

Pimpri Chinchwad Education Trust's

Pimpri Chinchwad University

Sate, Pune – 412106



PCET's
**Pimpri
Chinchwad
University**

Learn | Grow | Achieve

Curriculum Structure

B. TECH

COMPUTER SCIENCE & ENGINEERING

(Batch-2026-2029)

School of Engineering and Technology



Effective from

Academic Year 2026-29 Program Structure

Version 1.0

Preamble:

We, at Pimpri Chinchwad University, offer the Bachelor of Technology in Computer science and Engineering program to provide students with a comprehensive education in the science and practice of recent trends in computer engineering. Our mission is to prepare graduates who are competent, compassionate, and committed to promote technology through cutting edge practical assignments.

The B.Tech. in Computer Science and Engineering program integrates knowledge from various disciplines such as mathematics, science, engineering, statistics and programming languages to provide a holistic understanding of the core of computer science in engineering. The curriculum includes courses in databases, computer network, data structures, operating systems, web technologies; cloud computing, compiler construction and artificial intelligence. Students will also have opportunities to gain practical experience through internships, mini and major projects, webinars and various technical competitions like hackathon.

Our program aims to develop student's critical thinking, communication, and leadership skills to enable them to work effectively and to provide sustainable solutions for the real-world technical challenges in the recent industry trends by maintaining professional standards, ethical values and integrity. Graduates of our program will be able to apply their knowledge and skills to work on the cutting-edge technologies of the industry and also to appear for post graduate educations in respective fields.

We are committed to providing a supportive and inclusive learning environment that values diversity, equity, and inclusion. Our faculty members are dedicated to excellence in teaching, research, and technology and are actively engaged in advancing the field of computer and engineering through scholarly activities and professional organizations. We invite students who share our passion to use and create technology for computer engineering to join our program and embark on a journey of learning and growth that will prepare them for rewarding careers and lifelong learning.

Vision and Mission of Program:

Vision:

To develop engineers well versed with Critical Theory and Practical's (problem solving ability); and sensitive to National and Global challenges from Inter-disciplinary perspective. To create Industry ready; socially and ethically strong professionals.

Mission:

Our mission is

- To develop the Computer Professionals by imparting computer engineering knowledge with professional ethics
- To provide the service to the communities to which we belong at local and national levels, combined with a deep awareness of our ethical responsibilities to our profession and to society

Program Outcome

At the end of program, students should be able to

PO 1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to solve complex engineering problems.
PO 2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems to arrive at substantiated conclusions using principles of mathematics, natural sciences, and engineering sciences.
PO 3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet specified needs, considering public health, safety, cultural, societal, and environmental factors.
PO 4	Conduct investigations of complex problems: Use research-based knowledge and research methods, including design of experiments, analysis and interpretation of data, and synthesis of information, to provide valid conclusions.
PO 5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering activities, with an understanding of limitations.
PO 6	The engineer and the world: Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal, and cultural issues and the consequent responsibilities relevant to professional engineering practice.
PO 7	Environment and sustainability: Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of, and the need for, sustainable development.
PO 8	Ethics & inclusive behavior: Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice with inclusive behavior.

PO 9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO 10	Communication skills: Communicate effectively on complex engineering activities with the engineering community and with society at large, including writing effective reports, designing documentation, making presentations, and giving/receiving clear instructions.
PO 11	Project management, finance & lifelong learning: Demonstrate knowledge and understanding of engineering and management principles and apply them as a member and leader in a team to manage projects in multidisciplinary environments; recognize the need for lifelong learning and engage in independent and professional development.

Program Educational Objectives

Program Educational Objectives (PEOs) for a BTECH in Artificial Intelligence & Machine Learning program are as follows:

- **PEO 1:** To provide students with knowledge and skills to become leading experts in the field of computer science engineering.
- **PEO 2:** To provide an innovative and comprehensive curriculum that integrates theoretical knowledge with practical experience, research opportunities, and professional development
- **PEO 3:** To groom the student's overall personality for professional growth.
- **PEO 4:** To inculcate values and ethics among the students and making them aware about their social commitments.

Program Specific Outcomes

At the end of program, students should be able to

PSO 1	Apply knowledge of computer science, artificial intelligence, machine learning, mathematics, and statistical techniques to formulate, model, and solve complex problems in intelligent and data-centric domains.
PSO 2	Design and implement AI & ML solutions using appropriate tools, algorithms, and data analysis techniques to extract insights, evaluate performance, and address challenges in real-world applications.

