|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | CoreLab1:Programming Lab– C | | 4 |  | 3 | 50 | 50 | 100 |
| III | Core 2:Data structures | | 4 | 4 |  | 50 | 50 | 100 |
| III | Allied1: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**&** | | 2 | 4 |  | 25 | 25 | 50 |
|  | Naan Muthalvan –Skill Course Effective English [http://kb.naanmudhalvan.in/images/c/c7](http://kb.naanmudhalvan.in/images/c/c7/Cambridge_Course_Details.pdf)  [/Cambridge\_Course\_Details.pdf](http://kb.naanmudhalvan.in/images/c/c7/Cambridge_Course_Details.pdf) | | 2 | 2 | - | 25 | 25 | 50 |
| III | Core3:Programming in C++ | | 4 | 5 |  | 50 | 50 | 100 |
| III | CoreLab2:Programming Lab-C++ | | 4 |  | 4 | 50 | 50 | 100 |
| III | CoreLab3:Internet Basics Lab | | 2 |  | 2 | 25 | 25 | 50 |
| III | Allied2: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** | | | | | | | | |
| I | | Language –III | 4 | 4 |  | 50 | 50 | 100 |
| II | | English – III **&** | 2 | 4 |  | 25 | 25 | 50 |
| III | | Core 4:JAVA Programming | 4 | 4 |  | 50 | 50 | 100 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| III | Core Lab 4:JAVA Programming  Lab | 3 |  | 3 | 25 | 25 | 50 |
| III | Core 5:Artificial Intelligence | 2 | 4 |  | 50 | 50 | 100 |
| III | Allied 3:Software Engineering**&** | 2 | 5 |  | 25 | 25 | 50 |
| III | Skill based Subject1:Operating  System | 3 | 4 |  | 30 | 45 | 75 |
| IV | Tamil \*\*/ Advanced Tamil(OR)Non-major elective- 1(Yoga for  Human Excellence)\* / Women’s Rights\* | 2 | 2 |  |  | 50 | 50 |
| IV | Naan Muthalvan –Skill Course - Programming Essentials for Employability | 2 | 2 |  | 25 | 75 | 100 |
|  | **Total** | **24** | **29** | **3** | **280** | **395** | **675** |

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| **FOURTH SEMESTER** | | | | | | | |
| I | Language –IV | 4 | 4 |  | 50 | 50 | 100 |
| II | English – IV **&** | 2 | 4 |  | 25 | 25 | 50 |
| III | Core 6:Python Programming | 3 | 4 |  | 50 | 50 | 100 |
| III | Core 7:Introduction to Machine  Learning | 4 | 3 |  | 50 | 50 | 100 |
| III | Core Lab 5:Python  Programming Lab | 2 |  | 3 | 25 | 25 | 50 |
|  | Naan Muthalvan-Skill Course Office Fundamentals  [http://kb.naanmudhalvan.in/Bharathiar\_U](http://kb.naanmudhalvan.in/Bharathiar_University_(BU))  [niversity\_(BU)](http://kb.naanmudhalvan.in/Bharathiar_University_(BU)) | 2 |  | 3 | 25 | 25 | 50 |
| III | Allied 4 :Design and analysis of Algorithms**&** | 2 | 4 |  | 25 | 25 | 50 |
| III | Skill Based Subject 2 (Lab):Capstone Project Work(Based  on AI & Machine Learning | 2 |  | 3 | 25 | 25 | 50 |
| IV | Tamil \*\*/ Advanced Tamil(OR) Non-major elective  – II (General Awareness)\* | 2 | 2 |  |  | 50 | 50 |
|  | **Total** | **22** | **21** | **9** | **275** | **325** | **575** |
| **FIFTH SEMESTER** | | | | | | | |
| III | Core 8:Advanced Machine Learning  Using Python | 4 | 6 |  | 50 | 50 | 100 |
| III | Core Lab 6:Advanced Machine  Learning using Python Lab | 4 |  | 6 | 25 | 25 | 50 |
| III | Core 9:Fuzzy Logic and Neural Networks | 4 | 6 |  | 50 | 50 | 100 |
| III | Elective–I Fundamentals of Robotics/Business Data Analytics/  Social Network Analysis | 4 | 6 |  | 50 | 50 | 100 |
| III | Skill Based Subject 3:Database  Management Systems | 3 |  | 6 | 30 | 45 | 75 |
| IV | Naan Muthalvan – Skill Course – Cloud and IT Essentials for Employability | 2 | 2 |  | 25 | 75 | 100 |
|  | **Total** | **21** | **20** | **12** | **230** | **295** | **525** |

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| **SIXTH SEMESTER** | | | | | | | |
| III | Core 10:R Programming | 4 | 5 |  | 50 | 50 | 100 |
| III | Core Lab 7 :R Programming Lab | 3 |  | 5 | 25 | 25 | 50 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| III | Core 11:Project Work Lab | 6 |  | 5 | 60 | 90 | 150 |
| III | Elective –II Deep Learning/Web Application Security/Software Agents | 4 | 5 |  | 50 | 50 | 100 |
| III | Elective-III Natural Language Processing / Client Server Computing / Reinforcement Learning | 4 | 5 |  | 50 | 50 | 100 |
| III | Skill based Subject 4 (Lab): Oracle  and SQL Lab | 2 | 3 |  | 25 | 25 | 50 |
|  | Naan Muthalvan-Skill Course Cyber Security **@**[http://kb.naanmudhalvan.in/images/7/](http://kb.naanmudhalvan.in/images/7/71/Cybersecurity.pdf) [71/Cybersecurity.pdf](http://kb.naanmudhalvan.in/images/7/71/Cybersecurity.pdf)  (or)Machine Learning**#**[http://kb.naanmudhalvan.in/](http://kb.naanmudhalvan.in/images/1/19/PBL_Google.pdf) [images/1/19/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** | **27** | **20** | **10** | **335** | **315** | **650** |
|  | **Grand Total** | **144** | **139** | **45** | **1695** | **2005** | **3700** |

* \*No Continuous Internal Assessment(CIA),University Examinations Only.
* \*\*No University Examinations, Continuous Internal Assessment(CIA) Only.
* **&**University semester examination (CEE) will be conducted for 50 marks (As per existing pattern Of Examination)and it will be converted for 25 marks.
* **#** Govt –Non-Autonomous Colleges, **$** Aided–Non-Autonomous Colleges, **@** Self-Financing Colleges **(**Non– Autonomous).
* Naan Mudhalvan– skill courses-external marks will be assessed by Industry and internal will be offered by respective course teacher