

School of Engineering
Bachelor's in Technology in Electronics & Communication Engineering (2025-2026) onwards
(160 Credits)

Code	First Semester Course Name	Cr
CHY1001	Engineering Chemistry & Lab	3
MAS1001	Calculus & Matrices	3
ECE1002	Electronic Circuits	3
MEE1008	Basic Mechanical Engineering	3
CSC1001	Problem-Solving Using Computers	3
DOA1001	Universal Human Values	1
CSC1130	Problem-Solving Using Computers Lab	1
LLC1011	Communication Skills	2
MEE1036	Engineering Graphics	1
First Semester Credits		20

Code	Second Semester Course Name	Cr
PHY1001	Engineering Physics & Lab	4
MAS1002	Computational Mathematics	3
CHY1002	Environmental Studies	2
EEE1001	Electrical Technology	2
CIV1002	Engineering Material and Mechanics	3
MEE1038	Creativity & Innovation IDEA Lab	2
BIT1001	Biology for Engineers	2
MEE1037	MATLAB for engineers lab	1
DOA1002	Wellness and Community Services	1
Second Semester Credits		20

Code	Third Semester Course Name	Cr
MASXXXX	Statistics and Probability	3
XXXX	Principles of Management/Engineering Economics	3
ECE2104	Data Structures and Algorithms	3
ECE2105	Digital Electronics	3
ECE2106	Electronics Devices & Circuits	3
ECE2107	Circuits & Systems	3
ECE2108	Computer Architecture & Processor	3
ECE2132	Data Structures and Algorithms Lab	1
ECE2133	Digital Electronics lab	1
ECE2134	Electronics Devices & Circuits Lab	1
Third Semester Credits		24

Code	Fourth Semester Course Name	Cr
XXXX	Principles of Management/Engineering Economics	3
ECE2203	Analog Integrated Circuits	3
ECE2204	System Design using HDL	3
ECE2205	Digital Signal Processing	3
ECE2206	Electromagnetic Field Theory	3
ECE2232	Integrated Circuits Lab	1
ECE2233	System Design using HDL Lab	1
ECE2234	Digital Signal Processing Lab	1
ECE2271	Project Based Learning - 1	3
XXXXXX	Technical Writing	2
Fourth Semester Credits		23

Code	Fifth Semester Course Name	Cr
ECE3103	Optical Communication	3
ECE3104	Analog & Digital Communication	3
ECE3105	Digital VLSI Design	3
ECE3106	Microcontroller and Applications	3
ECE31XX	Program Elective 1	3
ECE31XX	Program Elective 2	3
ECE3132	Optical Communication Lab	1
ECE3133	Analog & Digital Communication Lab	1
ECE3134	VLSI Design Lab	1
ECE3171	Project Based Learning – 2	3
Fifth Semester Credits		24

Code	Sixth Semester Course Name	Cr
ECE3202	Embedded & RTOS	3
ECE3203	Antennas	3
ECE3204	Control Theory	3
ECE32XX	Program Elective 3	3
ECE32XX	Industry Elective	3
ECE3232	Embedded & RTOS Lab	1
ECE3233	Antenna Simulation & Measurement Lab	1
XXXXXX	Open Elective	3
XXXXXX	Open Elective	3
Sixth Semester Credits		23

Code	Seventh Semester Course Name	Cr
ECE41XX	Program Elective 4	3
ECE41XX	Program Elective 5	3
ECE41XX	Program Elective 6	3
ECE4171	Internship (Industry/ Research/ Industry Certification)	2
XXXX	Open Elective	3
Seventh Semester Credits		14

Code	Eighth Semester Course Name	Cr
ECE4271	Capstone Project	12
Eighth Semester Credits		12

School of Engineering
Bachelor's in Technology in Electronics & Communication Engineering (2025-2026) onwards
Honors (160 +18 Credits)

Code	First Semester Course Name	L
CHY1001	Engineering Chemistry & Lab	3
MAS1001	Calculus & Matrices	3
ECE1002	Electronic Circuits	3
MEE1008	Basic Mechanical Engineering	3
CSCXXXX	Problem-Solving Using Computers	3
DOA1001	Universal Human Values	1
CSCXXXX	Problem-Solving Using Computers Lab	1
LLC1011	Communication Skills	2
MEE1036	Engineering Graphics	1
First Semester Credits		20

Code	Second Semester Course Name	L
PHY1001	Engineering Physics & Lab	4
MAS1002	Computational Mathematics	3
CHY1002	Environmental Studies	2
EEE1001	Electrical Technology	2
CIV1002	Engineering Material and Mechanics	3
MEE1038	Creativity & Innovation IDEA Lab	2
BIT1001	Biology for Engineers	2
MEE1037	MATLAB for engineers lab	1
DOA1002	Wellness and Community Services	1
Second Semester Credits		20

