**FIRST YEAR**

**FIRST SEMESTER**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Theory** | | | | | | | | | | | | | | | |
| **Sl. No** | | **Subject Code** | | **Subject** | **Contact**  **Periods/Week** | | | | | | | | | **Credits** | |
|  | |  | |  | L | | T | | P | | | Total | |  | |
| 1.  2.  3.  4.  5.  6. | | SOT101  SOT102  SOT103  SOT104  SOT105  SOT106 | | Engineering Mathematics  Engineering Physics  Economics and Human Development Environmental Science  Communication Skill in English  Engineering Chemistry | 3  3  2  2  2  3 | | 1  1  0  0  0  1 | | | --  --  --  --  --  -- | | 4  4  2  2  2  4 | | 4  4  2  2  2  4 | |
| **Total Theory** | | | | | | | | | | | | **18** | | **18** | |
| **B. Practical** | | | | | | | | | | | | | | | |
| 1.  2.  3.  4. | SOT107  SOT108  SOT109  SOT110 | | Engineering Physics  Engineering Chemistry  Engineering Drawing  NCC/NSS | | | --  --  --  -- | | --  --  --  -- | | 3  3  3  2 | 3  3  3  2 | | 2  2  2  1 | |
| **Total Practical** | | | | | | | | | | | | **11** | **7** | |
| **Total of Semester:** | | | | | | | | | | | | **29** | **25** | |

**SECOND SEMESTER**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Theory** | | | | | | | |
| **Sl. No** | **Subject Code** | **Subject** | **Contact**  **Periods/Week** | | | | **Credits** |
|  | |  | L | T | P | Total |  |
| 1.  2.  3.  4.  5.  6. | SOT201  SOT202  SOT203  SOT204  SOT205  SOT206 | Advanced Engineering Mathematics-I  Engineering Mechanics  Computer Systems and Programming  Electrical Technology  Values and Ethics  Basic Electronics | 3  3  3  3  2  3 | 1  0  0  1  0  0 | --  --  --  --  --  -- | 4  3  3  4  2  3 | 4  3  3  4  2  3 |
| **Total Theory** | | | | | | **19** | **19** |
| **B. Practical** | | | L | T | P |  | |
| 1  2  3 | SOT207  SOT208  SOT209 | Computer Programming Lab  Electrical & Electronics Lab  Workshop Technology | --  --  -- | --  --  -- | 3  3  3 | 3  3  3 | 2  2  2 |
| **Total Practical** | | | | | | **9** | **6** |
| **Total of Semester:** | | | | | | **28** | **25** |

**SECOND YEAR**

**THIRD SEMESTER**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Theory** | | | | | | | | |
| **Sl. No.** | **Code** | **Theory** | **Contact**  **Periods/Week** | | | | | **Credits** |
|  |  |  | L | | T | P | Total |  |
| 1  2  3  4  5 | ETC301  ETC302  ETC303  ETC304  ETC305 | Signals and Systems  Solid State Device  Analog Electronic Circuits  Digital Electronic Circuits  Circuit Theory and Network Analysis | 3  3  3  3  3 | | 0  1  1  1  1 | --  --  --  --  -- | 3  4  4  4  4 | 3  4  4  4  4 |
| **Total Theory** | | | | | | | **19** | **19** |
| **B. Practical** | | | | | | | | |
| 1.  2.  2. | ETC306  ETC307  ETC308 | Analog Circuits Lab  Digital Electronics Lab  Networks Analysis Lab | | -  -  - | --  --  -- | 3  3  3 | 3  3  3 | 2  2  2 |
| **Total Practical** | | | | | | | **9** | **6** |
| **Total of Semester:** | | | | | | | **28** | **25** |

**FOURTH SEMESTER**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Theory** | | | | | | | |
| **Sl. No.** | **Code** | **Theory** | **Contact**  **Periods/Week** | | | | **Credits** |
|  |  |  | L | T | P | Total |  |
| 1  2  3  4  5  6 | ETC401  ETC402  ETC403  ETC404  ETC405  ETC406 | Analog Communication Theory  Electromagnetic Theory  Computer Architecture and Org.  Microprocessor & Microcontroller  Microelectronics  Random Processes, Probability Theory & Statistics | 3  3  3  3  3  3 | 0  1  0  1  0  1 | --  --  --  --  --  -- | 3  4  3  4  3  4 | 3  4  3  4  3  4 |
| **Total Theory** | | | | | | **21** | **21** |
| **B. Practical** | | | | | | | |
| 1  2 | ETC407  ETC408 | Analog communication lab  Microprocessor Lab | -  - | --  -- | 3  3 | 3  3 | 2  2 |
| **Total Practical** | | | | | | **6** | **4** |
| **Total of Semester:** | | | | | | **27** | **25** |

