**ANNEXURE- I**

**STATE BOARD OF TECHNICAL EDUCATION & TRAINING, TAMILNADU 1091 DIPLOMA IN AIRCRAFT MAINTENANCE ENGINEERING (AVIONICS) SYLLABU (Implemented from the Academic year 2020-2021 onwards)**

**N – SCHEME**

**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** |
| 4093330 | Programming Language in C & C++ | **5** | **-** | **-** | **5** |
| 4094340 | Basics of Electronics & microprocessor practical\* | **-** | **-** | **4** | **4** |
| 4094350 | Aircraft Electrical Systems practical\* | **-** | **-** | **4** | **4** |
| 4093360 | Programming Language C & C++ 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** |

\* Common to Aeronautical Engineering Course

\*\* Common to all Diploma Courses

**FOURTH SEMESTER (FT)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subject Code** | **Subjects** | **HOURS PER WEEK** | | | |
| **Theory Hours** | **Tutorial / Drawing** | **Practical Hours** | **Total Hours** |
| 4093410 | Avionics System-I | **5** | **-** | **-** | **5** |
| 4094420 | Components of Aircraft Structures\* | **5** | **-** | **-** | **5** |
| 4093430 | Flight Mechanics | **5** | **-** | **-** | **5** |
| 4093440 | Civil Aviation Requirements | **5** | **-** | **-** | **4** |
| 4093450 | Avionics System-I Practical | **-** | **-** | **4** | **5** |
| 4094460 | Components of Aircraft Structures practical\* |  |  | **4** | **4** |
| 4093470 | Flight Mechanics practical | **-** | **-** | **4** | **4** |
|  | | **20** | **-** | **12** | **32** |
| Extra / Co-Curricular activities | |  |  |  |  |
| Physical Education | | **-** | **-** | **-** | **2** |
| Library | | **-** | - | - | **1** |
| **TOTAL** | |  |  |  | **35** |

\* Common to Aeronautical Engineering Course

\*\* Common to all Diploma Courses

**FIFTH SEMESTER (FT)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subject Code** | **Subjects** | **HOURS PER WEEK** | | | |
| **Theory Hours** | **Tutorial / Drawing** | **Practical Hours** | **Total Hours** |
| 4094510 | Aircraft System \* | **5** | **-** | **-** | **5** |
| 4093520 | Avionics Systems - II | **5** | **-** | **-** | **5** |
|  | **Elective Theory –I** | | | | |
| 4093531 | UAV System Design | **5** | **-** | **-** | **5** |
| 4094531 | Helicopter Modeling\* | **5** | **-** | **-** |
| 4094540 | Aircraft Systems Practical\* | **-** | **-** | **5** | **5** |
| 4093550 | Avionics System - II Practical | **-** |  | **4** | **4** |
| 4094560 | Helicopter Modeling Practical \* | **-** | **-** | **4** | **4** |
| 4094570 | Entrepreneurships & startup\* | **-** | **-** | **4** | **4** |
|  | | **15** |  | **17** | **32** |
| Extra / Co-Curricular activities | |  |  |  |  |
| Physical Education | | **-** | **-** | **-** | **2** |
| Library | | **-** | - | - | **1** |
| **TOTAL** | |  | **-** |  | **35** |

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\*\* Common to all Diploma Courses

**SIXTH SEMESTER (FT)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subject Code** | **Subjects** | **HOURS PER WEEK** | | | |
| **Theory Hours** | **Tutorial / Drawing** | **Practical Hours** | **Total Hours** |
| 4093610 | Fundamentals of Control Systems | **5** | **-** | **-** | **5** |
| 4093620 | Aircraft Navigator Systems | **5** | **-** | **-** | **5** |
|  | **Elective Theory -II** | | | | |
| 4093631 | Air Worthiness Requirements | **5** | **-** | **-** | **5** |
| 4093632 | Aircraft Ground Handling | **5** | **-** | **-** |
| 4093640 | Flight Control practical using MAT LAB | **-** | **-** | **5** | **5** |
| 4093650 | Aircraft Navigation Systems Practical | **-** | **-** | **6** | **6** |
| 4093660 | Project work and internship | **-** | **-** | **6** | **6** |
|  | | **15** |  | **17** | **32** |
| Extra / Co-Curricular activities | |  |  |  |  |
| Physical Education | | **-** | **-** | **-** | **2** |
| Library | | **-** | - | - | **1** |
| **TOTAL** | |  | **-** |  | **35** |

\* Common to Aeronautical Engineering Course

\*\* Common to all Diploma Courses