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Sr. No.	Type of course	Abbreviations
1	Basic Science Course	BSC
2	Engineering Science Course	ESC
3	Programme Core Course	PCC
4	Programme Elective Course	PEC
5	Multidisciplinary Minor	MIN
6	Open Elective Other than a particular program	OE
7	Vocational and Skill Enhancement Course	VSEC
8	Ability Enhancement Course	AEC
9	Entrepreneurship / Economics / Management Courses	MGMT
10	Indian Knowledge System	IKS
11	Value Education Course	VEC
12	Research Methodology	RM
13	Comm. Engg. Project / Field Project	CEP/FP
14	Project	PROJ
15	Internship/ OJT	OJT
16	Co-curricular Courses	CC
17	Massive Open Online Courses	MOOC

Sr. No.	Type of course	No. of Courses	Total Credits	
			No.	%
1	Basic Science Course	4	16	9.46
2	Engineering Science Course	4	14	8.28
3	Programme Core Course	27	59	33.52
4	Programme Elective Course	10	20	11.36
5	Multidisciplinary Minor	3	9	5.11
6	Open Elective Other than a particular program	4	8	4.54
7	Vocational and Skill Enhancement Course	4	6	3.40
8	Ability Enhancement Course / Co-curricular Courses	6	10	5.6
9	Indian Knowledge System	2	2	1.1
10	Value Education Course	2	2	1.1
11	Research Methodology	1	4	2.3
12	Comm. Engg. Project / Field Project	2	2	1.1
13	Project	3	14	7.9
14	Internship/ OJT	2	8	4.5
15	Massive Open Online Courses	-	-	-
	Total	74	176	100%

Credit Distribution Per Semester by Course Type

Sr. No.	Course Type	No. of Credits / Semester								Total
		1	2	3	4	5	6	7	8	
1	Basic Science Course (BSC)	8	8							16
2	Engineering Science Course (ESC)	7	7							14
3	Programme Core Course (PCC)	3	3	12	12	12	10	8	6	66
4	Programme Elective Course (PEC)					4	8	4	4	20
5	Multidisciplinary Minor (MD M)			3	3	3			-	9
6	Open Elective (OE)			4	4					8
7	Vocational and Skill Enhancement Course (VSEC)	2	2	1	1					6
8	Ability Enhancement Course (AEC)	1	1		2	2	2			8
9	Entrepreneurship/Economics/ Management Courses						2			2
10	Indian Knowledge System (IKS)	1	1							2
11	Value Education Course (VEC)			1	1					2
12	Research Methodology								4	4
13	Comm. Engg. Project (CEP)/Field Project (FP)			1	1					2
14	Project					2		6	6	14
15	Internship/ OJT							4	4	8
16	Co-curricular Courses (CC)	1	1							2
17	Massive Open Online Courses (MOOC)									0
	Total	23	23	22	24	23	22	22	24	183

Credit Distribution Per Semester by Course Type

Sr. No.	Course Type	No. of Credits / Semester								Total
		I	II	III	IV	V	VI	VII	VIII	
1	Basic Science Course (BSC)	Min:8 Max:8	Min:8 Max:8	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	16
2	Engineering Science Course (ESC)	Min:7 Max:7	Min:7 Max:7	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	14
3	Programme Core Course (PCC)	Min:3 Max:3	Min:3 Max:3	Min:8 Max:12	Min:8 Max:12	Min:8 Max:12	Min:8 Max:10	Min:3 Max:8	Min:3 Max:6	44-66
4	MOOC (PCU On-line / NPTEL / SWAYAM / Coursera)	Min:0 Max:0	Min:0 Max:0	Min:0 Max:4	Min:0 Max:4	Min:0 Max:4	Min:0 Max:4	Min:0 Max:3	Min:0 Max:3	0-22
5	Programme Elective Course (PEC)	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:4 Max:4	Min:8 Max:8	Min:4 Max:4	Min:4 Max:4	20
6	Elective (OE) other than particular program	Min:0 Max:0	Min:0 Max:0	Min:4 Max:4	Min:4 Max:4	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	8
7	Multidisciplinary Courses (MDC)	Min:0 Max:0	Min:0 Max:0	Min:3 Max:3	Min:3 Max:3	Min:3 Max:3	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	9
8	Vocational and Skill Enhancement Course (VSEC) / Foreign Language	Min:2 Max:2	Min:2 Max:2	Min:1 Max:1	Min:1 Max:1	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	6
9	Ability Enhancement Course (AEC-01, AEC-02) Aptitude, Logical Reasoning (ALR)	Min:0 Max:1	Min:0 Max:1	Min:0 Max:0	Min:2 Max:2	Min:2 Max:2	Min:2 Max:2	Min:0 Max:0	Min:0 Max:0	8
10	Entrepreneurship / Economics / Management Courses (MGMT)	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:2 Max:2	Min:0 Max:0	Min:0 Max:0	2
11	Indian Knowledge System (IKS)	Min:0 Max:1	Min:0 Max:1	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	2
12	Value Education Course (VEC)	Min:0 Max:0	Min:0 Max:0	Min:0 Max:1	Min:0 Max:1	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	2
13	Research Methodology (RM)	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:4 Max:4	4
14	Multidisciplinary Comm. Engg. Project (CEP) / Rural Immersion Program (RIP) / NCC / Field Project (FP)	Min:0 Max:0	Min:0 Max:0	Min:0 Max:1	Min:0 Max:1	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	2
15	Project (PROJ)	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:2 Max:2	Min:0 Max:0	Min:6 Max:6	Min:6 Max:6	14
16	Multidisciplinary Internship / OJT (INT/OJT)	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:4 Max:4	Min:4 Max:4	8
17	Co-curricular Courses (CC)	Min:1 Max:1	Min:1 Max:1	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	Min:0 Max:0	2
Total Credits (Major)		23	23	22	24	23	22	22	24	183



