Programme Major   **Computer Science and Engineering**
Curriculum (Admitted Year)   **AY 2021-22**
School   **SCOPE**

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT ¤	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
PHY1008	Modern Physics † (or)	None	3	2	4
CHY1004	Chemistry and Environmental Studies †	None	3	2	4
ECE1002	Fundamentals of Electrical and Electronics Engineering	None	3	2	4
CSE1012	Problem Solving using Python	None	3	2	4
STS1002	Fundamentals of Aptitude ‡ (or)	SKEPT	0	2	1
STS1004	Introduction to Problem Solving ‡	SKEPT	0	2	1
	TOTAL CREDITS			**20**	

Semester - 2 (WIN 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1002	English for Effective Communication* (or)	SKEPT/ ENG1001	2	2	3
ENG2001	English for Professional Communication*	ENG1002	2	2	3
MAT1002	Applications for Differential and Difference Equations	MAT1001	3	2	4
PHY1008	Modern Physics † (or)	None	3	2	4
CHY1004	Chemistry and Environmental Studies †	None	3	2	4
ECE1003	Digital Logic Design	ECE1001/ECE1002	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS			**20**	

Semester - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2002	Computer Organization and Architecture † (or)	ECE1003	4	0	4
CSE3003	Computer Networks †	CSE2005	3	2	4
MAT1003	Discrete Mathematical Structures	None	4	0	4
CSE2001	Data Structures and Algorithms	CSE1004/CSE1012	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	0	0	0
TEC3001	Design Thinking §	None	3	0	3
	Technology Foundation Course	None	3	0	3
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
	TOTAL CREDITS			**21**	

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2002	Computer Organization and Architecture † (or)	ECE1003	4	0	4
CSE3003	Computer Networks †	CSE2005	3	2	4
MAT1011	Applied Statistics	None	3	2	4
CSE2007	Database Management System	MAT1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	0	0	0
TEC3001	Design Thinking §	None	3	0	3
	University Elective - 1	None	4	0	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
	TOTAL CREDITS			**19**	

SUMMER INTERNSHIP §   **0   0   1**

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
CSExxxx	Programme Elective-1		3	2	4
CSExxxx	Programme Elective-2		3	2	4
	University Elective - 2	None	4	0	4
CSE1008	Theory of Computation	None	4	0	4
CSE2008	Operating Systems	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			**22**	

Semester - 6 (WIN 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
CSE3004	Design and Analysis of Algorithms	CSE2001	3	2	4
CSExxxx	Programme Elective-3		3	2	4
CSExxxx	Programme Elective-4	None	3	2	4
CSE1005	Software Engineering	None	3	2	4
	University Elective-3	None	4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			**22**	

SUMMER INTERNSHIP §   0   0   1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
CSExxxx	Programme Elective-5		3	2	4
	University Elective-4		4	0	4
	University Elective-5		4	0	4
	University Elective-6		3	0	3
	TOTAL CREDITS			**19**	

Semester - 8 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
BIC4002	Industrial Internship/ Senior Design Project		0	0	6
	TOTAL CREDITS			**6**	

TOTAL PROGRAMME CREDITS   150

Note:
* The students who scored below cut-off in the English Proficiency Test are loaded into ENG1001 and those above cut-off are automatically loaded into ENG1002. In the subsequent semester students who studied ENG1001 in previous semester have to take ENG1002 and those who studied ENG1002 will take ENG2001
† The students are split between the FALL and WIN semesters. The choice is left to complete the course in any of the semesters the course appears
‡ The Soft Skills courses in the first semester are decided by the cut-off marks in SKEPT exam in the first semester. From subsequent semester student is automatically offered any one of the STSxxxx course depending on the grade they obtained in previous semester. S and A grade students go to higher course code and remaining grades are loaded into lower course code
§ Student has choice to take the course in any of the semester/ summer break that the course appears
¤ Soft Skills and English Proficiency Test which a student takes soon after securing admission into Engineering Programmes