 302	Multi-variate Calculus (CS Supporting)		3-0
			<b>Total Credits</b>	<b>16</b>
Semester VI				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 428	Artificial Intelligence	Discrete Structures	3-1
2	CSC 410	Computer Networks		3-1
3	CSC 336	Mobile Application & Development (CS ELEC)		3-0
4	CSC 313	Data Communication Networks (CS ELEC)		3-0
5	HMT 410	Technical & Business Writing		3-0
			<b>Total Credits</b>	<b>16</b>
Semester VII				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 548	Data & Network Security		3-0
2	CSC 505	Data Warehousing & Mining (CS ELEC)		3-0
3	CSC 222	Final Year Project – I		0-3
4	HMT 315	Business Ethics (UE)		3-0
5	CSC 483	Parallel & Distributed Computing	Operating Systems	3-0
			<b>Total Credits</b>	<b>15</b>
Semester VIII				
S. No	Code	Course Title	Pre-requisite	Credit Hours
1	CSC 522	Cloud Computing (CS ELEC)		3-0
2	FIN 311	Financial Management (UE)		3-0
3	CSC 333	Final Year Project - II		0-3
4	CSC 233	Information Security		3-0
5	HMT 105	Pakistan & Islamic Studies		4-0
			<b>Total Credits</b>	<b>16</b>



## APPLICATION PROCESS FOR ADMISSION IN SIMT

### SIMT ADMISSION PROCESS



**Weightage of Ranked Scores of Matric, Intermediate and University GAT Test****University GAT TEST: 60%****Intermediate: 25%****Matric: 15%****Formula for Weightage of Matric Score:****Total Marks/15 = 56.66 marks are equal to 1 percentile****600/850 = Weighted Score = 10.59****Formula for Weightage of Intermediate Score:****Total Marks/25 = 44 marks are equal to 1 percentile****755/1100 = Weighted Score = 17.16****Formula for Weightage of Intermediate Score:****Total Marks/60 = 1 mark is equal to 1 percentile****51/60 = Weighted Score = 51****Total Weighted Score Obtained: 10.59 (Matric) + 17.16 (Inter) + 51 (University GAT****Test) = 87.75/100****The Candidate must acquire at least 50% of the aggregate of the University Test + Previous Academic Record in order to be enrolled in SIMT****1. ELIGIBILITY CRITERIA FOR ADMISSION**

1. Students who have passed their Intermediate/DAE/**A-Level\*** (*Subject to Inter equivalency from respective BISE*) etc. with minimum 45% are eligible in **BBA/BA-Education/AD-Education/AD. COMMERCE/AD. COMPUTER SCIENCE** Programs after clearing their University GAT Test.
2. Students who have passed their Intermediate Pre-Engr/DAE/Intermediate with Mathematics & Physics, with minimum 50% are eligible in **BSCS/BS Engr. Technology** as well as **AD. Computer Science** Programs after clearing their University GAT Test.
3. Students who have passed their BA/B.Sc./B.Com/ B.Tech (Pass) 2-Years equivalent (**50 Credit Hours**) to 14-Year Education Qualification with minimum 2 CGPA or 2<sup>nd</sup> Division are eligible in BBA – Following (2-Year) Program after clearing their University GAT Test. **The University may offer 15-18 Credit Hours additional courses in order to cover the difference.**

Note: Inter Board Committee of Chairmen (IBCC) is mandatory for O & A Levels/High School Diploma/IB Diploma or equivalent.

4. Verification of last degree from Higher Education Commission of Pakistan (HEC) is mandatory for Master's Program.
5. Equivalency of international degrees from Higher Education Commission of Pakistan (HEC) is mandatory for Master's Program.
6. Admission of Foreign students are subject to clearance from the relevant Agencies/NoC from HEC.

7. Students waiting for results can also apply.
8. Candidates appeared in the Intermediate or Bachelors examination and awaiting results, may be admitted provisionally provided other requirements of the degree are met. Such candidates must fill an undertaking on the admission form before their applications may be considered for the Aptitude test. However, if a student fails to pass the examination or scores below the eligibility requirement of the degree, his/her admission will be immediately cancelled. Such student is given the opportunity to re-apply after the academic eligibility of the Program is met. Candidates, who fail to meet the eligibility criteria and are dropped from the degree programs will not refund their tuition fee. However, candidates must provide the complete academic result (mark sheet or the copy of the admit card and newspaper cutting) within four weeks after the announcement in the newspaper to the Admission Office.

## **2. DEFERMENT OF ADMISSION**

Students who are granted admissions at the Institute and want to postpone their admission for one semester are allowed to do so if they submit an application in writing to the Admission Office. The tuition fee of such students can also be transferred into the next semester if the Admission Office gets the application within a week of the commencement of that semester. Fee shall not be transferred after one week. Students who join the Institute and then decide to leave the Institute are not eligible for any refund in the tuition fee.

## **3. PROCEDURES AND CRITERIA OF ADMISSION**

Admissions will be advertised in the leading newspapers before commencement of the semester.

All candidates will be required to appear in the Aptitude/Admission Entry Test and secure minimum 50% marks in the test.

Then they will appear before the Interview Panel. If the students secure aggregate of 50% in the Admission Test, Interview and Previous Academic Record, they will qualify for getting admission in Sindh Institute of Management & Technology (SIMT).

