K. S. INSTITUTE OF TECHNOLOGY, BENGALURU
An Autonomous Institution under VTU, Approved by AICTE
Scheme of Teaching and Examinations-2025
Outcome-Based Education (OBE)and Choice Based Credit System (CBCS)
(Effective from the academic year 2025-26)

I Semester (MCA Stream)

SL NO.	Course Type	Course Code	Course Title	Teaching Hours per Week			Examination				Credits
					Practical/ Seminar	Tutorial/ SDA	Duration in hours	CIE Marks	SEE Marks	Total Marks	
				L	P	T/SDA					
1	IPCC	25MMC101	Programming and Problem-Solving in C	3	2	0	03	50	50	100	4
2	BSC	25MMC102	Mathematical Foundations for Computer Applications	3	0	0	03	50	50	100	3
3	PCC	25MMC103	Database Management Systems (DBMS)	3	0	0	03	50	50	100	3
4	PCC	25MMC104	Operating Systems	2	0	2	03	50	50	100	3
5	PCC	25MMC105	Web Application Development	3	0	0	03	50	50	100	3
6	PCCL	25MML106	DBMS and Web Technologies Laboratory	0	2	2	03	50	50	100	2
7	NCMC	25MRM107	Research Methodology and IPR (Online)	Online courses (online.vtu.ac.in)							PP
8	NCMC	25MMA108	Basic Mathematics (Bridge Course)	2	0	0	-	100	-	100	PP
	Total							**300**	**300**	**600**	**18**

BSC: Basic Science Courses: Courses like Mathematics/ Science are the prerequisite courses that the concerned engineering stream board of Studies will decide. **PCC: Professional Core Course:** Courses related to the stream of engineering, which will have both CIE and SEE components, students have to qualify in the course for the award of the degree. **Integrated Professional Core Course (IPCC)**: Refers to a Professional Theory Core Course Integrated with practicals of the same course. The IPCC's theory part shall be evaluated by CIE and SEE. The practical part shall be evaluated by only CIE (no SEE). However, questions from the practical part of IPCC shall be included in the SEE question paper. **Project Based Learning Course (PCC(PB):** Project Based Learning course is a professional core Course only Students have to complete a project out of learning from the course and SEE will be viva voce on project work. **PCCL: Professional Core Course Laboratory:** Practical courses whose CIE will be evaluated by the class teacher and SEE will be evaluated by the two examiners.

Skill development activities: Under Skill development activities in a concerning course, the students should

1. Interact with industry (small, medium, and large).
2. Involve in research/testing/projects to understand their problems and help creative and innovative methods to solve the problem.
3. Involve in case studies and field visits/ fieldwork.
4. Accustom to the use of standards/codes etc., to narrow the gap between academia and industry.
5. Handle advanced instruments to enhance technical talent.
6. Gain confidence in the modeling of systems and algorithms for transient and steady-state operations, thermal study, etc.
7. Work on different software/s (tools) to simulate, analyze and authenticate the output to interpret and conclude.

All activities should enhance student's abilities to employment and/or self-employment opportunities, management skills, Statistical analysis, fiscal expertise, etc. Students and the course instructor/s are to be involved either individually or in groups to interact together to enhance the learning and application skills of the study they have undertaken. The students with the help of the course teacher can take up relevant technical –activities that will enhance their skills. The prepared report shall be evaluated for CIE marks.

Bridge Course: Non-Credit Mandatory Course 25MMA108: Basic Mathematics: Students who have not taken mathematics at the 10+2-degree level are required to study and pass this course in 1st semester. However, this course /subject will not be considered for vertical progression.