|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Semester | Course Code, Course Name(L-T-P)Credits | GP | **Community Service** | **Contact Hours**  | Credits |
| 1 | PYL150Engg. Phy. (3-0-2)4 | MAL151Engg. Maths I (3-0-2)4 | CSL106FOCP-I(1-0-2)2 | ECL110BEEE(3-0-2)4 | MEL150BM.E.(2-0-2)3 | CLL101Eff Comm. I(1-0-2)2 |  | ECR107GP11 Credit |  | 380 | 19+1=20 |
| 2 | CHL150Engg. Chem.(2-0-2)3 | MAL152Engg.Maths-II(3-0-2)4 | CSL108FOCP-II(1-0-2)2 | MEP110Engg Graphics & Drg(1-0-3) 3 | CLL120HVPE(2-0-0)2 | CLL102Eff Comm. II(1-0-2)2 | CSL110Problem Solving and design thinking(2-0-2)3 | ECR108GP21 Credit |  | 380 | 19+1=20 |
| 3 | CSL251Programming I (2-0-5) 4.5 | ECL261Linux & Scripting(2-0-8) 6 | ECL251Analog Electronics & Integrated circuits (2-0-2)3 | ECL253Fields, waves and Antennas(2-0-2) 3 | ECL255Digital Electronics and Computer Architecture(2-0-3) 3.5 |  |  | ECR207GP31 Credit |  | 400 | 20 +1 = 21 |
| 4 | ECL252Microcontrollers and Sensors(2-0-4) 4 | ECL262Digital CMOS VLSI Design & Layout(2-0-5) 4.5 | ECL256Embedded System Design(2-0-4) 4 | ECL254Analog and Digital Communications(2-0-2) 3 | ECL258Signal processing(2-0-2) 3 |  |  | EC208GP41 Credit |  | 370 | 18.5 + 1= 19.5 |
| Summers | ECT201 Practical Training |  |  |  | 02 |
| 5 | ECL361Data Structures & OOPs (C++) (2-0-2) 3 | ECL264RTL Design & Synthesis(2-0-5) 4.5 | CSL237Introduction to AI, ML and DL(2-0-8) 6 | ECL266Control Systems(2-0-1) 2.5 | ECL365Analog CMOS VLSI Design & Layouts(2-0-4) 4 |  |  | ECR307GP51 Credit | ECS 301CS3 #1(35-Hrs)S/NS Course | 400 | 20 +1= 21 |
| 6 | ECL362Real Time Operating Systems(2-0-3) 3.5 | ECL364Verification Methodologies & Bus Architectures (2-0-6) 5 | ECL366VLSI Physical Design(2-0-4) 4 | CLP300Campus to Corporate* + 1. 1.5
 | CHL100Environmental Studies(3-0-0) 3 | Management Course(2-0-0) 2 |  | ECR308GP61 Credit | ECS 302CS3 #2(35-Hrs)1 Credit | 380 | 19 + 2= 21 |
| Summers | ECT301 Industrial Internship including7 days community service |  |  |  | 03 |  |  |  |  |  |
| 7 | ECD401Project # 1(0-0-20) 10 | Foreign Language(2-0-0) 2 | SML300Entrepreneurship(2-0-0) 2 | ECL461Embedded Systems and VLSI Industry: Employment & Higher Studies Trends (2-0-3) 3.5 | Open Elective (MOOC)(2-0-2) 3 |  |  | ECR407GP71 Credit | ECS 401CS4 #1(70-Hrs)S/NS Course | 410 | 20.5 +1 =21.5 |
| 8 | ECD402Project # 2 / Internship(0-0-34) 17 | SEG 400Self-Study Course GATE Audit | ECL436Tech. and Ethics (Online) (S/NS) Audit |  |  |  |  | ECR408GP81 Credit | ECS 402CS4 #1 (70-Hrs)2 Credits | 340 | 17 + 3= 20 |
|  |  | Total Credits **158+8(GP)+3(CS)** | **169** |
|  | \* In semester 8th, 2 MOOC courses can be conducted and there will be a provision to do industrial internship in place of Major project (2).  |

**Bachelor of Technology in Electronics and Communication Engineering with Specialization in Embedded Systems & VLSI Design (2018-19)**