



Department of Engineering Mathematics & Computing
Scheme of Examination

VIII Semester

For Admitted Batch 2022

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted								Total Marks	Contact Hours per week			Mode of Teaching (Online, Offline, Blended)	Mode of Exam.					
				Theory Slot				Practical Slot		MOOCs												
				End Term Evaluation		Continuous Evaluation		End Sem. Exam.	Continuous Evaluation		Assignment	Exam										
				End Sem. Exam.	\$ Proficiency in subject /course	Mid Sem. Exam	Quiz/ Assignment		Lab work & Sessional	Skill Based Mini Project												
1.	22508xx	DE	Departmental Elective* (DE-4)	-	-	-	-	-	-	-	25	75	100	-	-	3	online	MCQ				
2.		OC	Open Category* (OC-3)	-	-	-	-	-	-	-	25	75	100	-	-	3	online	MCQ				
3.	2250801	DLC	Internship/Project/Innovation & start-up***	-	-	-	-	250	150	-	-	-	400	-	-	18	9	offline	SO			
4.	2250802	-	Professional # Development	-	-	-	-	50	-	-	-	-	50	-	-	4	2	Interactive	SO			
Total				-	-	-	-	300	150	-	50	150	650	-	-	22	17	-	-			
Additional Course for Honors or minor Specialization				Permitted to opt for maximum two additional courses for the award of Honours or Minor specialization																		

* proficiency in course/subject-includes the weightage towards ability/skill/competence/knowledge level/ expertise attained etc. in that particular course/subject.

MCQ: Multiple Choice Question AO: Assignment + Oral

PP: Pen Paper SO: Submission + Oral

*All of these courses will run through SWAYAM/NPTEL/ MOOC with credit transfer

#Evaluation will be based on participation/laurels brought by the students to the institution in national/state level technical and other events during the complete tenure of the UG programme (participation in professional chapter activities, club activities, cultural events, sports, personality development activities, collaborative events, MOOCs, technical events, institute/department committees, etc.)

***Innovation/ start-up: only for those students who have opted relevant NEC

Mode of Teaching			Mode of Examination					Total Credits		
Theory		Lab	PD	Theory		Internship/ Project	PDC			
Offline	Online	Blended	Offline	Interactive	PP	AO	MCQ	SO	SO	17
-	-	06	09	02	-	-	06	09	02	17
-	-	35.29%	52.95%	11.76%	-	-	35.29%	52.95%	11.76%	Credits%



		DE -IV (Through NPTEL) Tentative List					
S. No.	Subject Code	Subject name	Time Duration (Weeks)	Start date	End date	Faculty Coordinator	Mentor Name and Affiliation
1	2250861	Reinforcement Learning	12	19 Jan 2026	10 April 2026	Dr. Minakshi Dahiya	By Prof. Balaraman Ravindran IIT Madras
2	2250862	Edge Computing	8	19 Jan 2026	13 Mar 2026		By Prof. Rajiv Misra IIT Patna
3	2250863	Computer Aided Applied Single Objective Optimization	12	19 Jan 2026	10 April 2026		By Prof. Prakash Kotecha IIT Guwahati

		OC-3 (Through NPTEL) Tentative List					
S. No.	Subject Code	Subject name	Time Duration (Weeks)	Start Date	End date	Faculty Coordinator	Mentor Name and Affiliation
1	910xxx	Numerical Linear Algebra	12	19 Jan 2026	13 Feb 2026	Dr. Minakshi Dahiya	By Prof. P. N. Agrawal, and Prof. D. N. Pandey IIT Roorkee
2	910xxx	Algorithmic Graph Theory and Data Structures	12	19 Jan 2026	10 April 2026		By Prof. Sourav Mukhopadhyay IIT Kharagpur
3	910xxx	Algebraic Number Theory	12	19 Jan 2026	10 April 2026		By Prof. Mahesh Kakde IISc Bangalore





Department of Engineering Mathematics & Computing

Scheme of Examination B. Tech. VI Semester

(Admitted Batch 2023)

