



VIT-AP
UNIVERSITY

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CURRICULUM ROADMAPS FOR STUDENTS OF B.TECH. ELECTRONICS AND COMMUNICATION ENGINEERING MAJOR



FOREWORD

The following document shows various roadmaps to complete the Curriculum requirements of any Programme with Electronics and Communication Engineering as a Major. A Major is a programme into which a student has taken admission. The Curriculum requirements of a Major Programme is 150 Credits. Over and above this requirement if a student chooses to take additional specialized courses worth 10 Credits (± 1) in the same domain as that of Major then the student earns a degree as Major with Specialization. Whereas if student chooses additional 10 credits (± 1) in another domain other than Major, then the student earns a degree as Major with Minor in that domain. Double Major is a unique opportunity for a student to Major in two disciplines within 4 years of study. The student has to complete apart from Major, an additional 20 credits (± 1) to obtain the second major. In order to make Minors/ Specialization and Double Major more practical and accessible to students, we utilize the Open Electives or University Electives to partly compensate the additional credit requirements. This not only gives us advantage in focused additional learning within achievable credit limits, but also makes it practical with no additional time required to earn the degree.

The document starts with the general structure of the Curriculum for Major in B.Tech Electronics and Communication Engineering and extends to all other possible combinations of Minors or Specializations or Double Majors. A student who zeroed in on a Programme can easily find how the Curriculum requirements can be fulfilled each semester by proper selection of courses. However, the roadmaps are only tentative suggestions and students still have flexibility in selecting courses as per the University's Fully Flexible Credit System (FFCS®).

The following points have to be noted before understanding the document

1. The courses may appear in more than one semester in the roadmaps, but the credits have been counted only at one place. This distribution is done keeping in mind that not all students may be able to study a particular course in a given semester. The student who has a course pending may complete the requirement in subsequent semester
2. In any semester, the maximum credits that can be taken by a student is 27. Whatever may be the programme or additional courses a student opts, the maximum credit limit per semester cannot be exceeded
3. The courses can be altered depending on the recommendations of Board of Studies which will be intimated to students by the respective Programme Chairs well in advance of affecting those changes. Revised copies of the roadmaps will also be provided in such a scenario
4. In the sections where Course Code is missing (eg.: University Elective), it has to be understood that there will be a list of courses from various disciplines, hence, it is deliberately left vacant (the same rule applies to prerequisites). A student has to make a choice from the courses offered in that semester
5. There may be fields where Course Codes may be generated on a later date, for which it is left with suffix "xxxx". It could also mean an elective basket where there is a large list of courses to choose from
6. The courses earmarked for a Minor, Specialization or Double Major have to be fulfilled without any exceptions. If a student fails to complete the entire prescribed set of courses, may opt to convert the completed courses as University Electives towards fulfillment of Curriculum requirements
7. Academic Enhancement Centers and Programme Chairs will guide students at the beginning of course registration in each semester
8. Students planning to sit for placements should compulsorily complete two additional soft skills courses in Semesters – 5 & 6 to be eligible. These courses should be selected by the students under University Electives

Dr. Jagadish C. Mudiganti
Dean Academics

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Curriculum Format

Programme Name:	B. Tech. Electronics and Communication Engineering
Programme School:	Electronics Engineering (SENSE)
Curriculum applicable to (for admitted year xxxx-xx format):	AY 2021-22
Curriculum Version:	1.0
Approved by & Date	6 th Academic Council, 22-06-2021

