

ECE UG 1st Year Course Structure

Sem	Category	Course	Code	L	T	P	Credit	Total Credit	Cumm Credit
1	Foundation Course	Science Society and Ethical Values	HS1501	2	1	0	3		
1		Engineering Mathematics-I	MA1501	3	0	0	3		
1		Engineering Chemistry	CH1501	3	0	0	3		
1		Elements of Electronics Engineering	EC1501	3	0	0	3		
1		Elements of Electrical Engineering	EE1501	3	0	0	3		
1	Foundation Lab	Chemistry Lab	CHL1501	0	0	3	1		
1		Elements of Electronics Engg Lab	ECL1501	0	0	3	1		
1		Electrical Engg Lab	EEL1501	0	0	3	1		
1		Engineering Graphics Lab	ME1501	0	0	3	2		
1	EAA	EAA-Swachha Bharat Mission	EAA1501	0	0	3	1	21	21

2	Foundation Course	Communicative English	HS2501	2	1	0	3		
2		Engineering Physics	PH2501	3	0	0	3		
2		Engineering Mathematics-II	MA2501	3	0	0	3		
2		Introduction to Computing	CS2501	3	0	0	3		
2	Core Course	Semiconductor Device and Circuits	EC2501	3	0	0	3		
2	Foundation Lab	Language Lab	HSL2501	0	0	3	1		
2		Physics Lab	PHL2501	0	0	3	1		
2		Computing Lab	CSL2501	0	0	3	1		
2	Core Lab	Semiconductor Device and Circuits Lab	ECL2501	0	0	3	1		
2	EAA	EAA Sports/Innovative Projects	EAA2501	0	0	3	1	20	41

ECE UG 2nd Year Course Structure

Sem	Category	Course	Code	L	T	P	Credit	Total Credit	Cumm Credit
3	Core Subjects	Analog Electronics	EC3501	3	1	0	4		
3		Electromagnetic Field Theory	EC3502	3	0	0	3		
3		Signals and Systems Analysis	EC3503	3	0	0	3		
3	Foundation Course	Data Structure	CS3501	3	0	0	3		
3		Engineering Mathematics-III	MA3501	3	0	0	3		
3		Network Analysis and Synthesis	EE3501	3	0	0	3		
3	Lab Courses	Analog Electronics Lab	ECL3501	0	0	3	1		
3		Data Structure Lab	CSL3501	0	0	3	1		
3		Signal and System Analysis Lab	ECL3502	0	0	3	1	22	
4	Core Subjects	Digital Electronics	EC4501	3	1	0	4		
4		Communication Engineering	EC4502	3	0	0	3		
4	Foundation Course	Object Oriented Programming	CS4501	3	0	0	3		
4	Professional Electives	Professional Elective-1:	EC45xx	3	0	0	3		
4	MOOC Course			3	0	0	3		
4	Open Electives	Open Elective-1:	OE0xxx	3	0	0	3		
4	Lab Courses	Digital Electronics Lab	ECL4501	0	0	3	1		
4		Communication Engineering Lab	ECL4502	0	0	3	1	18+3	81+3

ECE UG 3rd Year Course Structure

Sem	Category	Course	Code	L	T	P	Credit	Total Credit	Cumm Credit
5	Core Subjects	VLSI Design	EC5501	3	1	0	4		
5		Advanced Communication Engineering	EC5502	3	0	0	3		
5		Microprocessor & Microcontroller	EC5503	3	0	0	3		
5	Professional Electives	Professional Elective-2:	EC55xx	3	0	0	3		
5	Foundation Course	Green Technology (Environmental Science)	CH5501	3	0	0	3		
5	Open Electives	Open Elective-2:	OE0xxx	3	0	0	3		
5	Lab Courses	VLSI Design Lab	ECL5501	0	0	3	1		
5		Advanced Communication Lab	ECL5502	0	0	3	1		
5		Microprocessor & Microcontroller Lab	ECL5503	0	0	3	1	22	
6	Core Subjects	Digital Signal Processing	EC6501	3	1	0	4		
6		Antenna And Wave Propagation	EC6502	3	0	0	3		
6	Professional Electives	Professional Elective-3:	EC65xx	3	0	0	3		
6		Professional Elective-4:	EC65xx	3	0	0	3		
6	MOOC Course			3	0	0	3		
6	Open Electives	Open Elective-3:	OE0xxx	3	0	0	3		
6	Lab Courses	Digital Signal Processing Lab	ECL6501	0	0	3	1		
6		Antenna and Wave Propagation Lab	ECL6502	0	0	3	1	18+3	121+6

