



An Autonomous Institution Affiliated to Visvesvaraya Technological University (VTU) Belagavi Approved by
All India Council for Technical Education (AICTE), New Delhi, Recognized by Govt. of Karnataka,
UG Programs Accredited by National Board of Accreditation (NBA) : CSE, ECE & ISE
www.epcet.edu.in

Curriculum

Academic Batch 2025 - 29(Autonomous)

Undergraduate Bachelor of Engineering Program – B.E

Outcome Based Education (OBE)

III SEM TO VIII SEM

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

2026-27

About the Institute

East Point College of Engineering and Technology (EPCET) was established in the year 1999 by M. G. Charitable Trust, Bangalore. The College is located in the eastern part of Bangalore at Bidarahalli, Virgonagar Post, off old Madras Road. It is at a 5 km distance from K R Puram, Bangalore.

The College is affiliated to Visvesvaraya Technological University (VTU), Belgaum and NAAC accredited with A Grade. All the Undergraduate B.E. and Post Graduate programs M.Tech. offered at EPCET have the approval of AICTE. The College at present offers programs in Artificial Intelligence and Data Science, Computer Science & Engineering, Information Science & Engineering, Electronics & Communication Engineering, Mechanical Engineering, CSE (IoT, Cyber Security including Blockchain Technology, Artificial Intelligence and Machine Learning and Civil Engineering leading to BE degree of VTU. The college is also offering three M. Tech programs- one each in Mechanical Engineering and Civil Engineering. At EPCET, more than 2500 students are studying in various programs, and there are more than 145 faculty members with about 25% of them having Ph.D. Qualifications. Faculty members, in addition to teaching and routine administrative work, undertake research. A few faculty members work in collaboration with prestigious national laboratories like LRDE- DRDO and publish their research findings in Refereed Peer Reviewed Journals. The Three programs of CSE, ECE, ISE offered by the college were accredited by NBA during 2008-2011 and 2023-2026.

All the students of the final year undergo internships in reputed industries and more than 80% of the students get placement offer on campus in companies like VMware, Cognizant, Infosys, Accenture, IBM, Covance, and so on. The departments offer various competency and skill development courses to prepare the students for the job market. In addition to this Institute has a unit “Industry Institute Integrated Learning Program (IILP)” with CISCO, AWS, Salesforce, Google Cloud, ARM, UiPath, Microsoft and Texas Instruments. These courses are conducted and students are encouraged and supported to obtain certification. A significant number of Alumni have assumed important positions in industry and government. A few alumni have set up their own start-ups in and around Bangalore and a considerable number have settled down overseas. The Institute has sufficient number of classrooms, Tutorial rooms, seminar halls, well-equipped laboratories, and a library with more than 50000 books. The campus is completely Wi-Fi enabled. In the laboratories, industry-standard software is made available for students to learn and practice. The college encourage faculty members to attend seminars, conferences organized by other Colleges and industries. Also, faculty have been given the freedom to organize seminars,

conferences, and faculty development programs annually. Every year at least 5-6 seminars/ conferences/ FDP are conducted. Seminar halls are available within the college for organizing Student Development programmes and conferences. The College has entered into MoU with a number of industries and foreign Universities.

The campus has Medical College, a Superspecialist hospital with 800 beds, Pharmacy college, Two Nursing Institutes, a Higher Education Institute and a PU Institute. Students have opportunities to interact with students of medical, pharmacy nursing, management, commerce, and Science. Students have transport, hostel and sports facilities. There are more than 15 students' clubs for students to participate in various activities and experience. The College has set an ambitious vision and it is working continuously to adapt newer concepts in teaching, learning, and student assessments to realize its vision through working on its mission. The College aims to increase the students' satisfaction level with a holistic approach to education.

About the department

The Department of Computer Science and Engineering at East Point College of Engineering and Technology (EPCET), established in 1999 and the Institute is affiliated with VTU, Belagavi. Department offers a four-year B.E. program with 300 student intakes. Its mission is to provide students with a strong foundation in computer science, programming, and emerging technologies. The curriculum covers a wide range of subjects, including programming languages, algorithms, operating systems, and artificial intelligence. The department also boasts a VTU-recognized research center, well-equipped labs, and a dedicated faculty involved in research and teaching. Graduates have secured admissions to prestigious universities and excelled in leading IT companies.