University Core

Min. Credit Requirements ----->

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Course Code	Category	Course Title	Ver.	T	P	C	Pre/Co-Requisite	Course Discipline
	Projects and Internships	All are compulsory courses except for choices				15		
BIC4002		Industrial Internship/ Senior Design Project	2.0	0	0	6		Engineering
CAP4001		Capstone	1.0	0	0	4		Engineering
SIT1001		Summer Internship	1.0	0	0	1		Engineering
ECS1002		Engineering Clinics - I	1.0	0	4	2	None	Engineering
ECS3001		Engineering Clinics - II (or)	1.0	0	4	2	ECS1002	Engineering
MEC1002		Engineering Graphics	1.0	0	4	2	None	Engineering
	Engineering Foundation	All are compulsory				16		
CSE1012		Problem Solving using Python	1.0	3	2	4	None	Engineering
CSE2005		Object Oriented Programming	1.0	3	2	4	None	Engineering
CSE2001		Data Structures and Algorithms	1.1	3	2	4	None	Engineering
ECE1001		Fundamentals of Electrical Engineering	1.1	3	2	4	None	Engineering
	Humanities and Management	All are compulsory courses except for choices				17		
TECH3001		Design Thinking	1.0	3	0	3	None	Technology
MGT2015		Entrepreneurship	1.0	2	0	2	None	Management
MGT1001		Ethics and Values	2.0		P/F		None	Humanities
STS1002/ STS1004		Fundamentals of Aptitude (or) Introduction to Problem Solving	1.1	0	2	1	None	Humanities
STS1007/ STS1009		Arithmetic problem solving (or) Introduction to quantitative, logical and verbal ability	1.0	0	2	1	STS1002/STS1004	Humanities
STS2006/ STS2008		Getting started to skill enhancement (or) Numerical ability and cognitive intelligence	1.1	0	2	1	STS1007/STS1009	Humanities
STS2007/ STS2009		Enhancing problem solving skills (or) Advanced aptitude and reasoning skills	1.0	0	2	1	STS2006/STS2008	Humanities
		Any two English courses depending on SKEPT result				6		
ENG1001		English for Essential Communication	1.1	2	2	3	SKEPT	Humanities
ENG1002		English for Effective Communication	1.1	2	2	3	SKEPT/ ENG1001	Humanities
ENG2001		English for Professional Communication	1.1	2	2	3	ENG1002	Humanities
		Any one Foreign Language course				2		
FRL1001		Basic French	1.0	2	0	2	None	Humanities

FRL1004		Basic Spanish	1.0	2	0	2	None	Humanities
FRL1005		Basic German	1.0	2	0	2	None	Humanities
FRL1006		Basic Japanese	1.0	2	0	2	None	Humanities
	Technology Foundation	Any one course				3		
ECE1007		Sensor Systems	1.0	3	2	4	None	Engineering
ECE1008		Sensors and Control Systems	1.0	3	2	4	None	Engineering
MEC2002		Thermodynamics	2.0	4	0	4	None	Engineering
MECxxxx		Introduction to Digital Manufacturing	1.0	3	0	3	None	Engineering
MEC1008		Engineering Mechanics	1.0	4	0	4	None	Engineering
HUMxxxx		Introduction to Economics for Engineers	1.0	3	0	3	None	Humanities
CSE1006		Foundations for Data Analytics	1.0	2	2	3	None	Engineering
CSE1007		Introduction to Cryptography	2.0	3	2	4	None	Engineering
CSE3002		Artificial Intelligence	1.0	3	2	4	CSE1012	Engineering
CSE3003		Computer Networks	1.0	3	2	4	CSE2005	Engineering
CSE1005		Software Engineering	1.0	3	2	4	None	Engineering
CSExxxx		Introduction to Geographical Information Systems	1.0	3	0	3	None	Engineering
	Science Basket	All are Compulsory				20		
MAT1001		Calculus for Engineers	1.0	3	2	4	None	Science
MAT1002		Applications of Differential and Difference Equations	2.0	3	2	4	MAT1001	Science
MAT1011		Applied Statistics	2.0	3	2	4	None	Science
PHY1007		Principles of Electronics	2.0	3	2	4	None	Science
CHY1009		Chemistry and Environmental Studies	1.0	3	2	4	None	Science
		Co/Extra Curricular [Compulsory]	2.0	P/F			None	

Programme Core

Min. Credit Requirements ----->

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Course Code	Category	Course Title	Ver.	T	P	C	Pre-Requisite	Course Discipline
ECE1003		Digital Logic Design	1.1	3	2	4	ECE1001/ECE1002	Engineering
ECE2001		Analog Devices and Circuits	1.1	3	2	4	ECE1001/ECE1002	Engineering
ECExxxx		Probability and Random Processes	1.0	4	0	4	None	Engineering
PHY1002		Semiconductor Device Physics	2.0	4	0	4	None	Science
PHY2001		Applied Electromagnetics	2.0	4	0	4	MAT1001, PHY1007	Science
ECE2005		Signals and Systems	2.0	4	0	4	MAT1001	Engineering
ECE2006		Communication Systems	1.1	3	2	4	ECE2005	Engineering
ECExxxx		Microprocessors and Microcontrollers	1.0	3	2	4	ECE1003	Engineering
ECE3001		Linear Integrated Circuits and Applications	1.0	3	2	4	ECE2001	Engineering

