



Scheme of Evaluation

B. Tech. VIII Semester (*CSD*)

(for batch admitted in academic session 2022-23)

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted									Total Marks	Contact Hours per week			Total Credits	Mode of Teaching	Mode of Exam.	Duration of Exam.
				Theory Slot				Practical Slot			MOOCs									
				End Term Evaluation		Continuous Evaluation		End Sem. Exam.	Continuous Evaluation											
									Lab Work & Sessional	Skill Based Mini Project			Assigment	Exam						
				End Sem. Exam	\$Proficiency in subject /course	Mid Sem . Exam.	Quiz/ Assignment							L	T	P				
1.	DE	DE	Departmental Elective*(DE-4)	-	-	-	-	-		-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
2.	OC	OC	Open Category (OC-3)	-	-	-	-	-		-	25	75	100	3		-	3	Online	MCQ	3 Hrs
3.	2290801	DLC	Internship/Project Project/Innovation & start-up	-	-	-	-	250	150	-	-	-	400	-	-	18	9	Blended	SO	
4.	2290802	-	Professional Development#	-	-	-	-	50	-	-	-	-	50	-	-	4	2			
Total				-	-	-	-	300	150	-	50	150	650	06	-	22	17	-		
	Additional Courses for obtaining Honours or minor Specialization by desirous students		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/ competency /knowledge level /expertise attained etc. in that particular course/subject

Natural Sciences & Skills: Engineering Physics / Engineering Chemistry / Environmental Engineering / Language

Credits of Natural Sciences & Skills will be added in the VI Semester

MCQ: Multiple Choice Question **AO:** Assignment + Oral **PP:** Pen Paper **SO:** Submission + Oral



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Mode of Teaching						Mode of Examination					Total Credits
Theory			Lab	NEC/professional development		Theory			Lab	SIP/SLP/NEC/professional development	
Offline	Online	Blended		Offline	Interactive	PP	AO	MCQ	SO	SO	
		Offline	Online								
-	06			09	02			06	09	02	17
-	35			53	12			35	53	12	Credits %

DE-4*		
S. No.	Subject Code	Subject Name
1.	2290811	GPU Architectures and Programming
2.	2290812	Introduction To Soft Computing
3.	2290813	Selected Topics in Algorithms

OC-3*		
S. No.	Subject Code	Subject Name
1.		Affective Computing
2.		Natural Language Processing
3		Compiler Design



List of courses to be opted for Honors or Minor specialization in VIII Semester

Minor Specialization**(to be opted by students of Other Department)*

Advanced Computer Networks
Data Mining
Foundations of Deep Learning: Concepts and Applications

Honors**(to be opted by students of Parent Department)*

Track	Course
Information Security	Cryptography and Network Security
	Foundations of Cyber Physical Systems
IoT	VLSI Physical Design
	Introduction to Information Retrieval
High Performance Computing	Edge Computing
	Embedded System Design with ARM

* Course run through SWAYAM/NPTEL/MOOC Learning Based Platform



Scheme of Evaluation

B. Tech. VI Semester (CSD)

(for batch admitted in academic session 2023-24)