ECE UG 4th Year Course Structure

Sem	Category	Course	Code	L	T	P	Credit	Total Credit	Cumm Credit
7	Core Subjects	RF and Microwave Engineering	EC7501	3	0	0	3		
7		Embedded System Design	EC7502	3	0	0	3		
7	Professional Electives	Professional Elective-5:	EC75xx	3	0	0	3		
7	Open Elective	Open Elective-4:	OE0xx	3	0	0	3		
7		Seminar and Technical Report Writing	EC7503				2		
7	Lab Courses	RF and Microwave Engineering Lab	ECL7501	0	0	3	1		
7		Short term industrial.research Experience	EC7504				1		
7		Project-I	EC7505				5	21	
8	Core Subjects	Optical and Wireless Communication	EC8501	3	0	0	3		
8	Professional Electives	Professional Elective-6:	EC85xx	3	0	0	3		
8		Seminar and Technical Report Writing	EC8502				2		
8		Comprehensive Viva	EC8503				2		
8	Lab Courses	Optical and Wireless Communication Lab	ECL8501	0	0	3	1		
8		Project-II	EC8504				10	21	163+6

Courses proposed as Professional elective (PE)

SI No	Course Title	Code
1	Electronic Instrumentation	ECx510
2	Computer Organization and Architecture	ECx511
3	Semiconductor Device Modeling	ECx512
4	Linear Integrated Circuits	ECx513
5	Pulse and Digital Switching Circuits	ECx514
6	Control System	ECx515
7	Sensors and Transducers	ECx516
8	Telecommunication Switching Networks	ECx517
9	Computer Communication	ECx518
10	Cellular Mobile Communication	ECx519
11	IoT for Communication Engineering	ECx520
12	Wireless Sensor Networks	ECx521
13	Optoelectronics	ECx522
14	Biomedical Signal Processing	ECx523
15	Digital Image Processing	ECx524
16	MIMO Communications	ECx525
17	Computer Vision and its applications	ECx526
18	Artificial Intelligence and Machine Learning	ECx527
19	Information Theory and Coding	ECx528
20	Digital System Design	ECx529
21	Low Power Techniques in VLSI Design	ECx530
22	Analysis and Design of Digital ICs	ECx531
23	RF Circuit Design	ECx532
24	Micro Electro Mechanical Systems	ECx533
25	Optical Networks and Photonic Switches	ECx534
26	Satellite Communication	ECx535
28	Analog VLSI Design	ECx536
29	Electromagnetic Interference and Compatibility	ECx537
30	VLSI Technology	ECx538
31	Speech Processing	ECx539
32	Optimization Techniques	ECx540
33	Communication Network Security	ECx541
34	Power Electronics	ECx542
35	Nano Electronic Devices	ECx543

Courses proposed as Open elective (OE)-For other Dept students

1.	Communication Systems	OE0501
2.	Electronics Technology	OE0502
3.	Micro Electro Mechanical Systems	OE0503
4.	Digital Image Processing	OE0504
5.	Communication Networks	OE0505
6.	Embedded System Design	OE0506
7.	Information Theory and Coding	OE0507
8.	Digital Signal Processing	OE0508
9	Remote Sensing	OE0509
10	Pattern Recognition	OE0510
11	Computer Communication	OE0511
12	VLSI Design	OE0512
13	Introduction to IOT and its Applications	OE0513

Year	Foundation Course	Professional Core Course	Professional Electives	Open Electives	MOOC/S WAM Course	Foundation Laboratories	Professional Laboratories	Extra Academic Activity	Industrial/Research Experience	Seminar/Technical report Writing	Project Work	Comprehensive viva Voce	Total Credit
1	9 course, 27 credit	1 course, 3 credit	x	x	x	8 course, 8 credit	1 course, 1 credit	2 Course, 2 credit	x	x	x	x	41
2	1 course, 3 credit	5 Course, 17 Credit	3 course, 9 credit	2 course, 6 credit	1 Course, 3 Credit	x	5 Course, 5 credit	x	x	x	x	x	43
3	1 course, 3 credit	5 Course, 17 Credit	3 course, 9 credit	2 course, 6 credit	1 Course, 3 Credit	x	5 Course, 5 credit	x	x	x	x	x	43
4	x	3 Course, 9 Credit	3 Course, 9 Credit	x	x	x	3 Course, 3 credit	x	1 Course, 1 Credit	2 course, 4 credit	2 course, 15 credit	1 course, 2 credit	42
Total	11 course, 33 Credit	14 Course, 46 Credit	9 Courses, 27 Credit	4 Course, 12 Credit	2 course, 6 credit	8 course, 8 credit	14 course 14 credit	2 Course, 2 credit	1 Course, 1 Credit	2 course, 4 credit	2 course, 15 credit	1 course, 2 credit	169