**Second Year Third Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU301** | Values & Ethics in Profession | 3 | 0 | 0 | 3 | 3 |
| **2** | **M301** | Mathematics-3 | 3 | 1 | 0 | 4 | 4 |
| **3** | **CH301** | Basic Environmental Engineering &Elementary Biology; | 3 | 1 | 0 | 4 | 4 |
| **4** | **CS301** | Analog & Digital Electronics | 3 | 1 | 0 | 4 | 4 |
| **5** | **CS302** | Data Structure & Algorithm | 3 | 1 | 0 | 4 | 4 |
| **6** | **CS303** | Computer Organisation | 3 | 1 | 0 | 4 | 4 |
| **Total of Theory** | **23** | **23** |
| **B. PRACTICAL** |
| **7** | **CS391** | Analog & Digital Electronics Lab | 0 | 0 | 3 | 3 | 2 |
| **8** | **CS392** | Data Structure & Algorithm Lab | 0 | 0 | 3 | 3 | 2 |
| **9** | **CS393** | Computer Organisation Lab | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **9** | **6** |
| **C. SESSIONAL** |
| **10** | **GS381** | General Studies - III | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** |  |  | **36** | **33** |

 **Second Year Fourth Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **M(CS)401** | Numerical Methods | 2 | 1 | 0 | 3 | 2 |
| **2** | **CS401** | Communication Engg & CodingTheory | 3 | 0 | 0 | 3 | 3 |
| **3** | **CS402** | Formal Language & Automata Theory | 3 | 1 | 0 | 4 | 4 |
| **4** | **CS403** | Computer Architecture | 3 | 1 | 0 | 4 | 4 |
| **5** | **CS404** | Discrete Mathematics | 3 | 1 | 0 | 4 | 4 |
| **Total of Theory** | **18** | **17** |
| **B. PRACTICAL** |
| **6** | **HU481** | Technical Report Writing & Language Lab  | 0 | 0 | 3 | 3 | 2 |
| **7** | **M(CS)491** | Numerical Methods Lab | 0 | 0 | 2 | 2 | 1 |
| **8** | **CS491** | Communication Engg & CodingTheory Lab | 0 | 0 | 3 | 3 | 2 |
| **9** | **CS492** | Software Tools | 0 | 0 | 3 | 3 | 2 |
| **10** | **CS493** | Computer Architecture Lab | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **14** | **9** |
| **C. SESSIONAL** |
| **11** | **GS481** | General Studies - IV | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **36** | **30** |

**Third Year – Fifth Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU501** | Economics for Engineers | 3 | 0 | 0 | 3 | 3 |
| **2** | **CS501** | Design & Analysis of Algorithm | 3 | 1 | 0 | 4 | 4 |
| **3** | **CS502** | Microprocessors & Microcontrollers | 3 | 1 | 0 | 4 | 4 |
| **4** | **CS503** | Data Base Management Systems | 3 | 1 | 0 | 4 | 4 |
| **5** | **Free****Elective****CS504A****CS504B****CS504C****CS504D** | Circuit Theory & Network Data Communication Digital Signal ProcessingObject Oriented Programming using Java | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **18** | **18** |
| **B. PRACTICAL** |
| **6** | **CS591** | Design & Analysis of Algorithm | 0 | 0 | 3 | 3 | 2 |
| **7** | **CS592** | Microprocessors & Microcontrollers | 0 | 0 | 3 | 3 | 2 |
| **8****9** | **CS593****F.E.****CS594A****CS594B****CS594C****CS594D** | Data Base Management Systems LabCircuit Theory & Network LabData Communication LabDigital Signal Processing LabObject Oriented Programming using Java  | 00 | 00 | 03 | 33 | 22 |
| **Total of Practical** | **12** | **8** |
| **C. SESSIONAL** |
| **10** | **GS581** | General Studies - V | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **34** | **30** |