About the program

Year of Establishment	1999-2000
Name of the Program offered	BE- Computer Science & Engineering
Intake	300

Institute Vision and Mission

Vision

The East Point College of Engineering and Technology aspires to be a globally acclaimed institution, recognized for excellence in engineering education, applied research, and nurturing students for holistic development.

Mission

M1: To create Engineering graduates through quality education and to nurture innovation, creativity and excellence in teaching, learning and research.

M2: To serve the technical, scientific, economic and societal developmental needs of our communities.

M3: To induce integrity, teamwork, critical thinking, personality development, and ethics in students and to lay the foundation for lifelong learning.

Department Vision and Mission

Vision

The department aspires to be a centre of excellence in Computer Science & Engineering to develop competent professionals through holistic development.

Mission

M1: To create successful Computer Science Engineering graduates through effective pedagogies, the latest tools and technologies, and excellence in teaching and learning.

M2: To augment experiential learning skills to serve technical, scientific, economic and social developmental needs.

M3: To instil integrity, critical thinking, personality development and ethics in students for a successful career in Industries, Research and Entrepreneurship.

Program Educational Objectives (PEOs)

PEO 1: To produce graduates who can perform technical roles to contribute effectively in software industries and R&D Centre.

PEO 2: To produce graduates having the ability to adapt and contribute in key domains of Computer Science and Engineering to develop competent solutions.

PEO 3: To produce graduates who can provide socially and ethically responsible solutions while adapting to new trends in the domain to carve a successful career in the industry.

Program Specific Outcome (PSO)

PSO 1: To conceptualize, model, design, simulate, analyse, develop, test, and validate computing systems and solve technical problems arising in the field of computer science & engineering.

PSO 2: To specialize in the sub-areas of computer science & engineering systems such as cloud computing, Robotic Process Automation, cyber security, big data analytics, user interface design, and IOT to meet industry requirements.

PSO 3: To build innovative solutions to meet the demands of the industry using appropriate tools and techniques.

Program Outcomes as defined by NBA (PO) Engineering Graduates will be able to:

PO1: Engineering Knowledge: Apply knowledge of mathematics, natural science, computing, engineering fundamentals and an engineering specialization as specified in WK1 to WK4 respectively to develop to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, review research literature and analyse complex engineering problems reaching substantiated conclusions with consideration for sustainable development. (WK1 to WK4)

PO3: Design/Development of Solutions: Design creative solutions for complex engineering problems and design/develop systems/components/processes to meet identified needs with consideration for the public health and safety, whole-life cost, net zero carbon, culture, society and environment as required. (WK5)

PO4: Conduct Investigations of Complex Problems: Conduct investigations of complex engineering problems using research-based knowledge including design of experiments, modelling, analysis & interpretation of data to provide valid conclusions. (WK8).

PO5: Engineering Tool Usage: Create, select and apply appropriate techniques, resources and modern engineering & IT tools, including prediction and modelling recognizing their limitations to solve complex engineering problems. (WK2 and WK6)

PO6: The Engineer and The World: Analyse and evaluate societal and environmental aspects while solving complex engineering problems for its impact on sustainability with reference to economy, health, safety, legal framework, culture and environment. (WK1, WK5, and WK7).

PO7: Ethics: Apply ethical principles and commit to professional ethics, human values, diversity and inclusion; adhere to national & international laws. (WK9)

PO8: Individual and Collaborative Team work: Function effectively as an individual, and as a member or leader in diverse/multi-disciplinary teams.

PO9: Communication: Communicate effectively and inclusively within the engineering community and society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations considering cultural, language, and learning differences

PO10: Project Management and Finance: Apply knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, and to manage projects and in multidisciplinary environments.