Programme Electives

Min. Credit Requirements ----->

20

Course Code	Category	Course Title	Ver.	T	P	C	Pre-Requisite	Course Discipline
		Any course to fulfill the basket requirements						
ECE3004		Embedded Hardware Software system Design	1.0	3	2	4	ECE1003	Engineering
ECE4003		Embedded Programming	1.0	3	2	4	ECExxx	Engineering
ECE2009		Data Acquisition and Transmission Systems	2.0	2	2	3	ECE2005	Engineering
ECE3002		Antennas and wave propagation	1.0	3	0	3	PHY2001	Engineering
ECE4001		Microwave Engineering	1.0	3	2	4	PHY2001	Engineering
ECE4002		Wireless and Mobile Communications	1.0	3	0	3	ECE2006	Engineering
ECE4005		SoC Design	1.0	3	2	4	ECExxx	Engineering
ECE3005		CMOS VLSI Design	1.0	3	2	4	ECE1003,ECE2001	Engineering
ECE2010		Digital System Design using FPGAs	2.0	3	2	4	ECE1003	Engineering
ECE4009		Optical Communications	1.0	3	0	3	ECE2006	Engineering
ECE3007		Electrical Machines Modeling and Control	1.0	3	2	4	ECE1001/ECE1002	Engineering
ECE3010		Speech Processing	1.0	3	0	3	ECE2005	Engineering
ECE3009		Power Electronic Converters	1.0	3	0	3	ECE2001/ECE1002	Engineering
ECE4008		Low Power VLSI Design	1.0	3	0	3	ECE1003,ECE2001	Engineering
ECE4010		RF and Mixed Signal Circuit Design	1.0	3	2	4	ECE2001	Engineering
ECE4012		VLSI Design for Testability	1.0	3	0	3	ECE1003	Engineering
ECE4007		IoT System Architecture	1.0	2	0	2	ECE2004	Engineering
ECE3008		Neural Networks and Fuzzy systems	1.0	3	0	3	None	Engineering
ECE4011		Robotics and Automation	1.0	3	0	3	None	Engineering
ECE4004		Automotive Electronics	1.0	3	0	3	None	Engineering
ECE3006		HDL Verification and Methodology	1.0	3	2	4	ECE1003	Engineering
ECE4006		Analog IC Design	1.0	2	2	3	ECE2001	Engineering
ECE3003		Computer Communications	1.0	3	2	4	ECE2006	Engineering
ECE2008		VLSI System Design	1.1	3	2	4	ECE1003	Engineering

University Electives

Min. Credit Requirements ----->

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Course Code		Course Title		T	P	C	Pre-Requisite	
Any Course after fulfilling Programme Core & University Core requirements and without duplicity can be taken as University Elective								

Credit Summary		Credits
University Core		71
Programme Core		36
Programme Electives*		20
University Electives		23
Total Credits for Graduation		150

* Courses listed are only indicative and the actual list of courses are continually updated on V-Top.
The course credits are under revision and will be updated on V-Top
Dean Academics

Verified by: (Dean, SENSE)

Programme Major
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
	University Elective - 1		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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
	University Elective - 2		4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
	University Elective-3		4	0	4
ECExxxx	Programme Elective-5		3	2	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
	University Elective-4		4	0	4
	University Elective-5		4	0	4
	University Elective-6		3	0	3
	TOTAL CREDITS		15		

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
NA
VLSI
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
ECE3006	HDL Verification and Methodology	ECE1003	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
ECE2010	Digital System Design using FPGAs	ECE1003	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
ECE4006	Analog IC Design	ECE2001	3	2	4
ECE3005	CMOS VLSI Design	ECE2001,ECE1003	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
ECE4005	SoC Design	None	3	2	4
	TOTAL CREDITS		20		

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**159****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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
NA
Image and Video Processing
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
ECE3008	Neural Networks and Fuzzy systems	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
ECE2007	Digital Signal Processing	ECE2005	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
ECE3010	Speech Processing	ECE2005	3	2	4
ECEXXXX	Image Analysis and Computer Vision	ECE2005	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
ECEXXXX	Video Processing	ECE2005	3	2	4
	TOTAL CREDITS		20		

