|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Part** | **Title of the Course** | **Credits** | **Hours** | **Maximum marks** |
|  |  |  | **Theory** | **Practical** | **CIA** | **ESE** | **Total** |
| **FIRST SEMESTER** |
| I | Language – I | 4 | 6 |  | 50 | 50 | 100 |
| II | English – I | 4 | 6 |  | 50 | 50 | 100 |
| III | Core1:Programming in C | 4 | 4 |  | 50 | 50 | 100 |
| III | Core Lab 1: Programming Lab –C | 4 |  | 3 | 50 | 50 | 100 |
| III | Core 2:Data structures | 4 | 4 |  | 50 | 50 | 100 |
| III | Allied 1: Discrete Mathematics | 4 | 5 |  | 50 | 50 | 100 |
| IV | Environmental Studies \* | 2 | 2 |  |  | 50 | 50 |
|  | **Total** | **26** | **27** | **3** | **300** | **350** | **650** |
| **SECOND SEMESTER** |
| I | Language – II | 4 | 6 |  | 50 | 50 | 100 |
| II | English – II | 4 | 6 |  | 50 | 50 | 100 |
| III | Core3: Programming in C++ | 4 | 5 |  | 50 | 50 | 100 |
| III | Core Lab2: Programming Lab –C++ | 4 |  | 4 | 50 | 50 | 100 |
| III | Core Lab3: Internet Basics Lab | 2 |  | 2 | 25 | 25 | 50 |
| III | Allied 2: Introduction to Statistics | 4 | 5 |  | 50 | 50 | 100 |
| IV | Value Education – Human Rights\* | 2 | 2 |  |  | 50 | 50 |
|  | **Total** | **24** | **24** | **6** | **275** | **325** | **600** |
| **THIRD SEMESTER** |
| III | Core 4: JAVA Programming | 4 | 6 |  | 50 | 50 | 100 |
| III | Core Lab 4: JAVA ProgrammingLab | 4 |  | 5 | 50 | 50 | 100 |
| III | Core 5: Artificial Intelligence | 4 | 6 |  | 50 | 50 | 100 |
| III | Allied 3: Software Engineering | 4 | 6 |  | 50 | 50 | 100 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| III | Skill based Subject1 : OperatingSystem | 3 | 5 |  | 30 | 45 | 75 |
| IV | Tamil \*\*/ Advanced Tamil (OR)Non-major elective-1 (Yoga for Human Excellence)\* /Women‟s Rights\* | 2 | 2 |  |  | 50 | 50 |
|  | **Total** | **21** | **25** | **5** | **230** | **295** | **525** |
| **FOURTH SEMESTER** |
| III | Core 6: Python Programming | 4 | 6 |  | 50 | 50 | 100 |
| III | Core 7: Introduction to MachineLearning | 4 | 6 |  | 50 | 50 | 100 |
| III | Core Lab 5: PythonProgramming Lab | 2 |  | 3 | 25 | 25 | 50 |
|  | Naan Muthalvan-Skill Course Office Fundamentals[http://kb.naanmudhalvan.in/Bharat](http://kb.naanmudhalvan.in/Bharathiar_University_%28BU%29) [hiar\_University\_(BU)](http://kb.naanmudhalvan.in/Bharathiar_University_%28BU%29) | 2 |  | 3 | 25 | 25 | 50 |
| III | Allied 4 : Design and analysis of Algorithms | 4 | 6 |  | 50 | 50 | 100 |
| III | Skill Based Subject 2 (Lab): Capstone Project Work (Based on AI& Machine Learning | 3 |  | 4 | 30 | 45 | 75 |
| IV | Tamil \*\*/ Advanced Tamil (OR) Non-major elective – II (General Awareness) \* | 2 | 2 |  |  | 50 | 50 |
|  | **Total** | **21** | **20** | **10** | **230** | **295** | **525** |
| **FIFTH SEMESTER** |
| III | Core 8: Advanced Machine Learningusing Python | 4 | 6 |  | 50 | 50 | 100 |
| III | Core Lab 6: Advanced MachineLearning using Python Lab | 4 |  | 6 | 50 | 50 | 100 |
| III | Core 9 : Fuzzy Logic and Neural Networks | 4 | 6 |  | 50 | 50 | 100 |
| III | Elective – I Fundamentals ofRobotics /Business Data Analytics/ Social Network Analysis | 4 | 6 |  | 50 | 50 | 100 |
| III | Skill Based Subject 3: DatabaseManagement Systems | 3 |  | 6 | 30 | 45 | 75 |
| IV | Naan Muthalvan – Skill Course – Cloud and IT Essentials for Employabilit**y** | 2 | 2 |  | 25 | 75 | 100 |
|  | **Total** | **21** | **20** | **12** | **255** | **320** | **575** |
| **SIXTH SEMESTER** |
| III | Core 10 :R Programming | 4 | 4 |  | 50 | 50 | 100 |
| III | Core Lab 7 : R Programming Lab | 4 |  | 5 | 50 | 50 | 100 |
| III | Core 11:Project Work Lab | 6 |  | 5 | 60 | 90 | 150 |
| III | Elective - IIDeep Learning/Web ApplicationSecurity/Software Agents | 4 | 5 |  | 50 | 50 | 100 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| III | Elective - III Natural LanguageProcessing/Client ServerComputing/Reinforcement Learning | 4 | 5 |  | 50 | 50 | 100 |
| III | Skill based Subject 4 (Lab): Oracleand SQL Lab | 3 | 4 |  | 30 | 45 | 75 |
|  | Naan Muthalvan - Skill Course Cyber Security **@** [http://kb.naanmudhalvan.in/images/7/71/](http://kb.naanmudhalvan.in/images/7/71/Cybersecurity.pdf) [Cybersecurity.pdf](http://kb.naanmudhalvan.in/images/7/71/Cybersecurity.pdf)(or) Machine Learning **#** [http://kb.naanmudhalvan.in/images/1/](http://kb.naanmudhalvan.in/images/1/19/PBL_Google.pdf) [19/PBL\_Google.pdf](http://kb.naanmudhalvan.in/images/1/19/PBL_Google.pdf)(or) Android APP Development **$**[http://kb.naanmudhalvan.in/images/0/08/](http://kb.naanmudhalvan.in/images/0/08/Android_App_Dev.pdf) [Android\_App\_Dev.pdf](http://kb.naanmudhalvan.in/images/0/08/Android_App_Dev.pdf) | 2 | 2 |  | 25 | 25 | 50 |
| V | Extension Activities\*\* | 2 |  |  | 50 | - | 50 |
|  | **Total** | **29** | **20** | **10** | **365** | **360** | **725** |
|  | **Grand Total** | **142** | **136** | **46** | **1655** |  **1945** |  **3600** |

* \*NoContinuousInternalAssessment(CIA),UniversityExaminationsOnly.
* \*\*NoUniversityExaminations,ContinuousInternalAssessment(CIA)Only.
* **#** Govt – Non-Autonomous Colleges, **$** Aided – Non-Autonomous Colleges, **@** Self - Financing **(**Non – Autonomous).
* Naan Mudhalvan – skill courses- external marks will be assessed by Industry and internal will be offered by respective course teacher.