PO11: Life-Long Learning: Recognize the need for, and have the preparation and ability for i) independent and life-long learning ii) adaptability to new and emerging technologies and iii) critical thinking in the broadest context of technological change. (WK8)

East Point College of Engineering and Technology

Total Courses

Sl. No	Category	No. of Courses	No. of Credits
1	Humanity and Social Science and management Course (HSMC)	4	6
2	Programming Language Courses (PLC)/Emerging Technology Courses (ETC)	2	6
3	Basic Science Courses (BSC)/-Applied Science Course (ASC)	5	20
4	Integrated Professional Core Course (IPCC)	5	20
5	Professional Core Course (PCC)	9	31
6	Professional Elective Course (PEC)	4	16
7	Open Elective Course (OEC)	2	7
8	Professional Core Course laboratory (PCCL)	5	5
9	Engineering Science Course (ESC)	6	18
10	Ability Enhancement Course (AEC)/ Skill Enhancement Course (SEC)/ Skill Development Course (SDC)/Universal Human Value Course (UHV)	7	10
11	Internship (INT)	1	5
12	Project (PROJ)	3	16
13	Mandatory Course (Non-credit)- NCMC	5	-
14	Skill Lab Course (SK)	5	5
Total		58+5	160+5

Semester wise Credit Breakdown for B.E Degree Curriculum

Batch 2025-2029

Sl. No	Category	Credits Per Semester								Total Credits	Credits in %
		I	II	III	IV	V	VI	VII	VIII		
1	HSMC		1			3				4	3%
2	PLC/ETC	7								7	4%
3	BSC/ASC	8	8	4						20	12%
4	IPCC			4	4	4	4	4		20	12%
5	PCC		4	6	9	4	3	8		34	21%
6	PEC					7	4	4		15	9%
7	OEC						3	4		7	4%
8	PCCL			1	1	1	1	1		5	3%
9	ESC	3	6	3	3					15	9%
10	AEC/ SEC/ SDC/ UHV	2	1	2	3	1	3			12	7%
11	INT								5	5	3%
12	PROJ						2	2	12	16	10%
13	SK			1	1	1	1	1		5	3%
Total		20	20	20+1	20+1	20+1	20+1	23+1	17	160+5	100%

SDA-Skill Development Activities, TD/PSB- Teaching Department / Paper Setting Board, ASC-Applied Science Course, ESC- Engineering Science Courses, ETC- scheme for Computer Science and Engineering and allied branches (CSE/ISE and BT all allied branches of CSE) 2 Emerging Technology Course, AEC- Ability Enhancement Course, HSMS-Humanity and Social Science and management Course, SDC- Skill Development Course, CIE-Continuous Internal Evaluation, SEE- Semester End Examination, IC – Integrated Course (Theory Course Integrated with Practical Course)

PCC Value Course, MC: Mandatory Course (Non-credit), AEC: Ability Enhancement Course, SEC: Skill Enhancement Course, L: Lecture, T: Tutorial, P: Practical. ESC: Engineering Science Course, ETC: Emerging Technology Course, PLC: Programming Language Course, MC Mandatory Course, PCC: Professional Core Course, PCCL: Professional Core Course laboratory, UHV: Universal Human Values, SK: Skill Lab

III Semester

BE in CSE
Scheme of Teaching III Semester
Outcome Based Education and Choice Based Credit System (CBCS)
Effective from the academic year Batch - 2025-2029

S l. N o	Course	Course Code	Course Title	Teaching Department (TD)/ Board	Teaching Hours /Week			TW	TH/S	Examination			
					Theory	Tutorial	Practical			CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P						
1	ASC	25MATCS31	Probability, Distributions and Statistics	Math's Dept.	3	2	0	50	120	50	50	100	4
2	PCC	25CS32	Operating Systems	Respective. Dept.	3	0	0	48	90	50	50	100	3
3	PCC	25CS33	Data Structure & Applications	CSE	3	0	0	48	90	50	50	100	3
4	IPCC	25CS34	Digital Design & Computer Organization	CSE	3	0	2	50	120	50	50	100	4
5	PCCL	25CSL35	Data Structure & Applications Lab	CSE	0	0	2	02	30	50	50	100	1
6	ESC/PL C	25CS36X	ESC/PLC	Respective Engg. Dept.	2	0	2	34	90	50	50	100	3
7	AEC	25CSL37X	Ability Enhancement Course - III	CSE Dept. / IT Industry	0	0	2	02	30	50	50	100	1
8	NCMC	25NS38/ 25PE38/ 25YO38	NSS/ PE/ YOGA	NSS/ YOGA/ PE coordinator	0	0	2	28	28	100	-	100	-
9	SDC	25SC39	Community Project (Project based Learning) / Societal Project	Respective Engg. Dept.	0	0	2	30	30	50	50	100	1
10	NCMC	25MDIP310	Mathematics course for Lateral Entry Students	Maths Dept	1	0	0	14	28	100	-	100	-
11	SK	25CSSK311 X	Skill Lab -1	Respective Engg. Dept.	0	0	2	02	30	50	50	100	1
Total									686	650	450	1100	20+1