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**159****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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
NA
Embedded Systems
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
ECE1007	Sensor Systems	None	3	2	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
ECE3004	Embedded Hardware Software System Design	ECE1003	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
ECE2009	Data Acquisition and Transmission Systems		3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
ECE4003	Embedded Programming		3	2	4
ECE4011	Robotics and Automation	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
ECE4004	Automotive Electronics	None	4	0	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
NA
Internet of Things
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
ECE1007	Sensor Systems	None	3	2	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
ECE2009	Data Acquisition and Transmission Systems		3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
ECE3018	IoT Fundamentals	None	2	4	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECE4017	IoT Domain Analyst	ECE3018	2	4	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
ECE4007	IoT System Architecture		3	2	4
	TOTAL CREDITS		20		

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**160**

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
NA
Electric Vehicle Technology
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
MEC2002	Thermodynamics	None	4	0	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MEC4003	Internal Combustion Engines	MEC2002	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MEC4008	Automobile Engineering	MEC2002	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
ECEXXXX	Hybrid and Electrical Vehicles	None	4	0	4
ECEXXXX	Automotive Electrical and Electronic systems	None	4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
ECExxxx	Autonomous Vehicle technology	None	4	0	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Data Analytics
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
CSE1006	Foundations for Data Analytics	None	2	2	3
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MAT2003	Optimization Techniques	MAT1001	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
CSE4005	Data Warehousing and Data Mining	CSE1006	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSE3006	Data Visualization	CSE1006	3	2	4
CSExxxx	Mining Massive Data Sets	CSE4005	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
CSExxxx	Applications of Data Analytics	CSE4005	3	2	4
	TOTAL CREDITS		20		

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

159

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Cyber Security
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
CSE1007	Introduction to Cryptography	None	3	2	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
CSE3012	Network Security	CSE1007	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
CSExxxx	Cyber Physical System	None	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSE2011	Cyber Security and Digital Forensics	CSE1007	3	2	4
CSE4031	Web Application Security	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
CSExxxx	Network Intrusion Detection and Prevention System	CSE3003	3	2	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Artificial Intelligence and Machine Learning
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
CSE3002	Artificial Intelligence	CSE1012	3	2	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
CSE3008	Introduction to Machine Learning	CSE3002	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
CSE4006	Deep Learning	CSE3008	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSE3015	Natural Language Processing	CSE4006	3	2	4
CSExxxx	Reinforcement Learning	CSE4006	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
CSExxxx	Computer Vision	CSE2001	3	2	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Edge Computing
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
CSE3003	Computer Networks	CSE2005	3	2	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
CSExxxx	Edge Artificial Intelligence	MAT1002	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
CSE3005	Distributed Systems	None	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		3	2	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
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
CSExxxx	Edge Cyber Security	CSE3003	3	2	4
	TOTAL CREDITS		20		

TOTAL PROGRAMME CREDITS

160

Semester - 6 (WIN 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSExxxx	Software Defined Networks and Network Function Virtualization	CSE3003	3	2	4
CSExxxx	Cloud Big Data Analytics	CSE3005	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

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		

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Software Engineering
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
CSE1005	Software Engineering	None	3	2	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
CSE3001	Agile Development Process	CSE1005	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
SWE2004	Software Design and Architecture	CSE1005	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSE3018	Software Configuration Management	CSE1005	3	2	4
CSExxxx	Software verification and validation	CSE1005	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
CSExxxx	Design Patterns	CSE2005	3	2	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Geo Informatics
NA
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
CSExxxx	Introduction to Geographical Information Systems	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
CSE4007	Digital Image Processing	None	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
CSExxxx	Remote Sensing and Image Interpretation	CSE4007	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSExxxx	Environmental Impact Analysis		3	2	4
CSExxxx	Decision Support System for Resource Management		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
CSExxxx	Ecological Modelling		3	2	4
	TOTAL CREDITS		20		