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PIMPRI CHINCHWAD UNIVERSITY
A Trusted Brand in Education Since 1982.

PCET'S

PIMPRI CHINCHWAD UNIVERSITY

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

Computer Science and Engineering Structure

As per Guidelines of NEP-2020 to be implemented

w.e.f. from Academic Year 2026-27

Choice Based Credit System (CBCS)

(2026 Pattern)

SEMESTER - III

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/OR	Total
U26BTCE301	PCC	Data Structures and Algorithms	3	-	-	3	3	40	60	-	100
U26BTCE302	PCC	Data Structures and Algorithms Laboratory	-	1	-	1	2	25	-	25	50
U26BTCE303	PCC	Python Programming	3	-	-	3-3	3	40	60	-	100
U26BTCE304	PCC	Python Programming Laboratory	-	1	-	1-1	2	25	-	25	50
U26BTCEOE301 & U26BTCEOE303	OE	Elective-I	3	-	-	3	3	40	60	-	100
U26BTCEOE302 & U26BTCEOE304	OE	Elective-I Lab	-	1	-	1	2	25	-	25	50
U26BTCE305	PCC	Discrete Structures	2	-	-	2	2	20	30	-	50
U26BTCE306	PCC	Computer Organization and Operating System	2	-	-	2	2	20	30	-	50
	MIN	Multidisciplinary Minor -I	3	-	-	3	3	40	60	-	100
U26BTCE307	CEP	Community Engineering Project/ Rural Immersion	-	1	-	1	2	-	-	50	50
U26BTFL301	VSEC	Foreign Language III	1	-	-	1	1	25	-	-	25
U26VECUHV301 / U26VECCOI301	VEC	Understanding Harmony(UHV) / Constitution of India(COI)	1	-	-	1	1	25	-	-	25
Total			18	4	-	22	26	325	300	125	750

List of Open Elective I: Semester-III

Course Code	Elective-A	Course Code	Elective-B
U26BTCEOE301 & U26BTCEOE303 OE-Elective-I			
U26BTCEOE301	Digital Logic and Microprocessor	U26BTCEOE303	Signal System
U26BTCEOE302 & U26BTCEOE304 OE-Elective-I Lab			
U26BTCEOE302	Digital Logic and Microprocessor Lab	U26BTCEOE304	Signal System Lab

Foreign Language –III for Semester-III

Course Code	Foreign Language III
U26BTFL301 FL-III	
U26BTFL301A	Foreign Language: German-III
U26BTFL301B	Foreign Language: Japanese-III

