

BTech in Electronics and Communication Engineering (ECE)

Semester wise course plan

Semester 1		Semester 2	
Course	Credits	Course	Credits
Calculus (MA 101)	8	Linear Algebra (MA 102)	4*
Introduction to Electrical and Electronics Circuits (EE101)	6	Differential Equations I (MA 103) (Second Half)	4*
Computer Programming (CS 101)	8	Digital Systems (EE 204)	6
Quantum Physics and Applications (PH 101)	6	Digital Circuits Lab (EE 214)	3
Design Thinking and creativity (HS 101) (P/NP)	1	Network Theory (EE 205)	6
NSS/NSO/NCC/NCA	2	Electronic Devices (EE 229)	3*
Formal Communications (P/NP)	2	Engineering Graphics Lab (ME 111)	5
		Hands-on Engineering Lab (ME 113)	3
		NSS/NSO/NCC/NCA	2
Semester 1 Total	33	Semester 2 Total	36

Semester 3		Semester 4	
Course	Credits	Course	Credits
Complex Analysis (MA 201)	4*	Control Systems Engineering	6
Differential Equations II (MA 203)	4*	Control Systems Engineering Lab	3
Introduction to Probability (EE 221)	3*	Introduction to Modern Communication Systems	6
Data Analysis (EE 227)	3*	Introduction to Electrical Machines (EE 206)	3*
Signals & Systems (EE 210)	6	Introduction to Power Systems (EE 223)	3*
Introduction to Analog Circuits (EE 202)	3*	Introduction to Power Electronics (EE 209)	3*
Devices & Circuits Lab (EE 212)	3	EMPE Lab (EE 311)	3
Electricity and Magnetism	6	Data Structures and Algorithms (CS 106)	6
Economics (HS 201)	6	Data Structures and Algorithms Lab (CS 111)	3
Semester 3 Total	38	Semester 4 Total	36

Semester 5		Semester 6	
Course	Credits	Course	Credits
Numerical Analysis (MA 404)	6	Electronics Design Lab (EE 314)	6
Microprocessors and Microcontrollers (EE 325)	6	Environmental Studies (CH 301)	6
Microprocessors and Microcontrollers Lab (EE 319)	3	Technical Writing (P/NP)	2
Fundamentals of Digital Signal Processing	6	Electives	24
Electives	18	Semester 6 Total	38
Semester 5 Total	39		

Semester 7		Semester 8	
Course	Credits	Course	Credits
Electives	30	Electives	18
Semester 7 Total	30	Semester 8 Total	18

Notes

- * in credits indicates half semester course
- Minimum credits a student has to earn for getting BTech in ECE is 269.
- At least 30 credits of electives have to be taken from the broad domain of Communications and signal processing
- At least 18 credits of electives have to be taken from the broad domain of Microelectronics and VLSI.