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

159

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Blockchain Technology
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
CSE1007	Introduction to Cryptography	None	3	2	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
CSExxxx	Blockchain Fundamentals	CSE1007	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
CSE3003	Computer Networks	CSE2005	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSE3005	Distributed Systems		3	2	4
CSE3012	Network Security	CSE1007	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
CSExxxx	Blockchain Platforms and Applications		3	2	4
CSExxxx	Cloud Computing and Security	CSE3003	3	2	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Computer Science and Engineering
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
CSE1005	Software Engineering	None	3	2	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MAT1003	Discrete Mathematical Structures	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
ECE2002	Computer Organization and Architecture	ECE1003	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSE3003	Computer Networks	CSE2005	3	2	4
CSE2007	Database Management Systems	MAT1003	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
vl	Operating Systems		3	2	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Digital Manufacturing
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
MECxxxx	Introduction to Digital Manufacturing	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
ECE1008	Sensors and Control Systems	None	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MEC3005	Automation in Manufacturing		3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MEC2008	Product Design and Development	None	4	0	4
MEC3012	Additive Manufacturing	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
MECxxxx	Computer Aided Design and Manufacturing	None	3	2	4
	TOTAL CREDITS		20		

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**159**

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Automotive Design
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
MEC1008	Engineering Mechanics	None	4	0	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MEC2002	Thermodynamics	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MECxxxx	Vehicle Dynamics	MEC1008	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MEC4003	Internal Combustion Engines	MEC2002	3	2	4
MEC4008	Automobile Engineering	MEC2002	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
ECE4004	Automotive Electronics	None	3	2	4
	TOTAL CREDITS		20		

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**160**

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Robotics
NA
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
MEC1008	Engineering Mechanics	None	4	0	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MEC3002	Theory of Machines	MEC1008	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MECxxxx	Robot Kinematics	MEC3002	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MECxxxx	Robot Dynamics	MEC3002	4	0	4
ECE1008	Sensors and Control Systems	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
MECxxxx	Robot Programming	None	3	2	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Mechanical Engineering
NA
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
MEC1008	Engineering Mechanics	None	4	0	4
STS2006	Getting Started to Skill Enhancement ‡ (or)	STS1007/STS1009	0	2	1
STS2008	Numerical Ability and Cognitive Intelligence ‡	STS1007/STS1009	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		23		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MEC2003	Strength of Materials	MEC1008	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MEC2002	Thermodynamics	None	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MEC2004	Fluid Mechanics	MAT1001	3	2	4
MEC2005	Fundamentals of Manufacturing Processes	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
MEC2007	Introduction to Mechanical Engineering Design Process	None	4	0	4
	TOTAL CREDITS		20		

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

160

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
FinTech
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MGTxxxx	Financial and Management Accounting	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MGTxxxx	Financial Management	None	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MGTxxxx	Payments, Cryptocurrencies and Alternative Finance		4	0	4
MGTxxxx	Blockchain and Financial Technologies		4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
MGTxxxx	Project on FinTech	None	0	0	4
	TOTAL CREDITS		20		

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

159

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Digital Marketing
NA
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MGT2014	Fundamentals of Marketing Management	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MGT1015	Fundamentals of Consumer Behaviour	None	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MGTxxxx	Essentials of Digital Marketing		4	0	4
MGTxxxx	Social Media Marketing		4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
MGTxxxx	Project on Digital Marketing	None	0	0	4
	TOTAL CREDITS		20		

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**159**

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Econometrics
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
HUMxxxx	Introduction to Economics for Engineers	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
HUMxxxx	Macro and Micro Economics		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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
HUMxxxx	Statistics for Economists		4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
HUMxxxx	Econometrics		4	0	4
HUMxxxx	Managerial Economics		4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
HUMxxxx	Game Theory		4	0	4
	TOTAL CREDITS		20		

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

159

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Performing Arts
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
LIBxxxx	Theory of Performance and Practice		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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
LIBxxxx	The Aesthetics of Performing Arts		4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
LIBxxxx	Performing Skills		3	2	4
LIBxxxx	Performing Arts Practices		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
LIBxxxx	Theatre Anthropology		4	0	4
	TOTAL CREDITS		20		

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**159**

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Computational Mathematics
NA
AY 2021-22
SENSE

Semester - 1 (FALL 2021-22)

Course Code	Course Title	Pre-Requisite	T	P	C
ENG1001	English for Essential Communication* (or)	SKEPT α	2	2	3
ENG1002	English for Effective Communication*	SKEPT/ ENG1001	2	2	3
MAT1001	Calculus for Engineers	None	3	2	4
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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		P/F	
	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None		P/F	
MATxxxx	Financial Mathematics	MAT1001,MAT1011	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MATxxxx	Nonlinear Dynamics and Chaos	MAT1002	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MATxxxx	Transforms and Wavelets	MAT1002	4	0	4
MATxxxx	Computational Linear Algebra : Learning with Data	MAT1002	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
MATxxxx	Statistical Modeling and Data Analysis	MAT1011	3	2	4
	TOTAL CREDITS		20		