NOTE: Minimum of 1 subject should have a tutorial component.

TW&SL – Term work

TH/S – Total Hours per semester

III Sem
Engineering Science Course (ESC/ETC/PLC)

PLC courses

Course code	Course
25CS36A	Object Oriented Programming with Java
25CS36B	C# &.NET programming Language
25CS36C	Python for Data Science

Ability Enhancement Course

Course code	Course
25CSL37A	Data Analytics with Excel
25CSL37B	Project Management with Git
25CSL37C	Prompt Engineering

Skill Lab Courses

Course code	Course
25CSSK311A	Agentic AI Intelligence and Multi Agent Systems
25CSSK311B	Data Visualization using Python
25CSSK311C	Data Analytics Tool
25CSSK311D	Mobile App Development
25CSSK311E	Software Test Automations

IV Semester

BE in CSE
Scheme of Teaching IV Semester
Outcome Based Education and Choice Based Credit System (CBCS)
Effective from the academic year Batch - 2025-2029

Sl No	Course	Course Code	Course Title	Teaching Department (TD)/ Board	Teaching Hours /Week			TW	TH/S	Examination			
					Theory	Tutorial	Practical			CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P						
1	PCC	25CS41	Analysis and Design Algorithm	CSE	3	0	0	48	90	50	50	100	3
2	PCC	25CS42	Database Management System	CSE	3	0	0	48	90	50	50	100	3
3	PCC	25CS43	Introduction to AI & Machine Learning	CSE	3	0	0	48	90	50	50	100	3
4	IPCC	25CS44	Microcontroller	CSE	3	0	2	50	120	50	50	100	4
5	PCCL	25CSL45	Analysis and Design of Algorithm Lab	CSE	0	0	2	02	30	50	50	100	1
6	BSC/ESC	25CS46X	BSC/ESC	Respective Engg. Dept.	2	2	0	34	90	50	50	100	3
7	AEC	25CSL47X	Ability Enhancement Course-IV	CSE Dept./ IT Industry	0	0	2	02	30	50	50	100	1
8	UHV	25UH48	Universal Human Values	Any dept	1	0	0	16	30	50	50	100	1
9	NCMC	25NS49/ 25PE49/ 25YO49	NSS/PE/YOGA	NSS/YOGA/ PE coordinator	0	0	2	28	28	100	-	100	-
10	SDC	25SC410	Environmental Science Project	Respective Engg. Dept.	0	0	2	30	30	50	50	100	1
11	NCMC	25MDIP411	Mathematics course for Lateral Entry Students	Maths Dept	1	0	0	14	28	100	-	100	-
12	SK	25CISK412X	Skill Lab - 2	Respective Engg. Dept	0	0	2	02	30	50	50	100	1
Total									686	700	500	1200	20+1

NOTE: Minimum of 1 subject should have a tutorial component.

