

## Bachelor of Technology in Electronics and Communication Engineering- (2020-21)

Sem	Semester Course Code, Course Name (L-T-P) Credits							GP	CS	Hrs. Per week			Cont act Hrs	Credit s			
	L	T	P														
1	MAL151 Engg Maths-I (3-0-2)4	CSL106 FOCP-I (2-0-4)4	CHL150 Engg Chemistry (2-0-2)3	CLL101 Effective Communication-I (2-1-0)2.5	MEP110 Engineering Graphics & Drawing (1-0-4)3	ECL110 Basic of Electrical & Electronics Engineering (2-0-2)3		ECR107 GP 1 Credits	ECS 101 CS-I (70-Hrs)	12	1	14	27	19.5+1 =20.5			
2	MAL152 Engg Maths-II (3-0-2)4	CSL108 FOCP-II (2-0-4)4	PHY150 Engineering Physics (3-0-2)4	CLL102 Effective Communication-II (2-1-0)2.5	MEL150 Basic of Mechanical & Civil Engg. (2-0-2)3	CSL110 Problem Solving and Design Thinking (2-0-2)3		ECR108 GP 1 Credits	ECS 102 CS-II (70- Hrs) 2 Credit	14	1	12	27	20.5+3 =23.5			
<b>Summer</b> ECT101 In House Summer Internship including 7 days community service														1			
3	ECL251 Analog Electronics & Integrated circuits (3-0-2)4	ECL253 Fields, waves and Antennas (3-0-2)4	ECL255 DE & CA (3-0-2)4	CSL225 Programming for data science (2-0-4)4	SML300 Entrepreneur ship (3-0-0)3	SML*** Liberal arts (3-0-0)3		ECR207 GP 1 Credits	ECS 201 CS-III	17		10	27	22+1= 23			
4	ECL256 Embedded System Design (3-0-2)4	ECL254 Analog and Digital Communicat ions (3-0-2)4	ECL258 Signal processing (3-0-2)4	Program Elective-1 (2-0-4)4	Open Elective – 1* (MOOC) (3-0-0)3			ECR208 GP 1 Credits	ECS 202 CS-IV (140-Hrs)* 2 Credit	17		12	24	23+3= 26			
<b>Summer</b> ECT201 Industrial Training/Swachha Bharat internship														02			
5	CSL236 Introduction to AI & ML / CSL242 AI for Games (3-0-2)4	ECL 270 Control systems and power electronics (3-0-2)4	Program Elective-2 (2-0-4)4	ECL252 Micro Controllers & Sensors (3-0-2)4	Open Elective – 2* (MOOC) (3-0-0)3	CLL120 HVPE (2-0-0)-2	ECV201 Skill Develop ment 1 Credit	ECR307 GP 1 Credits	ECS 301 CS-V	16		10	26	22+1= 23			
6	ECL302 Data comm and networks (3-0-2) 4	Program Elective-3 (2-0-4)4	Program Elective-4 (2-0-4)4	Open Elective – 3* (MOOC) (3-0-0)3	ECL361 Data Structures (3-0-2)4	CLP300 Campus to Corporate (1-0-0)1	ECC301 Seminar 1 Credit	CSR308 GP 1 Credits	ECS 302 CS-VI (140-Hrs)* 2 Credit	13		14	26	21+3= 24			
<b>Summer</b> ECT301 Industrial Training														03			
7	ECL362 Real Time Operating System (3-0-2)4	Program Elective- 5 (2-0-4)4	ECD401 Project # 1 4 Credits	Open Elective – 4* (MOOC) (3-0-0)3	CHL100 EVS (3-0-0)3	Foreign Language (3-0-0)3			ECS 401 CS-VII	14		6	20	21			
8	Open Elective – 5* (MOOC) (3-0-0)3	ECD402 Project # 2 /Internship 6 Credits	SEG 400 Self-Study Course GATE Audit	Program Elective-6 (2-0-4)4					ECS 402 CS-VIII (140-Hrs) 2 Credits	9			9	9+2=1 1			
<b>Total</b>														10 6	2	78	<b>178</b>

- \*Students can utilize summer or winter break period to complete remaining 140 community service hours

## Program Electives for each track

Tracks	IOT	Embedded System & VLSI Design
Program Elective-1	CSL238 Intro to cloud computing	ECL261 Linux & Scripting
Program Elective-2	CSL253 WebFrame Works	ECL262 CMOS VLSI Design & Layout
Program Elective-3	ECL316 Wireless & Mobile Communication	ECL264 RTL Design & Synthesis
Program Elective-4	ECL352 Design for IOT-I	ECL366 VLSI Physical Design
Program Elective-5	ECL451 Image Processing and Computer Vision I	ECL364 Verification Methodologies & Bus Architectures
Program Elective-6	ECL353 Design for IoT-II	ECL461 Embedded Systems and VLSI Industry: Employment & Higher Studies Trends