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

159

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

Programme Major
Minor
Specialization
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Corporate Law
NA
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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	P/F		
	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
LAW1108	Business Law	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
TEC3001	Design Thinking §	None	3	0	3
	TOTAL CREDITS		22		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
LAWxxxx	Intellectual Property Law	None	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		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
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
LAW1002	Competition Law for Engineers	None	4	0	4
LAWxxxx	Cyber Law		4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective-1		4	0	4
	University Elective-2		4	0	4
	University Elective-3		4	0	4
LAWxxxx	Data Privacy and Law	None	4	0	4
	TOTAL CREDITS		20		

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

159

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

Programme Major
Second Major
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Applied Science
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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
	Technology Foundation Course	None	3	0	3
PHYxxxx	Material Characterization Techniques	None	3	2	4
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			26	

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS			20	

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None		P/F	
MATxxxx	Computational Linear Algebra : Learning with Data	MAT1002	3	2	4
CHY2001	Chemical and Biosensors	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
TEC3001	Design Thinking	None	3	0	3
	TOTAL CREDITS			26	

SUMMER INTERNSHIP §

0 0 1

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
PHY2005	Nano Technology and Its Applications	None	3	2	4
MAT3002	Operations Research	MAT1002	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
PHYxxxx	Solar Photovoltaic Cell Technology		3	2	4
MATxxxx	Regression Analysis and Predictive Models	MAT1011	3	2	4
	TOTAL CREDITS		12		

TOTAL PROGRAMME CREDITS**169****Semester - 6 (WIN 2023-24)**

Course Code	Course Title	Pre-Requisite	T	P	C
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CHYxxxx	Organic Electronics	None	4	0	4
MATxxxx	Statistical Methods for Bio-Informatics	MAT1011	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

Semester - 8 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
BIC4002	Industrial Internship/ Senior Design Project		0	0	6
CAP4002	Second Major Project		0	0	6
	TOTAL CREDITS		12		

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

** If the academic calendar permits for a Long Summer Semester, then the student opting double major can complete some of the double major basket courses during that particular summer semester, thereby easing the load in other semesters

Programme Major
Second Major
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Business Management
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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
	Technology Foundation Course	None	3	0	3
MGT1102	Macro Economics	None	3	2	4
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		26		

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MGT1103	Micro Economics	None	3	2	4
MGT1109	Management Accounting	None	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking	None	3	0	3
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MGT2101	Financial Management	MGT1109	3	2	4
LAW1108	Business Law	MAT1002	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			26	

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
MGT2105	Operations and Sypply Chain Management	None	3	2	4
MGT3101	Strategic Management	None	3	2	4
	TOTAL CREDITS			12	

TOTAL PROGRAMME CREDITS

169

Semester - 6 (WIN 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MGT2102	Marketing Management	None	3	2	4
MGT2103	Human Resource Management	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			26	

Semester - 8 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
BIC4002	Industrial Internship/ Senior Design Project		0	0	6
CAP4002	Second Major Project		0	0	6
	TOTAL CREDITS			12	

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

** If the academic calendar permits for a Long Summer Semester, then the student opting double major can complete some of the double major basket courses during that particular summer semester, thereby easing the load in other semesters

Programme Major
Second Major
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Economics
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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
	Technology Foundation Course	None	3	0	3
MGT1102	Macro Economics	None	4	0	4
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		26		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MGT1103	Micro Economics	None	4	0	4
HUMxxxx	Indian Economy : Problems and policies	None	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking	None	3	0	3
	TOTAL CREDITS		26		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
HUMxxxx	History of Economic Thoughts	None	4	0	4
HUMxxxx	Developmental Economics	None	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
HUMxxxx	Economics of Gender and Family	None	3	2	4
HUMxxxx	Urban and Regional Economics	None	4	0	4
	TOTAL CREDITS		12		