S. No.	Subject Code	Category Code	Subject Name	Maximum Marks Allotted									Total Marks	Contact Hours per week			Total Credits	Mode of Teaching	Mode of Exam	Duration of Exam.
				Theory Slot				Practical Slot			MOOCs									
				End Term Evaluation		Continuous Evaluation		End Sem. Exam.	Continuous Evaluation		Assignment	Exam		L	T	P				
				End Sem. Exam	Proficiency in subject /course	Mid Sem. Exam.	Quiz/ Assignment		Lab Work & Sessional	Skill Based Mini Project										
1.	3290601	DC	IOT System Design	50	10	20	20	40	30	30	-	-	200	3	-	2	4	Blended	PP	2 Hrs
2.	3290602	DC	Artificial Intelligence & Machine Learning	50	10	20	20	40	30	30	-	-	200	3	-	2	4	Blended	PP	2 Hrs
3.	DE	DE	Departmental Elective* (DE-1)	-	-	-	-	-	-	-	25	75	100	3	-	-	3	Blended	MCQ	3 Hrs
4.	OC	OC	Open Category (OC-1)	50	10	20	20	-	-	-	-	-	100	3	-	-	3	Blended	PP	2 Hrs
5.	3290603	DLC	Minor Project-II	-	-	-	-	40	60	-	-	-	100	-	-	6	3	Offline	SO	
6.	200XXX	CLC	Novel Engaging Course (Informal Learning)	-	-	-	-	50	-	-	-	-	50	-	-	2	1	SO	SO	-
8.		NSS	Natural Science & Skills	200	40	80	80	120	40	40	-	-	600	1	-	2	2*	-	-	-
Total				350	70	140	140	290	160	100	25	75	1350	13	-	14	20			
10.	1000007 ^{SS}	MAC	Intellectual Property Rights (IPR)	50	10	20	20	-	-				100	2	-	-	Grade	Online	MCQ	1.5 Hrs

\$Proficiency in course/subject – includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in that particular course/subject

Natural Sciences & Skills: Engineering Physics / Engineering Chemistry / Environmental Engineering / Language

Credits of Natural Sciences & Skills will be added in the VI Semester

MCQ: Multiple Choice Question **AO:** Assignment + Oral **PP:** Pen Paper **SO:** Submission + Oral



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Mode of Teaching						Mode of Examination					Total Credits
Theory				Lab	NEC	Theory			Lab	SIP/SLP/NEC	
Offline	Online	Blended		Offline	Interactive	PP	AO	MCQ	SO	SO	
		Offline	Online								
	3	9+2*	-	5	1	11	-	03+2*	03	01	20
	15	45+10*		25	5	55		15+10*	15	5	Credits %

DE-1*		
S. No.	Subject Code	Subject Name
1.	3290611	Reinforcement Learning
2.	3290612	Digital Design with Verilog

OC-1		
S. No.	Subject Code	Subject Name
1.		Database Management System
2.		Operating Systems



List of courses to be opted for Honors or Minor specialization in VI Semester

Minor Specialization*(to be opted by students of Other Department)

Programming in Modern C++

Introduction To Internet of Things

Honors*(to be opted by students of Parent Department)

Track1	Course
Information Security	Foundations of Cryptography
	Secure Computation: Part I
IoT	Introduction To Industry 4.0 And Industrial Internet Of Things
	Wireless Ad Hoc and Sensor Networks
High Performance Computing	Parallel Computer Architecture
	Advanced Computer Architecture

***Course run through SWAYAM/NPTEL/MOOC Learning Based Platform**



Scheme of Evaluation

B. Tech. IV Semester (*Computer Science and Design*)

(for batch admitted in academic session 2024-25)

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Exam.	Duration of Major Exam.
				Theory Block				Practical Block									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional									
1.	29242201	DC	Data Science	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
2.	29242202	DC	Design and Analysis of Algorithms	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	29242203	DC	Theory of Computation	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	29242204	DC	Data communication and Networks	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	29242205	DC	Design Pattern	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
6.	29242206	DLC	Data Science Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	29242207	DLC	Design and Analysis of Algorithms Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	29242208	DLC	Competitive Programming	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	29242209	SP	Semester Proficiency ^{\$}	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	29242210	PBL	Macro Project-II [#]	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
12.	SIP2XXXX	SIP	Skill Internship Program	-	-	-	-	60	-	60	-	-	-	2**	Experiential	SO	-
Total				125	125	100	150	440	120	1060	11	05	10	23	-	-	-
13.	29242211	MAC	Project Management, Economics & Financing	-	-	-	-	100	-	100	-	2	-	GRADE	Blended	SO	-
14.	29242212	MWS	Mandatory Workshop on Intellectual Property Rights at Department Level											GRADE	Interactive	MCQ	-

Summer Semester of six-eight week duration will be conducted for makeup of previous semester examination.

Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree

[§]Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

MCQ: Multiple Choice Question **AO:** Assignment + Oral **PP:** Pen Paper **SO:** Submission + Oral **OB:** Open Book

[#] Macro Project-II will be presented and evaluated through an interdisciplinary project evaluation committee.

^{**} These credits will be transferred from Skill Internship Project.

PC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
1	0	0	5	0	0	0	3	1	1	0	0	0	1	1	1

Mode of Learning								Mode of Examination								Total Credits
Theory				Lab				Theory				Lab		NEC	SIP	
Face to Face	Online	Face to Face	Blended	Experiential	Experimental	Interactive	Experiential	PP	AO	MCQ	OB	SO	AO	SO	SO	



15		1	1		3	1	2			15		2	3	1	2	23
65.1		4.4	4.4		13	4.4	8.7			65.1		8.7	13.1	4.4	8.7	Credits %

List of courses to be opted for Honors or Minor specialization in IV Semester

Minor Specialization*(to be opted by students of Other Department)

Introduction to Database Systems
Object Oriented System Development Using UML, Java And Patterns

Honors*(to be opted by students of Parent Department)

Track1	Course
Information Security	Foundations of Cryptography, IIIT Bangalore
	Cryptography and Network Security
IoT	Introduction To Internet Of Things
	Wireless Ad Hoc and Sensor Networks
High Performance Computing	Parallel Computer Architecture
	Advanced Computer Architecture

*Course run through SWAYAM/NPTEL/MOOC Learning Based Platform



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Scheme of Evaluation
B. Tech. II Semester (*Computer Science and Design*)

(for batch admitted in academic session 2025-26)

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Exam.	Duration of Major Exam.
				Theory Block				Practical Block									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional									
1.	29251201	DC	Computer Graphics & Animation	25	25	20	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	29251202	DC	Object oriented Programming & Methodology	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	29251203	DC	Computer System and Organization	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	29251204	DC	Operating Systems	25	25	20	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	29251205	ESC	Basic Electrical & Electronics Engineering	25	25	20	30	-	-	100	2	-	-	2	Face to Face	MCQ	2 Hrs
6.	29251206	DLC	Computer Graphics & Animation Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	29251207	DLC	Object oriented Programming & Methodology Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	29251208	DLC	Electrical & Electronics Engineering Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	29251209	SP	Semester Proficiency ^{\$}	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	29251210	PBL	Micro Project-II [#]	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
12.	SIP1XXXX	SIP	Skill Internship Program(Soft Skill)	-	-	-	-	60	-	60	-	-	-	2**	Experiential	SO	-
Total				125	125	100	150	440	120	1060	11	04	10	22	-	-	-
13.	29251211	MAC	Sustainability & Environmental Science	-	-	-	-	100	-	100	-	2	-	GRADE	Blended	SO	-
14.	29251212	MWS	Mandatory Workshop on Career Planning & Goal Setting at Department Level											GRADE	Interactive	MCQ	-
Summer Semester of six-eight week duration will be conducted for makeup of I & II semester examination.																	

Summer Semester of six-eight week duration will be conducted for makeup of I & II semester examination.

^{\$}Semester Proficiency- includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

MCQ: Multiple Choice Question **AO:** Assignment + Oral **PP:** Pen Paper **SO:** Submission + Oral **OB:** Open Book

^{**} These credits will be transferred from Skill Internship Program (Soft Skill).

[#] Micro Project-II will be presented and evaluated through an interdisciplinary project evaluation committee.

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	1	4	0	0	0	4	1	1	0	0	0	1	1	1



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Mode of Learning								Mode of Examination								Total Credits
Theory		Lab				NEC	SIP	Theory				Lab		NEC	SIP	
Face to Face	Online	Face to Face	Blended	Experiential	Experimental	Interactive	Experiential	PP	AO	MCQ	OB	SO	AO	SO	SO	
14		1	-	1	3	1	2			14		2	3	1	2	22
63.5		4.5		4.5	14	4.5	9			63.5		9	14	4.5	9	Credits %