**INDIANA AEROSPACE UNIVERSITY**

IAU Town Center Basak, Kagudoy Rd., Lapu-Lapu City

**BACHELOR OF SCIENCE IN AVIATION TECHNOLOGY MAJOR IN FLYING**

For First Year, Revised 2023. Academic Year 2023-2024

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **FIRST YEAR** |  |  |  |  |  |
|  | FIRST SEMESTER |  |  |  |  |  | SECOND SEMESTER |  |  |  |  |
| **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** | **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** |
| Gen Ed 1 |  Contemporary World | 3 | 0 | 3 | NA |  Gen Ed 3 |  Reading in Philippines History | 3 | 0 | 3 | NA |
| Draw 100 | Engineering Drawing 1 | 3 | 0 | 3 | NA |  |  |  |  |  |  |
| Math 100 | College Algebra | 3 | 0 | 3 | NA | Draw 120 | Engineering Drawing 2 | 3 | 0 | 3 | Draw 100 |
| Gen Ed 2 | Understanding the self | 3 | 0 | 3 | NA | Math 110 | Plane and Spherical Trigonometry | 3 | 0 | 3 | Math 100 |
| Math Plus | Basic Math | 3 | 0 | 3 | NA | Math 120 | Analytic and Solid Geometry | 3 | 0 | 3 | Math 100 |
| Eng Plus | Basic English | 3 | 0 | 3 | NA | Gen Ed 4 | Purposive Communication | 3 | 0 | 3 | NA |
| ATF 111 | Theory of Flight | 3 | 0 | 3 | NA | ATF 121 | Basic Weight & Balance | 3 | 0 | 3 | ATF 111 |
| ATF 112 | Basic Aircraft Instruments | 3 | 0 | 3 | NA | ATF 122 | CAR/Emergency Procedures | 3 | 0 | 3 | ATF 113 |
| ATF 113 | ATC Procedures/Radio Comms | 3 | 0 | 3 | NA | ATF 123 | A/C Powerplant (Recip Engines) | 3 | 3 | 4 | ATF 112 |
| CF 1 | The Commandments & Morals | 1 | 0 | 1 | NA | CF 2 | The Creed | 1 | 0 | 1 | CF 1 |
| PATHFIT1 |  Physical Activities Towards Health and Fitness | 2 | 0 | 2 | NA | PATHFIT2  |  Exercise Based-Fitness Activities | 2 | 0 | 2 | PATHFIT1 |
| NSTP 1 | Civil Welfare Training Program 1 | 3 | 0 | 3 | NA | NSTP 2 | Civil Welfare Training Program 2 | 3 | 0 | 3 | NSTP 1 |
|  |  | **33** | **0** | **33** |  |  |  | **30** | **3** | **31** |  |
|  |  |  |  |  | **SECOND YEAR** |  |  |  |  |  |
|  | FIRST SEMESTER |  |  |  |  |  | SECOND SEMESTER |  |  |  |  |
| **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** | **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** |
| Gen Ed 5 |  Mathematics in the Modern World | 3 | 0 | 3 | NA | Gen Ed 8 |  Environmental Science | 3 | 0 | 3 | NA |
| Gen Ed 6 |  Science Techonology and Society | 3 | 0 | 3 | NA |  Gen Ed 9 |  Entrepreneurial Mind | 3 | 0 | 3 | NA |
| Gen Ed 7 |  Ethics | 3 | 0 | 3 | NA | Gen Ed 10 |  Great Books | 3 | 0 | 3 | NA |
| Phys 210 |  Mechanics and Heat | 3 | 3 | 4 | Math 120 | Math 220 |  Integral Calculus | 4 | 0 | 4 | Math 211 |
| ATF 211 | A/C Performance  | 3 | 0 | 3 | ATF 121 | Phys 220 |  Sound, Light, Elec. & Mag. | 3 | 3 | 4 | Phys 210 |
| ATF 212 | Aviation Meteorology | 4 | 0 | 4 | NA | ATF 221 | Flight Computer & Flight Plan | 4 | 0 | 4 | ATF 211 |
|  |  |  |  |  |  | ATF 222 | Radio Navigation | 3 | 0 | 3 | ATF 112 |
| Math 210 | Statistics | 3 | 0 | 3 | Math Plus | ATF 223 | Human Factors with CRM | 4 | 0 | 4 | ATF 211 |
| CF 3 |  The Sacraments | 1 | 0 | 1 | CF 2 | CF 4 | Bible Study | 1 | 0 | 1 | CF 3 |
| Math 211 | Differential Calculus | 4 | 0 | 4 | Math 120 | PATHFIT 4 |  Sports Coaching and Sports Officiating | 2 | 0 | 2 | PATHFIT3 |