TOTAL PROGRAMME CREDITS**169****Semester - 6 (WIN 2023-24)**

Course Code	Course Title	Pre-Requisite	T	P	C
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
HUMxxxx	Natural Resources and Environmental Economics	None	3	2	4
HUMxxxx	International Economics	None	4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

Semester - 8 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
BIC4002	Industrial Internship/ Senior Design Project		0	0	6
CAP4002	Second Major Project		0	0	6
	TOTAL CREDITS		12		

Note:

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† 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

** If the academic calendar permits for a Long Summer Semester, then the student opting double major can complete some of the double major basket courses during that particular summer semester, thereby easing the load in other semesters

Programme Major
Second Major
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Digital Humanities
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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
	Technology Foundation Course	None	3	0	3
HUMxxxx	Introduction to Digital Humanities : Doing Digital History	None	4	0	4
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			26	

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS			20	

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None		P/F	
HUMxxxx	Introduction to Manuscript Studies	None	4	0	4
HUMxxxx	Spatial History : Concepts, Methods and Problems	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
TEC3001	Design Thinking	None	3	0	3
	TOTAL CREDITS			26	

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
HUMxxxx	Geo-Spatial Humanities	None	3	2	4
HUMxxxx	Data and Knowledge in Humanities	None	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			26	

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
LIBxxxx	Studies in Writing, Rhetoric and Information	None	3	2	4
LIBxxxx	Digital Writing	None	3	2	4
	TOTAL CREDITS			12	

TOTAL PROGRAMME CREDITS

169

Semester - 6 (WIN 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
LIBxxxx	Tech Ethics and Ethnography	None	3	2	4
LIBxxxx	Social and Economic Impact of AI	None	4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			26	

Semester - 8 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
BIC4002	Industrial Internship/ Senior Design Project		0	0	6
CAP4002	Second Major Project		0	0	6
	TOTAL CREDITS			12	

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
- ** If the academic calendar permits for a Long Summer Semester, then the student opting double major can complete some of the double major basket courses during that particular summer semester, thereby easing the load in other semesters

Programme Major
Second Major
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Media and Communication
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	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
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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
	Technology Foundation Course	None	3	0	3
LIBxxxx	Introduction to Communication and Rhetoric	None	4	0	4
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		26		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
LIBxxxx	Theories and Ethics of Communication	None	4	0	4
LIBxxxx	Technology and Communication	None	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking	None	3	0	3
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §

0 0 1

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
LIBxxxx	Writing and Reporting for Media	None	3	2	4
LIBxxxx	Print and Broadcast Journalism	None	4	0	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			26	

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
LIBxxxx	Introduction to Film and Media Aesthetics	None	4	0	4
LIBxxxx	Communication, Gender and Media	None	4	0	4
	TOTAL CREDITS			12	

TOTAL PROGRAMME CREDITS**169****Semester - 6 (WIN 2023-24)**

Course Code	Course Title	Pre-Requisite	T	P	C
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
LIBxxxx	Writing for Advertisement and Journalism	None	3	2	4
LIBxxxx	Interactive Digital Media	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			26	

Semester - 8 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
BIC4002	Industrial Internship/ Senior Design Project		0	0	6
CAP4002	Second Major Project		0	0	6
	TOTAL CREDITS			12	

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

** If the academic calendar permits for a Long Summer Semester, then the student opting double major can complete some of the double major basket courses during that particular summer semester, thereby easing the load in other semesters

Programme Major
Second Major
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Computer Science and Engineering
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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
	Technology Foundation Course	None	3	0	3
CSE1005	Software Engineering	None	3	2	4
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			26	

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS			20	

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None		P/F	
ECE2002	Computer Organization and Architecture	ECE1003	4	0	4
MAT1003	Discrete Mathematical Structures	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
TEC3001	Design Thinking	None	3	0	3
	TOTAL CREDITS			26	

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
CSE2008	Operating Systems	None	3	2	4
CSE2007	Database Management Systems	MAT1003	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

SUMMER INTERNSHIP §**0 0 1****Semester - 7 (FALL 2024-25)**

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
	University Elective - 1		4	0	4
CSE3004	Design and Analysis of Algorithms	CSE2001	3	2	4
	TOTAL CREDITS		12		

TOTAL PROGRAMME CREDITS**169****Semester - 6 (WIN 2023-24)**

Course Code	Course Title	Pre-Requisite	T	P	C
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
CSE3003	Computer Networks	CSE2005	3	2	4
CSE1008	Theory of Computation	None	4	0	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS		26		