Code	Third Semester Course Name	Cr
MASXXXX	Probability and Statistics	3
XXXX	Principles of Management/Engineering Economics	3
ECE2104	Data Structures and Algorithms	3
ECE2105	Digital Electronics	3
ECE2106	Electronics Devices & Circuits	3
ECE2107	Circuits & Systems	3
ECE2108	Computer Architecture & Processor	3
ECE2132	Data Structures and Algorithms Lab	1
ECE2133	Digital Electronics lab	1
ECE2134	Electronics Devices & Circuits Lab	1
Third Semester Credits		24

Code	Fourth Semester Course Name	Cr
XXXX	Principles of Management/Engineering Economics	3
ECE2203	Analog Integrated Circuits	3
ECE2204	System Design using HDL	3
ECE2205	Digital Signal Processing	3
ECE2206	Electromagnetic Field Theory	3
ECE2232	Integrated Circuits Lab	1
ECE2233	System Design using HDL Lab	1
ECE2234	Digital Signal Processing Lab	1
ECE2271	Project Based Learning - 1	3
XXXXXX	Technical Writing	2
Fourth Semester Credits		23

Code	Fifth Semester Course Name	Cr
ECE3103	Optical Communication	3
ECE3104	Analog & Digital Communication	3
ECE3105	Digital VLSI Design	3
ECE3106	Microcontroller and Applications	3
ECE31XX	Program Elective 1	3
ECE31XX	Program Elective 2	3
ECE3132	Optical Communication Lab	1
ECE3133	Analog & Digital Communication Lab	1
ECE3134	Digital VLSI Design Lab	1
ECE3171	Project Based Learning - 2	3
*ECE3107	*Display Technologies	3
Fifth Semester Credits		27

Code	Sixth Semester Course Name	Cr
ECE3202	Embedded & RTOS	3
ECE3203	Antennas	3
ECE3204	Control Theory	3
ECE32XX	Program Elective 3	3
ECE32XX	Industry Elective	3
ECE3232	Embedded & RTOS Lab	1
ECE3233	Antenna Simulation & Measurement Lab	1
XXXXXX	Open Elective	3
XXXXXX	Open Elective	3
*ECE3205	*VLSI DSP Architecture	3
Sixth Semester Credits		26

Code	Seventh Semester Course Name	Cr
ECE41XX	Program Elective 4	3
ECE41XX	Program Elective 5	3
ECE41XX	Program Elective 6	3
ECE4171	Internship (Industry/ Research/ Industry Certification)	2
XXXX	Open Elective	3
*ECE4101	*Mixed Signal Design	3
*ECE4102	*Static Timing Analysis	3
Seventh Semester Credits		20

Code	Eighth Semester Course Name	Cr
ECE4271	Capstone Project	12
**ECE4272	Honors (Research Project)	6
Eighth Semester Credits		18

Industry Elective

1. Project Based Learning-3	1. Industry Elective 1- RTL TO GDS II
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Program Electives

<u>Program Elective 1</u> - ECE3146:FPGA based System Design - ECE3147:Machine Learning - ECE3148:MEMS	<u>Program Elective 2</u> - ECE3149:CAD for VLSI - ECE3150: Principles of Nanomaterials & Quantum dots - ECE3151:Microwave Engineering	<u>Program Elective 3</u> - ECE3249:Design for Testability - ECE3250:Information Theory & Coding - ECE3251:Wireless Communication
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<u>Program Elective 4</u> - ECE4148:CyberPhysical System - ECE4149:Digital Image Processing - ECE4150:Internet of Things	<u>Program Elective 5</u> - ECE4151:VLSI Physical Design - ECE4152:Mobile Communication - ECE4153:Low Power VLSI Design	<u>Program Elective 6</u> - ECE4154:System Verilog for Verification - ECE4155:Introduction to Robotics - ECE4156:Fundamental of Quantum Optics - ECE 4157:System Verilog for Design & Verification
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Open Electives

<u>Open Elective</u> - ECE0001: Introduction to communication system - ECE0002: Introduction to game theory - ECE0006: Microprocessor & Interfacing	<u>Open Elective</u> - ECE0054: Introduction to Data, Signal, and Image Analysis with MATLAB - ECE0056: Information Theory and Coding	<u>Open Elective</u> ECE3085: Optical Fibre Technology
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**** Honors (Research Project) : Students pursuing Minor Specialization/ Honors will undertake 18 Credit Project in VIII Sem, related to specialization.**