**SELECTION**

The final selection of a candidate depends on the combined rating of the above factors.

**APTITUDE TEST**

All applications will be sorted out and assessed on basis of eligibility criteria for shortlisting purpose. Candidates' last qualification will be properly checked. It will be checked whether a candidate has submitted all important testimonials or not. Applicants will be required to take the Aptitude Test irrespective of their previous system of education, which provides a fair measure of the candidates' scholastic attainment as well as an insight into their potential. The test assesses applicants' skills in the following areas:

1. English
2. Mathematics
3. General Knowledge
4. I.T

Have gone through the test, the candidate will be interviewed in order to judge his/her I.Q, present-mindedness, convincing power and communication skills. Finally, the percentile score of academic record of Matric, Inter/(Bachelors) and University GAT Test will be accumulated. The Admission Merit List will be issued/displayed on the university website/Notice Boards and communicated to the candidate through Admission Confirmation Letter. Finally, the Fee Scholarship Award Letter will also be issued to the concerned students letting him know the total break-up of the fee package offered to him with the signature of the worthy Vice Chancellor.

<b>DOCUMENTS REQUIRED FOR ADMISSION</b>		
<b>1.</b>	Candidates granted admissions are required to submit the following documents for registration and enrollment. Failing which admission will be cancelled.	
<b>2.</b>	Matric / O Level Certificate	Attested Photocopy
<b>3.</b>	Intermediate / A Level Certificate	Attested Photocopy
<b>4.</b>	Intermediate Mark sheet	Attested Photocopy
<b>5.</b>	Bachelor's' Degree & Marksheet (For Masters)	Attested Photocopy
<b>6.</b>	C.N.I.C. or Birth Certificate or B. Form	Attested Photocopy
<b>7.</b>	Migration Certificate (for Student other than Karachi Board)	Original
<b>8.</b>	Equivalency Certificate from IBCC (A Level)	Original
<b>9.</b>	Four recent Passport size photographs	Attested on Back side

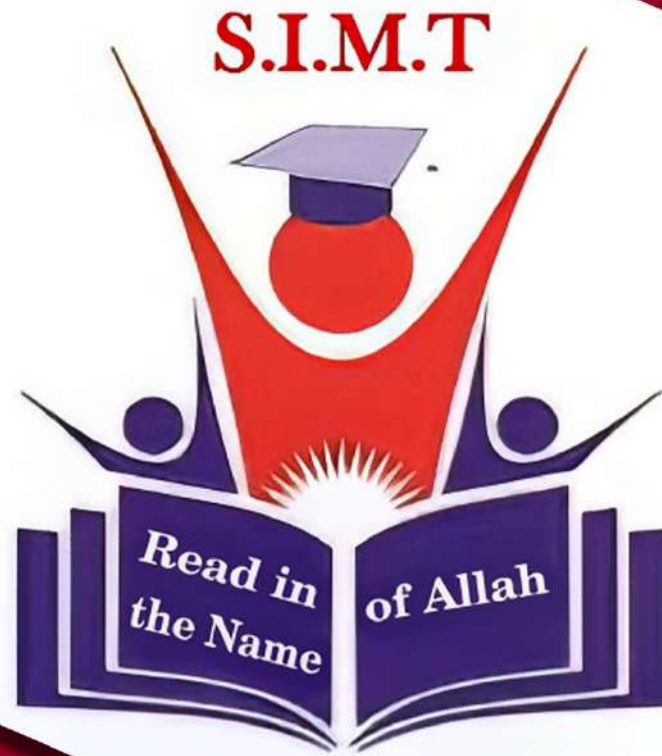
Eligibility Criteria for Admission in various degree Programs in Sindh Institute of Management & Technology (SIMT) strictly follows the instructions and guidelines provided in **Guide for Implementing Undergraduate Education Policy, 2020, IMPLEMENTATION MANUAL** by HEC.

	<b>Name:</b>
	<b>Program:</b>
	<b>Joining Semester:</b>
	<b>Document Checklist:</b> Matric Certificate & Mark sheet/ Inter/DAE Certificate & Mark sheet/Copy of CNIC (own or Father) / 7 Photographs/ Graduation Mark sheet/Degree
	<b>Fee Package Offered:</b>

<b>Chartered by Govt. of Sindh</b>	<b>Recognized by HEC</b>	<b>Approved by Relevant Councils</b>
<b>Best Faculty</b>	<b>Best Labs.</b>	<b>Easy HEC Attestation</b>

### SIMT FEE STRUCTURE

PROGRAMS	ELIGIBILITY	ACTUAL FEE PKG
BBA (4 YEARS)	INTER/DAE 45%	525,000
MBA (R)	16 YEARS	300,000
MBA (NR)	16 YEARS	340,000
BSCS (4 YEARS)	INTER/DAE 50%	525,000
B.E TECHNOLOGY (ELECTRICAL)	DAE/INTER PRE-ENGG 50%	650,000
B.E TECHNOLOGY (MECHANICAL)	DAE/INTER PRE-ENGG 50%	700,000
AD. COMMERCE	INTER 45%	250,000
AD. COMPUTER SCIENCE	INTER (PRE-MEDICAL/INTER PRE-ENGG/DAE 50%	250,000



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