SEMESTER - IV

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME				
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/OR	Total	
U26BTCE401	PCC	Database Management System	3	-	-	3	3	40	60	-	100	
U26BTCE402	PCC	Database Management System Laboratory	-	1	-	1	2	25	-	25	50	
U26BTCE403	PCC	Java Programming	3	-	-	3-3	3	40	60	-	100	
U26BTCE404	PCC	Java Programming Laboratory	-	1	-	1-1	2	25	-	25	50	
U26BTCEOE401 & U26BTCEOE403	OE	Elective-II	3	-	-	3	3	40	60	-	100	
U26BTCEOE402 & U26BTCEOE404	OE	Elective-II Lab	-	1	-	1	2	25	-	25	50	
U26BTCE405	PCC	Applied Statistical Techniques	3	-	-	3	3	40	60	-	100	
U26BTCE406	PCC	Competative Coding	-	-	1	1	1	25	-	-	25	
U26BTAEC401	AEC	Professional Development Training-I	-	2	-	2	4	50	-	-	50	
	MIN	Multidisciplinary Minor - II	3	-	-	3	3	40	60	-	100	
U26BTFL401	VSEC	Foreign Language IV	1	-	-	1	1	25	-	-	25	
U26BTCE401	CEP	Community Engineering Project/ Rural Immersion	-	1	-	1	2	-	-	50	50	
U26VECUHV401 / U26VECCOI401	VEC	UHV: Understanding Harmony / Constitution of India	1	-	-	1	1	25	-	-	25	
Total			17	6	1	24	29	400	300	125	825	

List of Open Elective II: Semester-IV

Course Code	Elective-A	Course Code	Elective-B
U26BTCEOE401 & U26BTCEOE403 : OE - ELECTIVE-II			
U26BTCEOE401	Internet of Things	U26BTCEOE403	Digital Image Processing
U26BTCEOE402 & U26BTCEOE404 : OE - ELECTIVE-II LAB			
U26BTCEOE402	Internet of Things Lab	U26BTCEOE404	Digital Image Processing Lab

Foreign Language –IV for Semester-IV

Course Code	Foreign Language IV
U26BTFL401 FL-IV	
U26BTFL401A	Foreign Language: German-IV
U26BTFL401B	Foreign Language: Japanese-IV

Exit Policy

Exit Option: Two Years UG Diploma in Computer Science and Engineering

Students who opt to exit after completion of second year and have scored the required credits offered by the school in the program structure will be awarded “Two Years UG Diploma in in Computer Science and Engineering” provided they must earn additional credits during the summer vacation of the Second Year.

GUIDELINES FOR B.TECH. HONORS (AFTER SEMESTER-IV)

Particulars	Guidelines
Eligibility to Opt	Students may opt for the B.Tech. Honours pathway after successful completion of Semester IV, subject to the rules notified by the University/Department.
Academic Requirement	A student should normally have a minimum CGPA of 7.50 at the end of Semester IV and should not have any active backlog at the time of opting for the Honours pathway.
Nature of Honours	Honours shall be in the same parent discipline, i.e., Computer Science and Engineering through advanced and application-oriented courses.
Credit Requirement	Students opting for Honours shall complete 16 additional credits from Semester V to Semester VIII through the Honours basket prescribed by the department.
Course Distribution	The Honours basket shall include advanced theory courses, laboratory/practice courses, seminar/studio-based courses, and implementation-oriented learning in emerging Computer Science and Engineering domains.
Mode of Completion	Honours courses may be completed through regular classroom teaching, laboratory work, guided implementation, approved MOOC/SWAYAM support, case studies, and domain projects, as approved by the department.
Assessment	Assessment of Honours courses shall be carried out as per the University assessment norms applicable to theory, practical, seminar, and project-based courses.
Award Condition	A student who successfully completes all regular B.Tech. requirements and the prescribed Honours basket shall be eligible for the award of B.Tech. Honours, subject to University approval and academic regulations.
Exit Condition	In case a student is unable to complete the Honours basket, the student shall continue under the regular B.Tech. degree requirements, subject to the academic rules of the University.

SEMESTER - V

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/ OR	Total
U26BTCE501	PCC	Theory of Computation	3	-	1	4	4	40	60	-	100
U26BTCE502	PCC	Computer Network	3	-	-	3	3	40	60	-	100
U26BTCE503	PCC	Computer Network Lab	-	1	-	1	2	25	-	25	50
U26BTCEPE501 & U26BTCEPE503 & U26BTCEPE505	PEC	Program Elective I	3	-	-	3	3	40	60	-	100
U26BTCEPE502 & U26BTCEPE504 & U26BTCEPE506	PEC	Program Elective I Lab	-	1	-	1	2	25	-	25	50
U26BTCE504	PCC	Advanced Web Programming	3	-	-	3-3	3	40	60	-	100
U26BTCE505	PCC	Advanced Web Programming Lab	-	1	-	1-1	2	25	-	25	50
-	MIN	Multidisciplinary Minor - 3	3	-	-	3	3	40	60	-	100
U26BTCE506	PROJ	Technical Seminar	-	-	2	2	2	25	-	25	50
U26BTAEC501	AEC	Professional Development Training-II	-	2	-	2	4	50	-	-	50
Total			14	5	2	23	28	350	300	100	750

