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| **SEMESTER1** | | | |
| **Course code** | **Course Name** | **L-T- P** | **Credits** |
| MA101 | Calculus | 3-1- 0 | 4 |
| CY100 | Engineering Chemistry | 3-1-0 | 4 |
| BE100 | Engineering Mechanics | 3-1-0 | 4 |
| BE101-04 | Introduction to Electronics Engineering | 2-1-0 | 3 |
| EE 100 | Basics of Electrical Engineering | 2-1-0 | 3 |
| BE103 | Introduction to Sustainable Engineering | 2-0-1 | 3 |
| CY110 | Engineering Chemistry Lab | 0-0-2 | 1 |
| EE110 | Basic Engineering Workshops | 0-0-2 | 1 |

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| **SEMESTER 2** | | | |
| **Course code** | **Course Name** | **L-T- P** | **Credits** |
| MA102 | Differential Equations | 3-1-0 | 4 |
| PH100 | Engineering Physics | 3-1-0 | 4 |
| BE102 | Design & Engineering | 2-0-2 | 3 |
| BE110 | Engineering Graphics | 1-1-3 | 3 |
| CE100 | Basics of Civil Engineering | 2-1-0 | 3 |
| EC 100 | Basics of Electronics Engineering | 2-1-0 | 3 |
| EC 110 | Basic Engineering Workshops | 0-0-2 | 1 |
| PH110 | Engineering Physics Lab | 0-0-2 | 1 |

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| **SEMESTER – 3** | | | |
| ***Course*** ***Code*** | ***Course*** ***Name*** | ***L-T-P*** | ***Credits*** |
| MA201 | Linear Algebra & Complex Analysis | 3-1-0 | 4 |
| EC201 | Network Theory | 3-1-0 | 4 |
| EC203 | Solid State Devices | 3-1-0 | 4 |
| EC205 | Electronic Circuits | 3-1-0 | 4 |
| EC207 | Logic Circuit Design | 3-0-0 | 3 |
| HS200/  HS210 | Business Economics/Life Skills | 3-0-0/ 2-0-2 | 3 |
| EC231 | Electronic Devices & Circuits Lab | 0-0-3 | 1 |
| EC233 | Electronic Design Automation Lab | 0-0-3 | 1 |

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| **SEMESTER – 4** | | | |
| ***Course*** ***Code*** | ***Course*** ***Name*** | ***L-T-P*** | ***Credits*** |
| MA204 | Probability, Random Processes and Numerical Methods | 3-1-0 | 4 |
| EC202 | Signals & Systems | 3-1-0 | 4 |
| EC204 | Analog Integrated Circuits | 4-0-0 | 4 |
| EC206 | Computer Organization | 3-0-0 | 3 |
| EC208 | Analog Communication Engineering | 3-0-0 | 3 |
| HS210/ HS200 | Life Skills/Business Economics | 2-0-2/ 3-0-0 | 3 |
| EC232 | Analog Integrated Circuits Lab | 0-0-3 | 1 |
| EC230 | Logic Circuit Design Lab | 0-0-3 | 1 |

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| **SEMESTER – 5** | | | |
| ***Course*** ***Code*** | ***Course*** ***Name*** | ***L-T-P*** | ***Credits*** |
| EC301 | Digital Signal Processing | 3-1-0 | 4 |
| EC303 | Applied Electromagnetic Theory | 3-0-0 | 3 |
| EC305 | Microprocessors & Microcontrollers | 3-0-0 | 3 |
| EC307 | Power Electronics & Instrumentation | 3-0-0 | 3 |
| HS300 | Principles of Management | 3-0-0 | 3 |
|  | **Elective 1** | 3-0-0 | 3 |
| EC341 | Design Project | 0-1-2 | 2 |
| EC333 | Digital Signal Processing Lab | 0-0-3 | 1 |
| EC335 | Power Electronics & Instrumentation Lab | 0-0-3 | 1 |

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| **Elective 1:-** |
| **1. EC361 Digital System Design** |
| **2. EC363 Optimization Techniques** |
| **3. EC365 Biomedical Engineering** |
| **4. EC360 Soft Computing** |