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted								Total Marks	Contact Hours per week	Total Credits	Mode of Teaching (Offline/ Online)	Mode of Exam.	Duration of Exam.					
				Theory Slot			Practical Slot			MOOCs												
				End Sem.		Mid Sem. Exam.	Quiz/ Assignment	End Sem	Lab Work & Sessional	Skill Based Mini Project	Assignment	Exam										
				End Term Evaluation	Proficiency in subject /course																	
1.	3250601	DC	Computer Graphics	50	10	20	20	-	-	-			100	3	1	-	4	Offline	PP	2 Hrs		
2.	3250602	DC	Compiler Design	50	10	20	20	-	-	-			100	3	1	-	4	Offline	PP	2 Hrs		
3.	32506xx	DE	Departmental Elective (DE-I)								25	75	100	3	-	-	3	Online	MCQ	3 Hrs		
4.	3250604	MC	Artificial Intelligence & Machine Learning (AI & ML)	50	10	20	20	40	30	30			200	2	1	2	4	Offline	MCQ	1.5 Hrs		
5.	910xxx	OC	Open Category (OC-1)	50	10	20	20	-	-	-			100	3	-	-	3	Blended	PP	2 Hrs		
6.	3250605	DLC	Minor Project-II					40	60				100	-	-	4	2	Offline	SO			
7.	200xxx	CLC	Novel Engaging Course	-	-	-	-	50	-	-			50	-	-	2	1	Interactive	SO			
8.		NSS	*Natural Science & Skill	200	40	80	80	120	40	40			600	1	-	2	2**	-	-			
Total				400	80	160	160	250	130	70	25	75	1350	15	3	10	23					
Skill Enhancement Program/Research Internship/On Job Training for Four weeks duration: Evaluation in VII Semester																						
9.	1000007	Intellectual Property Right (IPR)		50	10	20	20	-					100		2			Grade	Online	MCQ	1.5 Hrs	

* Natural Science & Skill: Engineering Physics/Engineering Chemistry/Environmental Science/Language

**(Natural Science & Skill treated as Mandatory Audit Course from I to IV semester and cumulative marks converted as a cluster of credits and awarded in the VI semester)

\$ proficiency in course/subject-includes the weightage towards ability/skill/competence/knowledge level/ expertise attained etc. in that particular course/subject.

\$\$ MCQ: Multiple Choice Question

\$\$ AO: Assignment + Oral

\$\$ PP: Pen Paper

\$\$ SO: Submission + Oral

Compulsory registration for one online course using SWAYAM/NPTEL/MOOC, evaluation through attendance, assignments and presentation

Mode of Teaching			Mode of Examination						Total Credits	
Theory		Lab	NEC		Theory		Lab	NEC		
Offline	Online	Blended	Offline	Interactive	PP	AO	MCQ	SO		
11	3	3	3	1	11	-	7	2	1	21
52.38	14.29	14.29	14.29	4.75	52.4	-	33.33	9.5	4.75	Credits%



		DE -I (Through NPTEL) Tentative List					
S. No.	Subject Code	Subject name	Time Duration (Weeks)	Start date	End date	Faculty Coordinator	Mentor Name and Affiliation
1	3250661	Block Chain and its Application	12	19 Jan 2026	10 April 2026	Dr. Minakshi Dahiya	By Prof. Sandip Chakraborty, and Prof. Shamik Sural IIT Kharagpur
2	3250662	Cloud Computing	12	19 Jan 2026	13 Mar 2026		By Prof. Soumya Kanti Ghosh IIT Kharagpur
3	3250663	GPU Architectures and Programming	12	19 Jan 2026	10 April 2026		By Prof. Soumyajit Dey IIT Kharagpur

OC-1 (Offered in Traditional Mode) Tentative List

S. No.	Subject Code	Subject name	Mentor Name
1	910xxx	Advanced Numerical Techniques	Dr. J K Muthele
2	910xxx	Transform Calculus	Dr. D K Jain