| PATHFIT3 | Sports and Management Program |  2 |  0 |  2 | PATHFIT2 |  |  | **30** | **3** | **31** |  |
|  |  | **29** | **3** | **30** |  |  |  |  |  |  |  |
|  |  |  |  |  | **THIRD YEAR** |  |  |  |  |  |
|  | FIRST SEMESTER |  |  |  |  |  | SECOND SEMESTER |  |  |  |  |
| **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** | **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** |
| Gen Ed 11 |  Art Appreciation | 3 | 0 | 3 | NA | Gen Ed 12 |  Life and Works of Rizal | 3 | 0 | 3 | NA |
| Mech 310 | Engineering Mechanics | 5 | 0 | 5 | Phys 220 | ATF 320 | Fundamentals of Aerodynamics | 3 | 0 | 3 | ATF 211 |
| Mech 311 | Thermodynamics | 3 | 0 | 3 | Phys 220 | ATF 321 |  IFR Charts and Proc. | 4 | 0 | 4 | ATF 222 |
|  |  |  |  |  |  | ATF 322 |  Principles of Instrument Flight | 3 | 0 | 3 | ATF 112 |
| ATF 311 | A/C Propellers | 2 |  | 2 | ATF 123 |  |  |  |  |  |  |
| ATF 312 | A/C Fuels and Lubricants | 3 | 0 | 3 | ATF 123 |  ATF 323 | A/C Materials, Const & Repairs (Non- Metals) | 2 | 6 | 4 | Draw 120 |
| ATF 313 | Advance ATC Flight Environment | 3 | 0 | 3 | ATF 113 | ATF 324 |  Turbine Systems | 3 | 3 | 4 | ATF 311 |
| Research 1 | Thesis Writing 1 | 3 | 0 | 2 | Math 210 |  |  |  |  |  |  |
|  |  | **22** | **0** | **22** |  |  |  | **18** | **9** | **21** |  |
|  |  |  |  |  | **FOURTH YEAR** |  |  |  |  |  |
|  |  FIRST SEMESTER |  |  |  |  |  |  SECOND SEMESTER |  |  |  |  |
| **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units Pre Req** | **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units**  | **Pre Req** |
| ATF 410 | A/C Systems | 2 | 0 | 2 | ATF 324 |  |  |  |  |  |  |
| ATF 411 | Multi Engine Concepts | 3 | 0 | 3 | ATF 321 | ATF 421 | A/C Electrical System (AC-DC) | 2 | 3 | 3 | ATF 410 |
| ATF 412 | Pilot Instructor Ratings 1 | 4 | 0 | 4 | ATF 321 | ATF 422 | Pilot Instructor Rating 2 | 4 | 0 | 4 | ATF 412 |
| ATF 413 | IFR Flight Consideration | 4 | 0 | 4 | ATF 321 |  |  | **6** | **3** | **7** |  |
| ATF 414 | A/C Materials, Const & Repairs (Metals) | 2 | 6 | 4 | DRAW 120 |  |  |  |  |  |  |
|  |  | **15** | **6** | **17** |  |  |  |  |  |  |  |

**Summary**

|  |  |
| --- | --- |
| **First Year** | 33+31=64 Units |
| **Second Year** | **30+31= 61 Units** |
| **Third Year** | **22+21=43 Units** |
| **Fourth Year** | **17+7= 24 Units** |
| Total | **192 Units** |

**Mandatory number of flight hours before proceeding to any 3rd year major subjects is 40 hours in preparation for CAAP minimum Private Pilot License requirement.**

**Mandatory number of flight hours before proceeding to any 4th year major subjects is 12 hours Cessna 172 time in preparation for CAAP minimum additional rating requirements.**

**Mandatory number of flight hours before proceeding to any 4th year 2nd sem major subjects is 25 hours Cessna 172 instrument time in preparation for CAAP minimum Commercial Pilot and Instrument Rating requirements.**

**Mandatory number of Flight hours for graduation is an accumulated flight time of 190 hours, of which 127 hours in Cessna 150, 48 hours in Cessna 172, 15 hours in Piper Aztec, and minimum 25 hours flight simulator. Total Flying Time is required for CAAP Commercial Pilot License, Multi-Engine Rating, and Instrument Rating application.**