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| **SEMESTER – 6** | | | |
| ***Course*** ***Code*** | ***Course*** ***Name*** | ***L-T-P*** | ***Credits*** |
| EC302 | Digital Communication | 4-0-0 | 4 |
| EC304 | VLSI | 3-0-0 | 3 |
| EC306 | Antenna & Wave Propagation | 3-0-0 | 3 |
| EC308 | Embedded System | 3-0-0 | 3 |
| EC312 | Object Oriented Programming | 3-0-0 | 3 |
|  | **Elective 2** | 3-0-0 | 3 |
| EC332 | Communication Engg Lab (Analog& Digital) | 0-0-3 | 1 |
| EC334 | Microcontroller Lab | 0-0-3 | 1 |
| EC352 | Comprehensive Exam | 0-1-1 | 2 |

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| Elective 2 |  |  |  |
| 1. EC362 Modelling & Simulation of Communication Systems | | | |
| 2. EC366 Real Time Operating Systems | |  |  |
| 3. EC368 Robotics | |  |  |
| 4. EC370 Digital Image Processing | |  |  |

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| **SEMESTER – 7** | | | |
| ***Course*** ***Code*** | ***Course*** ***Name*** | ***L-T-P*** | ***Credits*** |
| EC401 | Information Theory & Coding | 4-0-0 | 4 |
| EC403 | Microwave & Radar Engg | 3-0-0 | 3 |
| EC405 | Optical Communication | 3-0-0 | 3 |
| EC407 | Computer Communication | 3-0-0 | 3 |
| EC409 | Control Systems | 3-0-0 | 3 |
|  | Elective 3 | 3-0-0 | 3 |
| EC451 | Seminar & Project Preliminary | 0-1-4 | 2 |
| EC431 | Communication Systems Lab (Optical & Microwave) | 0-0-3 | 1 |

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| Elective 3:- |  |
| 1. EC461 Microwave Devices and Circuits | |
| 2. EC463 Speech and Audio Signal Processing | |
| 3. EC465 MEMS | |
| 4. EC467 Pattern Recognition | |
| 5. EC469 Opto Electronic Devices | |

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| **SEMESTER – 8** | | | |
| ***Course*** ***Code*** | ***Course*** ***Name*** | ***L-T-P*** | ***Credits*** |
| EC402 | Nano electronics | 3-0-0 | 3 |
| EC404 | Advanced Communication Systems | 3-0-0 | 3 |
|  | Elective 4 | 3-0-0 | 3 |
|  | Elective 5 (Non Departmental) | 3-0-0 | 3 |
| EC492 | Project |  | 6 |

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| Elective 4:- |  |
| 1. EC462 Mixed Signal Circuit Design  2. EC464 Low Power VLSI Design  3. EC466 Cyber Security  4. EC468 Secure Communication  5. EC472 Integrated Optics & Photonic Systems  6.EC474 Computer Vision | |
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| **Course No.** | **Subject** | **L-T-P** | **Hours** | **Credits** |
| MA102 | Differential Equations | 3-1-0 | 4 | 4 |
| PH100 | Engineering Physics | 3-1-0 | 4 | 4 |
| CY100 | Engineering Chemistry | 3-1-0 | 4 | 4 |
| BE100 | Engineering Mechanics | 3-1-0 | 4 | 4 |
| BE110 | Engineering Graphics | 1-1-3 | 5 | 3 |
| BE102 | Design & Engineering | 2-0-2 | 4 | 3 |
| CE 100 | Basics of Civil Engineering | 2-1-0 | 3 | 3 |
| ME 100 | Basics of Mechanical Engineering | 2-1-0 | 3 | 3 |
| EE 100 | Basics of Electrical Engineering | 2-1-0 | 3 | 3 |
| EC 100 | Basics of Electronics Engineering | 2-1-0 | 3 | 3 |
| CS 100 | Computer Programming (Only for CSE & IT branches) | 2-1-0 | 3 | 3 |
| PH110 | Engineering Physics Lab | 0-0-2 | 2 | 1 |
| CY110 | Engineering Chemistry Lab | 0-0-2 | 2 | 1 |
| CE110/ME110/ EE110/EC110 CS 120 | Basic Engineering Workshops Computer Programming Lab ( only for CSE & IT Branches) | 0-0-2 | 2 | 1 |
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| 0-0-2 | 2 | 1 |
|  | U100 Language lab / CAD Practice/ Bridge courses/ Micro Projects etc | 0-0-(1/2) | (1/2) |  |