TW&SL – Term work

TH/S – Total Hours per semester

IV Sem

Engineering Science Course (ESC/ETC/PLC)

PLC courses

Course Code	Course
25CS46A	Math's4–Linear Algebra
25CS46B	Discrete Mathematics Structures
25CS46C	Graph Theory

Ability Enhancement Course

Course Code	Course
25CSL47A	UX/UI Design Tool (Lab)
25CSL47B	DBMS with SQL and MongoDB (Lab)
25CSL47C	Technical writing using LATEX(Lab)

Skill Lab Courses

Course code	Course
25CSSK412A	Agentic AI Intelligence and Multi Agent Systems
25CSSK412B	Data Visualization using Python
25CSSK412C	Data Analytics Tool
25CSSK412D	Mobile App Development
25CSSK412E	Software Test Automations

V Semester

BE in CSE
Scheme of Teaching V Semester
Outcome Based Education and Choice Based Credit System (CBCS)
Effective from the academic year Batch (2025-2029)

Sl. No	Course	Course Code	Course Title	Teaching Department (TD)/ Board	Teaching Hours /Week			TW	TH/S	Examination			
					Theory	Tutorial	Practical			CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P						
1	HSMC	25CS51	Software Engg. & Project Management	CSE	3	0	0	48	90	50	50	100	3
2	PCC	25CS52	Theory of computations	CSE	3	2	0	50	120	50	50	100	4
3	IPCC	25CS53	Computer Networks	CSE	3	0	2	50	120	50	50	100	4
4	PCCL	25CSL54	Web Development Lab	CSE	0	0	2	02	30	50	50	100	1
5	PEC	25CS55X	Program Elective Course-1	CSE	3	0	0	48	90	50	50	100	3
6	PEC	25CS56X	Program Elective Course-2	CSE	4	0	0	64	120	50	50	100	4
7	NCMC	25ES57	Environmental Studies and E-waste Management	Civil Dept	1	0	0	14	28	100	-	100	-
8	NCMC	25NS58 / 25PE58 / 25YO58	NSS/PE/YOGA	NSS/ PE/Yoga Coordinator	0	0	2	28	28	100	-	100	-
9	SDC	25SC59	Hackathon Based Project	Respective Engg. Dept.	0	0	2	30	30	50	50	100	1
10	SK	25CISK510X	Skill Lab-3	Respective Engg. Dept.	0	0	2	02	30	50	50	100	1
Total									686	600	400	1000	20+1

NOTE: Minimum of 1 subject should have a tutorial component.

TW&SL – Term work

TH/S – Total Hours per semester

V Sem

Professional Elective Courses – PEC

Sl. No	Career Path	PEC1	PEC2	PEC3	PEC4
1	FSD Engineers	Full Stack Development	Advanced UI/UX	MERN Stack / MEAN Stack	Cloud computing (Open Stack/ Google)
2	Cloud Engineers	Cloud Foundations & Practitioner	AI Cloud Practitioner	Cloud Architect	Cloud Solution Architect
3	AIML Engineers	Deep learning	Natural language processing	AI for Computer Vision	Machine Learning for Web Automation
4	Data Science Engineers	Data Engineering & MLOps	Statistical Machine Learning for Data Science	Data Security & Privacy	Business Analytics

Skill Lab Courses

Course code	Course
25CSSK510A	Agentic AI Intelligence and Multi Agent Systems
25CSSK510B	Data Visualization using Python
25CSSK510C	Data Analytics Tool
25CSSK510D	Mobile App Development
25CSSK510E	Software Test Automations

VI Semester

BE in CSE Scheme of Teaching VI Semester Outcome Based Education and Choice Based Credit System (CBCS) Effective from the academic year Batch (2025-2029)

Sl No	Course	Course Code	Course Title	Teaching Department (TD)/ Board	Teaching Hours /Week			TW	TH/S	Examination			
					Theory	Tutorial	Practical			CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P						
1	PCC	25CS61	Gen AI & Cyber Law Ethics	CSE	3	0	0	48	90	50	50	100	3
2	IPCC	25CS62	Advanced Machine Learning Algorithms & Applications	CSE	3	0	2	50	120	50	50	100	4
3	PCCL	25CSL63	Devops Lab	CSE	0	0	2	02	30	50	50	100	1
4	PEC	25CS64X	Program Elective Course-3	CSE	3	2	0	50	120	50	50	100	4
5	AEC	25RM65	Research Methodologies & IPR	CSE	3	0	0	48	90	50	50	100	3
6	OEC	25XX66X	Open Elective - 1	CSE	3	0	0	48	90	50	50	100	3
7	PROJ	25CSP67	Mini Project	CSE	0	0	4	60	60	100	-	100	2
8	NCMC	25NS68/ 25PE68/ 25YO68	NSS/PE/YOGA	NSS/ PE/ YOGA coordinator	0	0	2	28	28	100	-	100	-
9	NCMC	25IKS69	IKS	Respective Engg.	1	0	0	14	28	100	-	100	-
10	SK	25CSSK69X	Skill Lab - 4	Respective Engg.	0	0	2	02	30	50	50	100	1
Total									686	650	350	1000	20+1