Semester - 8 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
BIC4002	Industrial Internship/ Senior Design Project		0	0	6
CAP4002	Second Major Project		0	0	6
	TOTAL CREDITS		12		

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

** If the academic calendar permits for a Long Summer Semester, then the student opting double major can complete some of the double major basket courses during that particular summer semester, thereby easing the load in other semesters

Programme Major
Second Major
Curriculum (Admitted Year)
School

Electronics and Communication Engineering
Mechanical Engineering
AY 2021-22
SENSE

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
CHY1009	Chemistry and Environmental Studies	None	3	2	4
ECE1001	Fundamentals of Electrical 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 - 3 (FALL 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
MAT1011	Applied Statistics	None	3	2	4
ECExxxx	Probability and Random Processes	None	4	0	4
PHY1002	Semiconductor Device Physics	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
	Technology Foundation Course	None	3	0	3
MEC1008	Engineering Mechanics	None	4	0	4
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		26		

SUMMER INTERNSHIP §

0 0 1

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
PHY1007	Principles of Electronics	None	3	2	4
ECE1003	Digital Logic Design	None	3	2	4
CSE2005	Object Oriented Programming	None	3	2	4
STS1007	Arithmetic Problem Solving ‡ (or)	STS1002/STS1004	0	2	1
STS1009	Introduction to Quantitative, Logical and Verbal Ability ‡	STS1002/STS1004	0	2	1
	TOTAL CREDITS		20		

Semester - 4 (WIN 2022-23)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE2005	Signals and Systems	MAT1001	4	0	4
ECE2001	Analog Devices and Circuits	ECE1001	3	2	4
ECExxxx	Microprocessors and Microcontrollers	ECE1003	3	2	4
ECS1002	Engineering Clinics - I † (or)	None	0	4	2
MGT2015	Entrepreneurship † (or)	None	2	0	2
MGT1001	Ethics and Values §	None	P/F		
MEC2002	Thermodynamics	None	4	0	4
MEC2003	Strength of Materials	MEC1008	3	2	4
STS2007	Enhancing Problem Solving Skills ‡ (or)	STS2006/STS2008	0	2	1
STS2009	Advanced Aptitude and Reasoning Skills ‡	STS2006/STS2008	0	2	1
TEC3001	Design Thinking	None	3	0	3
	TOTAL CREDITS		26		

Semester - 5 (FALL 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECExxxx	Programme Elective-1		3	2	4
ECExxxx	Programme Elective-2		3	2	4
MEC2004	Fluid Mechanics	MEC1008	3	2	4
ME2005	Fundamentals of Manufacturing Processes	None	3	2	4
PHY2001	Applied Electromagnetics	MAT1001, PHY1007	4	0	4
ECExxxx	Programme Elective-3		3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			26	

SUMMER INTERNSHIP §

0 0 1

Semester - 7 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
CAP4001	Capstone		0	0	4
MEC3001	Heat and Mass Transfer	MEC2002,MEC2004	3	2	4
MEC3002	Machine Design	MEC2003	3	2	4
	TOTAL CREDITS			12	

TOTAL PROGRAMME CREDITS

169

Semester - 6 (WIN 2023-24)

Course Code	Course Title	Pre-Requisite	T	P	C
ECE3001	Linear Integrated Circuits and Applications	ECE2001	3	2	4
ECE2006	Communication Systems	ECE2005	3	2	4
ECExxxx	Programme Elective-4		3	2	4
ECExxxx	Programme Elective-5		3	2	4
MEC3002	Theory of Machines	MEC1008	3	2	4
MECxxxx	Machining Processes and Workshop Technology	None	3	2	4
ECS3001	Engineering Clinics - II † (or)	ECS1002	0	4	2
FRLxxxx	Foreign Language †	None	2	0	2
	TOTAL CREDITS			26	

Semester - 8 (FALL 2024-25)

Course Code	Course Title	Pre-Requisite	T	P	C
BIC4002	Industrial Internship/ Senior Design Project		0	0	6
CAP4002	Second Major Project		0	0	6
	TOTAL CREDITS			12	

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
- ** If the academic calendar permits for a Long Summer Semester, then the student opting double major can complete some of the double major basket courses during that particular summer semester, thereby easing the load in other semesters