**Credit Definition**

|  |  |  |
| --- | --- | --- |
| **Type** | **Duration**  **(in Hour)** | **Credit** |
| Lecture (L) | 1 | 1 |
| Tutorial (T) | 1 | 1 |
| Practical (P) | 2 | 1 |

**Semester Wise Credit Break up**

|  |  |
| --- | --- |
| **Semester** | **Credit** |
| 1st Semester | 18 |
| 2nd Semester | 18 |
| 3rd Semester | 14 |
| 4th Semester | 14 |
| 5th Semester | 12 |
| 6th Semester | 12 |
| **Total** | **88** |

**Subject Codification**

Department Code

Course No

Type

Semester (1..8)

X

X

X

X

X

X

X

If “Type” = 3, then 1 – Seminar, 2 – project, 3 – Internship/Entrepreneurship

1 – L/L+T, 2 – L+P, 3 – Sessional, 4 – P/Workshop

Category

Degree

1 – CS, 2 – DTS, 3 – IE, 4 – DS, 5 – MS, 6 – SH

1 – UG, 2 – PG, 3 – PhD, 4 – Diploma, 5 – Certificate

**Semester-1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | Subject List | Category | Type | Credit | Contact hr. |
|  | Principles of Programming Languages | PC | Theory | 4 | 4 |
|  | Advanced Algorithms | PC | Theory | 4 | 4 |
|  | High Performance Computer Architecture | PC | Theory | 4 | 4 |
|  | Programming Lab | PC | Practical | 2 | 4 |
|  | Computer Architecture Lab | PC | Practical | 2 | 4 |
|  | Foreign Language - I | MUS | Theory | 2 | 2 |
| Total | | | | **18** | **22** |

**Semester-2**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | Subject List | Category | Type | Credit | Contact hr. |
|  | Advanced Operating System | PC | Theory | 4 | 4 |
|  | Database Technology and Data Mining | PC | Theory | 4 | 4 |
|  | Theory of Computations | PC | Theory | 4 | 4 |
|  | Advanced Operating System Lab | PC | Practical | 2 | 4 |
|  | Database Technology Lab | PC | Practical | 2 | 4 |
|  | Foreign Language - II | MUS | Theory | 2 | 2 |
| Total | | | | **18** | **22** |

**Semester-3**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | Subject List | Category | Type | Credit | Contact hr. |
|  | Professional Elective-1 | PE | Theory | 4 | 4 |
|  | Professional Elective-2 | PE | Theory | 4 | 4 |
|  | Assignment based Lab | PC | Practical | 2 | 4 |
|  | Mentored Seminar-1 | PSE | Sessional | 2 | 1 |
|  | Foreign Language - III | MUS | Theory | 2 | 2 |
| Total | | | | **14** | **15** |

|  |  |
| --- | --- |
| **Elective I** | |
| **Sl No.** | **Paper Name** |
|  | Artificial Intelligence |
|  | Distributed Computing |
|  | Wireless Communication |
|  | Information and Coding Theory |
| **Elective II** | |
| **Sl No.** | **Paper Name** |
|  | Computer Vision |
|  | Cryptography and Network Security |
|  | Embedded System |
|  | Computational Biology and Bioinformatics |

**Semester-4**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | Subject List | Category | Type | Credit | Contact hr. |
|  | Professional Elective-3 | PE | Theory | 4 | 4 |
|  | Professional Elective-4 | PE | Theory | 4 | 4 |
|  | Term Paper leading to Thesis | PSE | Sessional | 2 | 1 |
|  | Mentored Seminar-2 | PSE | Sessional | 2 | 1 |
|  | Foreign Language - IV | MUS | Theory | 2 | 2 |
| Total | | | | **14** | **12** |

|  |  |
| --- | --- |
| **Elective III** | |
| **Sl No.** | **Paper Name** |
|  | Computational Intelligence |
|  | Natural Language Processing |
|  | Ad-hoc and Sensor Network |
| **Elective IV** | |
| **Sl No.** | **Paper Name** |
|  | Machine Learning |
|  | Multimedia Technology |
|  | Service oriented Architecture |

**Semester-5**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | Subject List | Category | Type | Credit | Contact hr. |
|  | Thesis work | PSE | Sessional | 8 | 12 |
|  | Viva-Voice | PSE | Sessional | 4 | 0 |
| Total | | | | **12** | **12** |

**Semester-6**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | Subject List | Category | Type | Credit | Contact hr. |
|  | Thesis work | PSE | Sessional | 8 | 12 |
|  | Viva-Voice | PSE | Sessional | 4 | 0 |
| Total | | | | **12** | **12** |