NOTE: Minimum of 1 subject should have a tutorial component.

TW&SL – Term work

TH/S – Total Hours per semester

VI Sem

Professional Elective Courses – PEC

Sl. No	Career Path	PEC1	PEC2	PEC3	PEC4
1	FSD Engineers	Full Stack Development	Advanced UI/UX	MERN Stack/ MEAN Stack	Cloud computing (Open Stack/ Google)
2	Cloud Engineers	Cloud Foundations & Practitioner	AI Cloud Practitioner	Cloud Architect	Cloud Solution Architect
3	AIML Engineers	Deep learning	Natural language processing	AI for Computer Vision	Machine Learning for Web Automation
4	Data Science Engineers	Data Engineering & MLOps	Statistical Machine Learning for Data Science	Data Security & Privacy	Business Analytics

Skill Lab Courses

Course code	Course
25CSSK69A	Agentic AI Intelligence and Multi Agent Systems
25CSSK69B	Data Visualization using Python
25CSSK69C	Data Analytics Tool
25CSSK69D	Mobile App Development
25CSSK69E	Software Test Automations

VII Semester

BE in CSE
Scheme of Teaching and Examination for VII Semester Outcome
Based Education and Choice Based Credit System (CBCS)
Effective from the academic Batch (2025-2029)

Sl No	Course	Course Code	Course Title	Teaching Department (TD)/ Board	Teaching Hours /Week			TW	TH/S	Examination			
					Theory	Tutorial	Practical			CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P						
1	PCC	25CS71	Cryptography & Network Security	CSE	4	0	0	64	120	50	50	100	4
2	PCC	25CS72	Parallel Computing	CSE	3	2	0	50	120	50	50	100	4
3	IPCC	25CS73	Big Data Analytics	CSE	3	0	2	50	120	50	50	100	4
4	PCCL	25CSL74	Cloud Computing Lab (Open Stack/Google)	CSE	0	0	2	2	30	50	50	100	1
5	PEC	25CS75X	Program Elective Course-4	CSE	4	0	0	64	120	50	50	100	4
6	OEC	25XX76X	Open Elective -2	CSE	4	0	0	64	120	50	50	100	4
7	PROJ	25XXP77	Project-Work Phase - 1	CSE	0	0	4	60	60	100	-	100	2
8	SK	25CSSK78X	Skill Lab -5	Respective Engg.	0	0	2	2	30	50	50	100	1
Total									720	450	350	800	23+1

NOTE: Minimum of 1 subject should have a tutorial component.

TW&SL – Term work

TH/S – Total Hours per semester

VII Sem

Professional Elective Courses – PEC

Sl. No	Career Path	PEC1	PEC2	PEC3	PEC4
1	FSD Engineers	Full Stack Development	Advanced UI/UX	MERN Stack/ MEAN Stack	Cloud computing (Open Stack/ Google)
2	Cloud Engineers	Cloud Foundations & Practitioner	AI Cloud Practitioner	Cloud Architect	Cloud Solution Architect
3	AIML Engineers	Deep learning	Natural language processing	AI for Computer Vision	Machine Learning for Web Automation
4	Data Science Engineers	Data Engineering & MLOps	Statistical Machine Learning for Data Science	Data Security & Privacy	Business Analytics

