**ANNEXURE- I**

**STATE BOARD OF TECHNICAL EDUCATION & TRAINING, TAMILNADU 1092 DIPLOMA IN AERONAUTICAL ENGINEERING SYLLABUS N – SCHEME**

**(Implemented from the Academic year 2020-2021 onwards)**

**CURRICULUM OUTLINE**

**THIRD SEMESTER (FT)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subject Code** | **Subjects** | **HOURS PER WEEK** | | | |
| **Theory Hours** | **Tutorial / Drawing** | **Practical Hours** | **Total Hours** |
| 4094310 | Basics of Electronics & Microprocessor Engineering | **5** | **-** | **-** | **5** |
| 4094320 | Aircraft Electrical Systems | **5** | **-** | **-** | **5** |
| 4094330 | Basic of Thermodynamics and Fluid Mechanics | **5** | **-** | **-** | **5** |
| 4094340 | Basics of Electronics & microprocessor practical | **-** | **-** | **4** | **4** |
| 4094350 | Aircraft Electrical Systems practical | **-** | **-** | **4** | **4** |
| 4094360 | Basic of Thermodynamics and Fluid Mechanics Practical |  |  | **5** | **5** |
| 4094370 | Aero Modeling practical using CAD | **-** | **-** | **4** | **4** |
|  | | **15** | **-** | **17** | **32** |
| Extra / Co-Curricular activities | |  |  |  |  |
| Physical Education | | **-** | **-** | **-** | **2** |
| Library | | **-** | - | - | **1** |
| **TOTAL** | |  |  |  | **35** |

**FOURTH SEMESTER (FT)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subject Code** | **Subjects** | **HOURS PER WEEK** | | | |
| **Theory Hours** | **Tutorial / Drawing** | **Practical Hours** | **Total Hours** |
| 4094410 | Materials and Testing processes | **5** | **-** | **-** | **5** |
| 4094420 | Components of Aircraft Structures | **5** | **-** | **-** | **5** |
| 4094430 | Aerodynamics | **5** | **-** | **-** | **5** |
| 4094440 | Metrology and Measurements | **5** | **-** | **-** | **4** |
| 4094450 | Materials and Testing processes practical | **-** | **-** | **4** | **5** |
| 4094460 | Components of Aircraft Structures practical |  |  | **4** | **4** |
| 4094470 | Aerodynamics practical | **-** | **-** | **4** | **4** |
|  | | **20** | **-** | **12** | **32** |
| Extra / Co-Curricular activities | |  |  |  |  |
| Physical Education | | **-** | **-** | **-** | **2** |
| Library | | **-** | - | - | **1** |
| **TOTAL** | |  |  |  | **35** |

**FIFTH SEMESTER (FT)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subject Code** | **Subjects** | **HOURS PER WEEK** | | | |
| **Theory Hours** | **Tutorial / Drawing** | **Practical Hours** | **Total Hours** |
| 4094510 | Aircraft System | **5** | **-** | **-** | **5** |
| 4094520 | Aircraft Engine Propulsion | **5** | **-** | **-** | **5** |
|  | **Elective Theory – I** | | | | |
| 4094531 | Helicopter Modelling | **5** | **-** | **-** | **5** |
| 4094532 | Advanced Airframe Structure | **5** | **-** | **-** |
| 4094540 | Aircraft System Practical | **-** | **-** | **5** | **5** |
| 4094550 | Aircraft Engine Propulsion Practical | **-** |  | **4** | **4** |
| 4094560 | Helicopter Modeling Practical | **-** | **-** | **4** | **4** |
| 4094570 | Entrepreneurship & Startups | **-** | **-** | **4** | **4** |
|  | | **15** |  | **17** | **32** |
| Extra / Co-Curricular activities | |  |  |  |  |
| Physical Education | | **-** | **-** | **-** | **2** |
| Library | | **-** | - | - | **1** |
| **TOTAL** | |  | **-** |  | **35** |

**SIXTH SEMESTER (FT)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subject Code** | **Subjects** | **HOURS PER WEEK** | | | |
| **Theory Hours** | **Tutorial / Drawing** | **Practical Hours** | **Total Hours** |
| 4094610 | UAV System Design | **5** | **-** | **-** | **5** |
| 4094620 | Aircraft Structure Repair | **5** | **-** | **-** | **5** |
|  | **Elective Theory – II** | | | | |
| 4094631 | Aircraft maintenance & practice | **5** | **-** | **-** | **5** |
| 4094632 | Introduction to Rocket | **5** | **-** | **-** |
| 4094640 | UAV System Design Practical | **-** | **-** | **5** | **5** |
| 4094650 | Aircraft Structure Repair Practical | **-** |  | **6** | **6** |
| 4094660 | Project work and internship | **-** | **-** | **6** | **6** |
|  | | **15** |  | **17** | **32** |
| Extra / Co-Curricular activities | |  |  |  |  |
| Physical Education | | **-** | **-** | **-** | **2** |
| Library | | **-** | - | - | **1** |
| **TOTAL** | |  | **-** |  | **35** |