Honours Semester-V

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/ OR	Total
HNRML501	HNR	Foundations of Agent AI	3	-	-	3	3	40	60	-	100
HNRML502	HNR	Agent AI Laboratory-I	-	1	-	1	2	25	-	25	50

List of Program Elective I: Semester-V

Course Code	Elective-A	Course Code	Elective-B	Course Code	Elective-C
U26BTCEPE501, U26BTCEPE503 & U26BTCEPE505 – Program Elective-I					
U26BTCEPE501	Intelligent Systems	U26BTCEPE503	Cloud Computing and Architecture	U26BTCEPE505	Real Time Operating System
U26BTCEPE502, U26BTCEPE504 & U26TCEPE506 – Program Elective-I Laboratory					
U26BTCEPE502	Intelligent Systems Lab	U26BTCEPE504	Cloud Computing and Architecture Lab	U26BTCEPE506	Real Time Operating System Lab

Note: #Refer separate booklet for Multidisciplinary Minor (MDM Courses)

SEMESTER - VI

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/OR	Total
U26BTCE601	PCC	Design and Analysis of Algorithms	3	-	-	3	3	40	60	-	100
U26BTCE602	PCC	Design and Analysis of Algorithms Lab	-	1	-	1	2	25	-	25	50
U26BTCE603	PCC	Cyber Security and Ethical Hacking	3	-	-	3	3	40	60	-	100
U26BTCE604	PCC	Cyber Security and Ethical Hacking Lab	-	1	-	1	2	25	-	25	50
U26BTCE605	PCC	Augmented and Virtual Reality (AR/VR)	-	-	2	2	2	50	-	-	50
U26BTCEPE601 & U26BTCEPE603	PEC	Program Elective II	3	-	-	3-3	3	40	60	-	100
U26BTCEPE602 & U26BTCEPE604	PEC	Program Elective II Lab	-	1	-	1-1	2	25	-	25	50
U26BTCEPE605 & U26BTCEPE607	PEC	Program Elective III	3	-	-	3	3	40	60	-	100
U26BTCEPE606 & U26BTCEPE608	PEC	Program Elective III Lab	-	1	-	1	2	50	-	-	50
U26CRPP601	AEC	Career Readiness and Placement Preparation	-	2	-	2	4	50	-	-	50
U26BTMG601	MGMT	Entrepreneurship/ Economics/ Management Courses	-	-	2	2	2	50	-	-	50
Total			12	6	4	22	28	435	240	75	750

Honours Semester-VI

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/OR	Total
HNRML601	HNR	Autonomous Decision Systems	3	-	-	3	3	40	60	-	100
HNRML602	HNR	Agentic Workflow Design Lab	-	1	-	1	2	25	-	25	50

List of Program Elective II & III: Semester-VI

Course Code	Elective-A	Course Code	Elective-B
U26BTCEPE601, U26BTCEPE603 – Program Elective-II			
U26BTCEPE601	Machine Learning with Python	U26BTCEPE603	Applied Data Science
U26BTCEPE602, U26BTCEPE604 - Program Elective-II Laboratory			
U26BTCEPE602	Machine Learning with Python Laboratory	U26BTCEPE604	Applied Data Science Laboratory
U26BTCEPE605, U26BTCEPE607 – Program Elective-III			
U26BTCEPE605	Optimization Techniques and Applications	U26BTCEPE607	Distributed Systems
U26BTCEPE606, U26BTCEPE608 – Program Elective-III Laboratory			
U26BTCEPE606	Optimization Techniques and Applications Laboratory	U26BTCEPE608	Distributed Systems Laboratory

Note: #Refer separate booklet for Multidisciplinary Minor (MDM Courses)

Exit Policy

Exit Option: Three Years Bachelor's Degree in B. Sc. in Computer Science and Engineering

Students who opt to exit after completion of second year and have scored the required credits offered by the school in the program structure will be awarded “Three Years Bachelor's Degree in B. Sc. in Computer Science and Engineering” provided they must earn additional credits during the summer vacation of the Third Year.

