**SEMESTER - I**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Course Name** | **Hours per week** | **Credits** |
| **L** | T | **P** |
| **1.** | Mathematical Foundations of Computer Science | 4 | 0 | 0 | 4 |
| **2.** | Software Engineering | 4 | 0 | 0 | 4 |
| **3.** | Computer Organization & Architecture | 4 | 0 | 0 | 4 |
| **4.** | Data Structures | 4 | 0 | 0 | 4 |
| **5.** | Database Management Systems | 4 | 0 | 0 | 4 |
| **7.** | Software Engineering Laboratory | 0 | 1 | 2 | 2 |
| **8.** | Data Structures using C Laboratory | 0 | 1 | 2 | 2 |
| **9.** | Database Management Systems Laboratory | 0 | 1 | 2 | 2 |
| **10.**  | Research Methodology and IPR | 2 | 0 | 0 | 2 |
|  | **TOTAL** | **22** | **3** | **8** | **28** |

**SEEMSTER - II**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Course Name** | **Hours per week** | **Credits** |
| **L** | T | **P** |
| **1.** | Operating Systems | 4 | 0 | 0 | 4 |
| **2.** | Data Science with Python | 4 | 0 | 0 | 4 |
| **3.** | Computer Networks | 4 | 0 | 0 | 4 |
| **4.** | **Program Elective – I**Software Testing MethodologiesData Mining and Business IntelligenceManagerial Economics and Financial Accountancy | 4 | 0 | 0 | 3 |
| **5.** | **Open Elective – I** Operations ResearchDigital MarketingCloud Computing | 3 | 0 | 0 | 3 |
| **6.** | Operating Systems Laboratory | 0 | 1 | 2 | 2 |
| **7.** | Data Science Laboratory | 0 | 1 | 2 | 2 |
| **8.** | Computer Networks Laboratory | 0 | 1 | 2 | 2 |
| **9.** | **Skill Oriented Course – I**Exploratory Data Analytics with Python | 1 | 0 | 2 | 2 |
| **10.** | **Seminar** | 0 | 0 | 4 | 2 |
|  | **Total** | **20** | **3** | **10** | **28** |

**SEMESTER – III**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Course Name** | **Hours per week** | **Credits** |
| **L** | T | **P** |
| **1.** | Web Technologies | 4 | 0 | 0 | 4 |
| **2.** | Big Data Technologies | 4 | 0 | 0 | 4 |
| **3.** | DevOps & Agile Programming | 4 | 0 | 0 | 4 |
| **5.** | **Program Elective – II**Software Architecture & Design PatternsNetwork SecurityMachine Learning | 3 | 0 | 0 | 3 |
| **6.** | **Program Elective – III**Mobile Application DevelopmentInternet of thingsBlockchain Technologies | 3 | 0 | 0 | 3 |
| **7.** | Web Technologies Laboratory | 0 | 1 | 2 | 2 |
| **8.** | Big Data Technologies Laboratory | 0 | 1 | 2 | 2 |
| **9.** | DevOps & Agile Programming Laboratory | 0 | 1 | 2 | 2 |
| **10.** | Summer Internship / Industry Oriented Mini Project/ Skill Development Course (Minimum 6 weeks)  | - | - | - | 2 |
| **11.** | **Skill oriented Course – II**MEAN Stack Development  | 1 | 0 | 2 | 2 |
|  | **TOTAL** | **18** | **4** | **8** | **28** |

**SEMESTER - IV**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Course Name** | **Hours per week** | **Credits** |
| **L** | T | **P** |
| **1.** | **Program Elective– IV**Deep LearningSocial Network AnalysisMultimedia Systems and Tools | 3 | 0 | 0 | 3 |
| **2.** | **Open Elective – II**Cyber LawsEntrepreneurshipNOSQL Databases | 3 | 0 | 0 | 3 |
| **3.** | Project Work | 0 | 0 | 20 | 10 |
| **4.** | Comprehensive Viva Voce | - | - | - | 2 |
|  | TOTAL | **6** |  | **20** | **18** |