**THIRD YEAR**

**FIFTH SEMESTER**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Theory** | | | | | | | | | | |
| **Sl. No.** | **Code** | **Theory** | **Contact**  **Periods/Week** | | | | | | | **Credits** |
|  |  |  | | **L** | **T** | | P | | Total |  |
| 1  2  3  4  5 | ETC501  ETC502  ETC503  ETC504  ETC505 | Digital Communication  Advanced Digital System Design  Microwave Engineering  VLSI Design  Control Systems | 3  3  3  3  3 | | 0  1  0  1  0 | | --  --  --  --  -- | | 3  4  3  4  3 | 3  4  3  4  3 |
| **Total Theory** | | | | | | | | | **17** | **17** |
| **B. Practical** | | | | | | | | | | |
| 1  2  3  4 | ETC506  ETC507  ETC508  ETC 509 | Advanced Digital Design Lab  Digital Communication Lab  Microwave Engg. Lab  Control System Lab | -  -  -  - | | | --  --  --  -- | | 3  3  3  3 | 3  3  3  3 | 2  2  2  2 |
| **Total Practical** | | | | | | | | | **12** | **8** |
| **Total of Semester:** | | | | | | | | | **29** | **25** |

**SIXTH SEMESTER**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Theory** | | | | | | | | | |
| **Sl. No.** | **Code** | **Theory** | **Contact**  **Periods/Week** | | | | | | **Credits** |
|  |  |  | L | T | | P | Total | |  |
| 1  2  3  4  5 | ETC601  ETC602  ETC603  ETC604  ETC605 | Computer Communication & Networking  Digital Signal Processing  Power Electronics  Measurement & Instrumentation  Antenna and Radar Engineering | 3  3  33  3 | 1  1  1  1  0 | | --  --  --  --  -- | 4  4  4  4  3 | | 4  4  4  4  3 |
| **Total Theory** | | | | | | | **19** | | **19** |
| **B. Practical** | | | | | | | | | |
| 1  2  3 | ETC606  ETC607  ETC608 | DSP Lab  Computer Networking Lab  VLSI Design Lab | -  -  - | | --  --  -- | 3  3  3 | 3  3  3 | 2  2  2 | |
| **Total Practical** | | | | | | | **9** | **6** | |
| **Total of Semester:** | | | | | | | **28** | **25** | |

**FOURTH YEAR**

**SEVENTH SEMESTER**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Theory** | | | | | | | | | | | | |
| **Sl. No.** | **Code** | | **Theory** | **Contact**  **Periods/Week** | | | | | | | | **Credits** |
|  |  | |  | | L | T | | P | | Total | |  |
| 1  2  3  4 | ETC701  ETC702  ETC703  ETC704 | | Linear Integrated Circuit  Satellite Communication  Elective I  Elective II | | 3  3  3  3 | 1  1  1  1 | | --  --  --  -- | | 4  4  4  4 | | 4  4  4  4 |
| **Total Theory** | | | | | | | | | | **16** | | **16** |
| **B. Practical** | | | | | | | | | | | | |
| 1  2  3 | ETC706  ETC707  ETC708 | Integrated Circuit Lab  Measurement Lab  Project I | | -  -  - | | | --  --  -- | | 3  3  3 | | 3  3  3 | 2  2  5 |
| **Total Practical** | | | | | | | | | | | **9** | **9** |
| **Total of Semester:** | | | | | | | | | | | **25** | **25** |

**LIST OF ELECTIVES**

**ELECTIVE I (ETC704):**

ETC704A Telecommunication Network Management

ETC704B Cryptography and Network Security

ETC704C Higher Power Semiconductor Devices

ETC704D EDA for VLSI Design

ETC704E Discrete Mathematics and Graph Theory

**ELECTIVE II (ETC705):**

ETC705A Operating System

ETC705B Biomedical Instrumentation

ETC705C Multimedia communication and Networks

ETC705D Telecom Switching

ETC705E Advanced Computer Communication Networks

**EIGHTH SEMESTER**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Theory** | | | | | | | | | |
| **Sl. No.** | **Code** | **Theory** | | **Contact**  **Periods/Week** | | | **Credits** | | |
|  |  |  | | L | T | P | | Total |  |
| 1  2  3  4 | HU801  ETC802  ETC803  ETC 804 | Industrial Management  Optical Fiber & Comn.  Elective III  Elective IV | | 3  3  3  3 | 0  1  0  1 | --  --  --  -- | | 3  4  3  4 | 3  4  3  4 |
| **Total Theory** | | | | | | | | **14** | **14** |
| **B. Practical** | | | | | | | | | |
| 1  2  3 | ETC805  ETC806  ETC807 | Seminar  Grand VIVA  Project II | -  -  - | | -  -  - | --  --  6 | | --  --  6 | 2  4  5 |
| **Total Practical** | | | | | | | | **6** | **11** |
| **Total of Semester:** | | | | | | | | **20** | **25** |

**ELECTIVE SUBJECTS**

**ELECTIVE III (ETC802):**

ETC802A Cellular and Mobile Communication

ETC802B Software Engineering

ETC802C Embedded Systems

ETC802D Artificial Neural Network

**ELECTIVE IV (ETC803):**

ETC803A Nanotechnology & Nano-Electronics

ETC803B Distributed Computing

ETC803C Principles of Electromagnetic and Electrostatic Compatibility

ETC803D Electronic Sensors and MEMS