SEMESTER - VII

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/OR	Total
U26BTCE701	PCC	Mobile Application Development	3	-	-	3-3	3	40	60	-	100
U26BTCE702	PCC	Mobile Application Development Lab	-	1	-	1-1	2	25	-	25	50
U26BTCE703	PCC	Software Testing and Quality Assurance	3	-	-	3	3	40	60	-	100
U26BTCE704	PCC	Software Testing and Quality Assurance Lab	-	1	-	1	2	25	-	25	50
U26BTCEPE701 & U26BTCEPE703 & U26BTCEPE705	PEC	Program Elective IV	3	-	-	3	3	40	60	-	100
U26BTCEPE702 & U26BTCEPE704 & U26BTCEPE706	PEC	Program Elective IV Lab	-	1	-	1	2	25	-	25	50
U26BTCE704	INT/OJT	Industry/International/Research INTERNSHIP	-	4	-	4	8	100	-	50	150
U26BTCE705	PROJ	Major Project - I CSE	-	6	-	6	12	100	-	100	200
Total			9	13	-	22	35	395	180	225	800

Honours Semester-VII

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/OR	Total
HNRML701	HNR	Multi-Agent Systems and Coordination	3	-	-	3	3	40	60	-	100
HNRML702	HNR	Multi-Agent Simulation Lab	-	1	-	1	2	25	-	25	50

List of Program Elective IV: Semester-VII

Course Code	Elective-A	Course Code	Elective-B	Course Code	Elective-C
U26BTCEPE701, U26BTCEPE703 & U26BTCEPE705: Program Elective-IV					
U26BTCEPE701	Fundamentals of Deep Learning	U26BTCEPE703	Big Data and Business Analytics	U26BTCEPE705	Quantum Computing
U26BTCEPE702, U26BTCEPE704 & U26BTCEPE706 - Program Elective-IV Laboratory					
U26BTCEPE702	Fundamentals of Deep Learning Lab	U26BTCEPE704	Big Data and Business Analytics Lab	U26BTCEPE706	Quantum Computing Lab

Note: #Refer separate booklet for Multidisciplinary Minor (MDM Courses)

SEMESTER - VIII

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/OR	Total
U26BTCE801	PCC	Dev-Ops	3	-	-	3-3	3	40	60	-	100
U26BTCE802	PCC	Dev-Ops Laboratory	-	1	-	1-1	2	25	-	25	50
U26BTCE803	RM	Research Methodology & IPR	3	-	-	3	3	40	60	-	100
U26BTCE804	RM	Research Methodology & IPR Laboratory	-	1	-	1	2	25	-	25	50
U26BTCE805	PCC	Fundamentals of Blockchain	-	-	2	2	2	50	-	-	50
U26BTCE806	PROJ	Major Project-II	-	6	-	6	12	100	-	100	200
U26BTCE807	INT/OJT	Internship	-	4	-	4	8	100	-	50	150
U26BTCEPE801 & U26BTCEPE803	PEC	Program Elective V	3	-	-	3	3	40	60	-	100
U26BTCEPE802 & U26BTCEPE804	PEC	Program Elective V Laboratory	-	1	-	1	2	25	-	25	50
Total			9	13	2	24	37	445	180	225	850

Honours Semester-VIII

Course Code	Type	Course Name	TEACHING SCHEME					ASSESSMENT SCHEME			
			THY	PR	TU	Credits	Hrs	CIA	ESA	PR/OR	Total
HNRML801	HNR	Agentic AI Applications and Governance	3	-	-	3	3	40	60	-	100
HNRML802	HNR	Agentic AI Innovation Studio	-	3	-	3	6	40	-	60	100

List of Program Elective V & VI: Semester-VIII

Course Code	Elective-A	Course Code	Elective-B
U26BTCEPE801 & U26BTCEPE803 : Program Elective V			
U26BTCEPE801	Generative Models and Applications	U26BTCEPE803	Natural Language Processing and LLM
U26BTCEPE802 & U26BTCEPE804 : Program Elective V Laboratory			
U26BTCEPE802	Generative Models and Applications Laboratory	U26BTCEPE804	Natural Language Processing and LLM Laboratory

Note: #Refer separate booklet for Multidisciplinary Minor (MDM Courses)

Exit Policy

Exit Option: 4-Years Bachelor's degree B.Tech. in Computer Science and Engineering with Multidisciplinary Minor

Students who opt to exit after completion of second year and have scored the required credits offered by the school in the program structure will be awarded "Exit Option: 4-Years Bachelor's degree B.Tech. in Computer Science and Engineering with Multidisciplinary Minor".

COURSE SYLLABUS

COMPUTER SCIENCE & ENGINEERING

SEMESTER-III