Platforms for the certification

Sl. No	Career Path	Certification	Platform
1	FSD Engineers	IBM Full Stack Software Developer Professional Certificate	IBM (Coursera)
2	Cloud Engineers	AWS Certification	AWS
3	AIML Engineers	IBM AI Engineering Professional Certificate	IBM (Coursera)
4	Data Science Engineers	IBM Data Science Professional Certificate	IBM (Coursera)

Skill Lab Courses

Course code	Course
25CSSK78A	Agentic AI Intelligence and Multi Agent Systems
25CSSK78B	Data Visualization using Python
25CSSK78C	Data Analytics Tool
25CSSK78D	Mobile App Development
25CSSK78E	Software Test Automations

VIII Semester

BE in CSE

**Scheme of Teaching and Examination for VIII Semester Outcome Based Education and Choice Based Credit System (CBCS)
Effective from the academic Batch (2025-2029)**

Sl No	Course	Course Code	Course Title	Teaching Department (TD)/ Board	Teaching Hours /Week			TW	TH/S	Examination			
					Theory	Tutorial	Practical			CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P						
1	INT	25INT81	Research/ Industrial Internship	CSE	0	0	10	150	360	100	100	200	05
2	PROJ	25CSP82	Project Work Phase - II	CSE	0	0	24	150	360	100	100	200	12
Total									510	200	200	400	17

TW&SL – Term work

TH/S – Total Hours per semester

Open Elective from CSE to other Dept. (Academic)

Sl. No	Department	Subjects
1	CSE	Principles of AI
2	CSE	Web Technologies
3	CSE	Introduction to Artificial Intelligence & Machine Learning
4	CSE	Big Data analytics Techniques
5	CSE	Cloud computing & applications
6	CSE	Data Science
7	CSE	Cryptography & Computer Networks
8	CSE	Advance Java programming
9	CSE	Advanced Python programming
10	CSE	Technology for Rural development

Details of Open Electives from other Dept. to CSE

Sl. No	Department	Subjects
1	Civil	E & Plastic waste management
2	Civil	Environmental Impact Assessment
3	Civil	Traffic Engineering
4	ECE	Robotics and its Applications
5	ECE	Embedded system & application
6	ECE	Satellite Remote sensing & GIS
7	MECH	Supply Chain Management
8	MECH	Bio-Energy Technology
9	MECH	Renewable Energy system
10	EEE	Electric Vehicle technology

Assessment Metrics

1. For IPCC

Continuous Internal Assessment (CIE): 50 Marks

Assessment Tools	Marks	Course Outcome Addressed
Internal Test - 1 (CIE - I)	15	CO1, CO2, CO3
Internal Test - 2 (CIE - II)	15	CO3, CO4, CO5
Average of the two CIE will be taken for 15 marks	-	-
Assignment / Programming Competition / Hackathon / Code Tantra / Quiz / Online Certification	10	CO1, CO2, CO3, CO4, CO5
Integrated Practical Lab session (Daily Assessment + Record + 2 Lab Test)	25 (10+5+10)	CO1, CO2, CO3, CO4, CO5

The Final CIE out of 50 Marks = Average of two CIE tests for 15 Marks + Marks scored in Programming Competition / Hackathon / Code Tantra / Quiz / Online Certification for 10 Marks + Lab Assessment for 25 Marks.

Examination	Marks	Course Outcome Addressed
Semester End Examinations (SEE)	100	CO1, CO2, CO3, CO4, CO5

2. For PCC

Continuous Internal Assessment (CIE): 50 Marks

Assessment Tools	Marks	Course Outcome Addressed
Internal Test - 1 (CIE - I)	25	CO1, CO2, CO3
Internal Test - 2 (CIE - II)	25	CO3, CO4, CO5
Average of the two CIE will be taken for 30 marks	-	-
Assignment / Programming Competition / Hackathon / Code Tantra / Quiz / Online Certification	25	CO1, CO2, CO3, CO4, CO5

The Final CIE out of 50 Marks = Adding of two CIE tests for 30 Marks + Marks scored in Programming Competition / Hackathon / Code Tantra / Quiz / Online Certification for 20 Marks.

Examination	Marks	Course Outcome Addressed
Semester End Examinations (SEE)	100	CO1, CO2, CO3, CO4, CO5