**Second Year - Third Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU-301** | Values & Ethics in Profession | 3 | 0 | 0 | 3 | 3 |
| **2** | **M (CS) 301** | Numerical Methods | 2 | 1 | 0 | 3 | 2 |
| **3** | **CH301** | Basic Environmental Engineering &Elementary Biology | 3 | 0 | 0 | 3 | 3 |
| **4** | **ME 301** | Applied Thermodynamics | 4 | 0 | 0 | 4 | 4 |
| **5** | **ME 302** | Strength of Materials | 3 | 1 | 0 | 4 | 4 |
| **6** | **ME 303** | Engineering Materials | 3 | 1 | 0 | 4 | 3 |
| **Total of Theory** | **21** | **20** |
| **B. PRACTICAL** |
| **7** | **HU-381** | Technical Report Writing &Language Lab Practice | 0 | 0 | 3 | 3 | 2 |
| **8** | **M (CS) 391** | Numerical Methods | 0 | 0 | 2 | 2 | 1 |
| **8** | **ME 391** | Machine Drawing –I | 0 | 0 | 3 | 3 | 2 |
| **9** | **ME 392** | Workshop Practice-II | 0 | 0 | 3 | 3 | 2 |
| **10** | **ME 393** | Applied Mechanics Lab | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **14** | **9** |
| **C. SESSIONAL** |
| **11** | **GS 381** | General Studies - III | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **39** | **33** |

**Second Year Fourth Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **M 401** | Mathematics-3 | 3 | 1 | 0 | 4 | 4 |
| **2** | **ME 401** | Fluid Mechanics & HydraulicMachines | 3 | 1 | 0 | 4 | 4 |
| **3** | **ME 402** | Mechanisms | 3 | 0 | 0 | 3 | 3 |
| **4** | **ME 403** | Primary Manufacturing Processes | 3 | 1 | 0 | 4 | 4 |
| **5** | **ME 404** | Heat Transfer | 3 | 1 | 0 | 4 | 4 |
| **Total of Theory** | **19** | **19** |
| **B. PRACTICAL** |
| **6** | **ME491** | Fluid Mechanics & Hydraulics Lab | 0 | 0 | 3 | 3 | 2 |
| **7** | **ME 492** | Manufacturing Technology Lab | 0 | 0 | 3 | 3 | 2 |
| **8** | **ME493** | Material Testing Lab | 0 | 0 | 3 | 3 | 2 |
| **9** | **ME 494** | Machine Drawing-II | 0 | 0 | 3 | 3 | 2 |
| **10** | **ME 495** | Applied Thermodynamics & Heat Transfer Lab | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **15** | **10** |
| **C. SESSIONAL** |
| **11** | **GS 481** | General Studies - IV | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **38** | **33** |

**Third Year – Fifth Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU511** | Principles & Practices ofManagement | 2 | 0 | 0 | 2 | 2 |
| **2** | **ME 501** | Dynamics of Machines | 3 | 1 | 0 | 4 | 4 |
| **3** | **ME 502** | Design of Machine Elements | 3 | 1 | 0 | 4 | 4 |
| **4** | **ME 503** | Metrology & Measurement | 3 | 1 | 0 | 4 | 4 |
| **5** | **ME 504** | Professional Elective-IA-Electrical MachinesB-Applied Fluid Mechanics | 3 | 0 | 0 | 3 | 3 |
| **6** | **ME 505** | Free Elective – IA. Data Base Management Systems B. Operating SystemC. Microprocessor & Microcontroller | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **20** | **20** |
| **B. PRACTICAL** |
| **7** | **ME 581 (Sessional)** | Seminar-I | 0 | 0 | 3 | 3 | 2 |
| **8** | **ME 592** | Design Practice-I | 0 | 0 | 3 | 3 | 2 |
| **9** | **ME593** | Metrology & Measurement Lab | 0 | 0 | 2 | 2 | 1 |
| **10** | **ME 594** | Professional Elective – I Lab | 0 | 0 | 3 | 3 | 2 |
| **11** | **ME 595** | Free Elective – I Lab | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **14** | **9** |
| **C. SESSIONAL** |
| **12** | **GS 581** | General Studies - V | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **38** | **33** |

