

B. Tech Electronics & Communication Engineering Curriculum

Course Category	Course No.	Course Title	Contact Hours			Credit	Prerequisites
			L	T	P		
Science Core Courses -28 Credits	MA 101	Mathematics-I	3	1	0	4	None
	MA 102	Mathematics-II	3	1	0	4	None
	MA 201	Mathematics-III	3	0	0	3	None
	MA 203	Scientific computing	3	0	0	3	CS101
	MA 210	Mathematics Laboratory	0	0	4	2	CS101, MA101, MA102
	PH 101	Engineering Physics	3	1	2	5	None
	CH 101	Engineering Chemistry	3	1	2	5	None
	ES 101	Environmental Science	2	0	0	2	None
Science Elective Courses -3 Credits	BT 201	Elements of Modern Biology	3	0	0	3	None
	PH 201	Physics of Materials	3	0	0	3	None
	CH 102	Introduction to Material Science	3	0	0	3	None
		Any other subject offered by Sc. departments and recommended by the Course Adviser.					
Engineering Sc. Core Courses -20 Credits	CE 101	Engineering Drawing	1	0	4	3	None
	EE 101	Basic Electrical Engineering	3	0	2	4	None
	EC 101	Basic Electronics	3	0	2	4	EE 101
	ME 101	Engineering Mechanics	3	0	0	3	None
	ME 102	Engineering Thermodynamics	2	0	0	2	None
	CS 101	Computer Programming	2	0	2	3	None
	ME 103	Workshop Practice-I	0	0	4	2	None
Discipline Core Courses -53 Credits	EC 201	Network Analysis	3	1	2	5	EC 101
	EC 202	Digital Logic Design	3	1	2	5	EC 101
	EC 203	Signal & Systems	3	1	0	4	MA 101, MA 102
	EC 204	Electronic Devices & Circuits	3	1	2	5	EE 101
	EC 205	Principles of Communication	3	1	2	5	EC 203
	EC 301	Microprocessors & Interfacing	3	0	2	4	EC 202, CS 101
	EC 302	Digital Communication	3	1	2	5	EC 205
	EC 303	Digital Signal Processing	3	0	2	4	EC 203
	EC 304	Data Communication & Networks	3	0	2	4	EC 302
	EC 305	Digital & Analog Integrated Circuits	4	0	2	5	EC 204
	EC 306	Microcontroller & Embedded Systems	3	0	2	4	EC 301
EC 307	Fiber Optic Communication	3	0	2	4	EC 203	
Discipline Electives -20 Credits	EC 311	Electromagnetic Waves & Radiating Patterns	4	0	2	5	PH101
	EC312	Image Processing	3	0	0	3	EC203
	EC 313	Sensors & Transducers	3	0	0	3	EC204
	EC 314	Laser Technology	3	0	0	3	EC204
	EC 315	VLSI Technology	3	0	2	4	EC201
	EC 316	Microelectronic Circuits	3	0	0	3	EC204
	EC 411	VLSI Design	3	0	2	4	EC305
	EC 412	Radio Frequency & Microwaves	4	0	2	5	EC311
	EC 413	Mobile Communication	3	0	0	3	EC205, EC302
	EC 414	Multimedia Communication Technology	3	0	0	3	EC205, EC302
	EC 415	Information Theory & Coding	3	0	0	3	EC203

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	EC 416	Neural Networks & Application	3	0	0	3	EC201
	EC 520	Mixed Signal Design	3	0	2	4	EC305
	Plus any other course of level 300 and above offered by the department and recommended by it.						
Open Elective Courses - 20 Credits	Any course of appropriate level offered in the Institute and recommended by the Course Adviser						
Project Works	EC 401	Project-I	0	0	8	4	100 or more credits earned
	EC 402	Project-II	0	0	16	8	120 or more credits earned
HSS Core Courses - 11 Credits	HS 101	English Language Skills	2	0	2	3	None
	HS 301	Foundations of Management	3	0	0	3	None
	HS 302	Accounting and Financial Methods	3	0	0	3	HS 301
	HS 401	Professional Ethics	2	0	0	2	HS 301
HSS Elective Courses - 3 Credits	HS 402	Introduction to Economics	3	0	0	3	None
	HS 403	Introduction to Sociology	3	0	0	3	None
	HS 404	Introduction to Psychology	3	0	0	3	None
	HS 405	Introduction to Behavioural Sc.	3	0	0	3	None