**Third Year – Sixth Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU601** | Principles of Management | 2 | 0 | 0 | 2 | 2 |
| **2** | **CS601** | Software Engineering | 3 | 0 | 0 | 3 | 3 |
| **3** | **CS602** | Computer Networks | 3 | 1 | 0 | 4 | 4 |
| **4** | **CS603** | Operating System | 3 | 0 | 0 | 3 | 3 |
| **5** | **P.E****CS604A****CS604B****CS604C** | Information Theory & CodingComputer GraphicsERP | 3 | 0 | 0 | 3 | 3 |
| **6** | **F. E.****CS605A****CS605B****CS605C** | Operation ResearchHuman Resource ManagementMultimedia Technology | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **18** | **18** |
| **B. PRACTICAL** |
| **7** | **CS691** | Programming Practices using C++ Lab | 0 | 0 | 3 | 3 | 2 |
| **8** | **CS692** | Computer Networks Lab | 0 | 0 | 3 | 3 | 2 |
| **9** | **CS693** | Operating System Lab | 0 | 0 | 3 | 3 | 2 |
| **10** | **CS681** | **Seminar** | 0 | 0 | 3 | 3 | 2 |
| **Total of Practical** | **12** | **8** |
| **C. SESSIONAL** |
| **11** | **GS681** | General Studies - VI | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **34** | **30** |

**Fourth Year – Seventh Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **CS701** | Artificial Intelligence | 3 | 0 | 0 | 3 | 3 |
| **2** | **CS702** | Compiler Design | 3 | 0 | 0 | 3 | 3 |
| **3** | **CS703** | A. Pattern RecognitionB. Soft ComputingC. Distributed Operating SystemD. Image Processing | 3 | 0 | 0 | 3 | 3 |
| **4** | **CS704** | A. Cloud ComputingB. Data Warehousing and Data MiningC. Sensor NetworksD. Mobile Computing | 3 | 0 | 0 | 3 | 3 |
| **5** | **CS705** | A. Internet TechnologyB. Microelectronics & VLSI DesignC. Control SystemD. Modelling & Simulation | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **15** | **15** |
| **B. PRACTICAL** |
| **6** | **HU781** | Group Discussion | 0 | 0 | 3 | 3 | 2 |
| **7** | **CS791** | Software Engineering Lab | 0 | 0 | 3 | 3 | 2 |
| **8** | **CS792** | Artificial Intelligence Lab | 0 | 0 | 3 | 3 | 2 |
| **9** | **CS793** | A. Pattern Recognition LabB. Soft Computing LabC. Distributed Operating System LabD. Image Processing Lab | 0 | 0 | 3 | 3 | 2 |
| **10** | **CS794** | A. Internet Technology LabB. Microelectronics & VLSI Design LabC. Control System LabD. Modeling & Simulation Lab | 0 | 0 | 3 | 3 | 2 |
| **11** | **CS782** | Industrial training | 4 weeks during 6th -7 thSem-break | 2 |
| **12** | **CS783** | Project- 1 |  |  |  | 3 | 2 |
| **Total of Practical** | **18** | **14** |
| **C. SESSIONAL** |
| **13** | **GS781** | General Studies - VII | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **37** | **33** |

**Fourth Year – Eighth Semester**

|  |
| --- |
| **A.THEORY** |
| **Sl No.** | **Subject Code** | **Theory** | **Contact Hours/Week** | **Credit****Points** |
|  |  |  | **L** | **T** | **P** | **Total** |  |
| **1** | **HU801A****HU801B** | A. Organisational BehaviourB. Project Management | 2 | 0 | 0 | 2 | 2 |
| **2** | **CS801** | A. Advanced Computer ArchitectureB. Parallel ComputingC. Natural Language ProcessingD. Cryptography & Network SecurityE. Business Analytics | 3 | 0 | 0 | 3 | 3 |
| **3** | **CS802** | A. Technology ManagementB. Cyber Law & Security PolicyC. Optical NetworkingD. Low Power Circuits & SystemsE. E-CommerceF. Robotics | 3 | 0 | 0 | 3 | 3 |
| **Total of Theory** | **8** | **8** |
| **B. PRACTICAL** |
| **4** | **CS891** | Design Lab / Industrial problem relatedpractical training (Workshop needed) | 0 | 0 | 6 | 6 | 4 |
| **5** | **CS892** | Project-2 | 0 | 0 | 12 | 12 | 6 |
| **6** | **CS893** | Grand Viva |  |  |  |  | 3 |
| **Total of Practical** | **18** | **13** |
| **C. SESSIONAL** |
| **7** | **GS881** | General Studies - VIII | 3 | 1 | 0 | 4 | 4 |
| **Total of Sessional** | **4** | **4** |
| **Total of Semester** | **30** | **25** |