**Third Year – Sixth Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU 611** | Production & Operations Management | 2 | 0 | 0 | 2 | 2 |
| **2** | **ME 601** | IC Engines and Gas Turbines | 3 | 0 | 0 | 3 | 3 |
| **3** | **ME 602** | Machining Principles & MachineTools | 3 | 0 | 0 | 3 | 3 |
| **4** | **ME 603** | Machine Design | 3 | 0 | 0 | 3 | 3 |
| **5** | **ME 604** | Professional Elective-IIA. Air Conditioning & RefrigerationB. MechatronicsC. Fluid Power Control | 3 | 0 | 0 | 3 | 3 |
| **6** | **ME 605** | Free Elective-IIA. Control SystemB. Software EngineeringC. Operations Research | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **17** | **17** |
| **B. PRACTICAL** |
| **7** | **ME 691** | Machining & Machine Tools Lab | 0 | 0 | 3 | 3 | 2 |
| **8** | **ME 692** | IC Engine Lab | 0 | 0 | 3 | 3 | 2 |
| **9** | **ME 693** | Design Practice-II | 0 | 0 | 3 | 3 | 2 |
| **10** | **ME 694** | Dynamics of Machines Lab | 0 | 0 | 3 | 3 | 2 |
| **11** | **ME 695** | Professional Elective-II Lab | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **15** | **10** |
| **C. SESSIONAL** |
| **12** | **GS 681** | General Studies - VI | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **36** | **31** |

**Fourth Year – Seventh Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **ME 701** | Power Plant Engineering | 4 | 0 | 0 | 4 | 4 |
| **2** | **ME 702** | Advanced Manufacturing Technology | 4 | 0 | 0 | 4 | 4 |
| **3** | **ME 703** | Professional Elective-IIIA. Materials HandlingB. Finite Element MethodC. Turbo Machinery | 3 | 0 | 0 | 3 | 3 |
| **4** | **ME 704** | Professional Elective-IVA. Maintenance EngineeringB. Renewable Energy SystemsC. Tribology | 3 | 0 | 0 | 3 | 3 |
| **5** | **ME 705** | Professional Elective – VA. Quantity Production MethodB. Advanced Welding TechnologyC. Computational Methods in Engineering | 3 | 0 | 0 | 3 | 3 |
| **6** | **ME 706** | Free Elective-IIIA. Object Oriented ProgrammingB. Artificial IneleganceC. Electronic Measurement & Instrumentation  | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **20** | **20** |
| **B. PRACTICAL** |
| **6** | **ME 791** | Advanced Manufacturing Lab | 0 | 0 | 3 | 3 | 2 |
| **7** | **ME 781** | Project : Part 1 | 0 | 0 | 4 | 4 | 2 |
| **8** | **ME 782** | Viva Voce on Vocational Training | 0 | 0 | 0 | 0 | 2 |
| **9** | **ME783** | Group Discussion | 0 | 0 | 0 | 0 | 2 |
| **Total of Practical** | **7** | **8** |
| **C. SESSIONAL** |
| **10** | **GS 781** | General Studies - VII | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **31** | **32** |

**Fourth Year – Eighth Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **ME 801 (HU)** | Economics for Engineers | 3 | 0 | 0 | 3 | 3 |
| **2** | **ME 802** | Professional Elective-VIA. CAD/CAMB. Industrial RoboticsC. Energy Conservation & ManagementD. Quality & Reliability Engineering | 3 | 0 | 0 | 3 | 3 |
| **3** | **ME 803** | Free Elective-IVA. Safety & Occupational HealthB. Automation & ControlC. Water Resource EngineeringD. Automobile Engineering | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **9** | **9** |
| **B. PRACTICAL** |
| **4** | **ME 881** | Deign of a Mechanical System | 0 | 0 | 6 | 6 | 4 |
| **5** | **ME 882** | Project : Part II | 0 | 0 | 12 | 12 | 6 |
| **6** | **ME 883** | Comprehensive viva | 0 | 0 | 0 | 0 | 2 |
| **Total of Practical** | **18** | **12** |
| **C. SESSIONAL** |
| **7** | **GS 881** | General Studies - VIII | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **31** | **25** |