

**INDIANA AEROSPACE UNIVERSITY**

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

**BACHELOR OF SCIENCE IN AVIONICS TECHNOLOGY**

Revised Curriculum per CHED Memo Order No.93, S.2017

Effective Academic Year 2018-2019

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **FIRST YEAR** |  |  |  |  |  |
|  | FIRST SEMESTER |  |  |  |  |  | SECOND SEMESTER |  |  |  |  |
| **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** | **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** |
| ENGL 1 | English for the Professions | 3 | 0 | 3 |  |  Gen Ed 4 |  Purposive Communication |  |  |  |  |
| Gen Ed 1 |  Contemporary World | 3 | 0 | 3 |  | Gen Ed 5 |  Mathematics in the Modern World | 3 | 0 | 3 |  |
| Gen Ed 2 |  Understanding the Self | 3 | 0 | 3 |  |  Gen Ed 6 |  Science & Technology & Society | 3 | 0 | 3 |  |
| Gen Ed 3 |  Readings in Phil, History | 3 | 0 | 3 |  | Draw 120 |  Engineering Drawing 2 | 3 | 0 | 3 | Draw 100  |
| Math 1 |  Math Enhancement | 3 | 0 | 3 |  |  AVT 121 |  Fundamentals of AC-DC | 2 | 3 | 3 |  |
| Draw 100 |  Engineering Drawing 1 | 3 | 0 | 3 |  |  AVT 122 |  Workshop 1 - Hand Tools and | 2 | 6 | 3 |  |
| AVT 111 |  Aviation Orientation | 2 | 0 | 2 |  |  |  Electrical Test Equipments |  |  |  |  |
| AVT 112 |  Aviation Safety | 2 | 0 | 2 |  |  AVT 123 |  Essentials of Communication | 3 | 0 | 3 |  |
| AVT 113 |  Theory of Flight | 3 | 0 | 3 |  |  AVT 124 |  A/C Materials Construction & Repairs 1 (Non-Metals) | 2 | 6 | 4 |  |
| Theology 1 | The Commandments & Morals | 1 | 0 | 1 |  | Theology 2  | The Creed | 1 | 0 | 1 | Theology 1 |
| PATHFIT1 |  Physical Activities Towards Health and Fitness | 2 | 0 | 2 |  | PATHFIT2  |  Exercise Based-Fitness Activities | 2 | 0 | 2 | PATHFIT1 |
| NSTP 1 | Civil Welfare Training Program 1 | 3 | 0 | 3 |  | NSTP 2 | Civil Welfare Training Program 2 | 3 | 0 | 3 | NSTP 1 |
| **Total** |  | **31** | **0** | **31** |  |  |  | **27** | **15** | **30** |  |
|  |  **SUMMER** |  |  |  |  |  |  |  |  |  |  |
| Math 120 | Analytic and Solid Geometry | 3 | 0 | 3 |  |  |  |  |  |  |  |
|  |  | **3** | **0** | **3** |  |  |  |  |  |  |  |
|  |  |  |  |  | **SECOND YEAR** |  |  |  |  |  |
|  | FIRST SEMESTER |  |  |  |  |  | SECOND SEMESTER |  |  |  |  |
| **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** | **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** |
| Gen Ed 7 |  Ethics |  3 | 0 | 3 |  |  Gen Ed 10 |  Great Books | 3 | 0 | 3 |  |
| Gen Ed 8  |  Environmental Science |  3 |  0 | 3 |  |  Gen Ed 11 |  Art Appreciation | 3 | 0 | 3 |  |
| Gen Ed 9 |  Entrepreneurial Mind |  2 |  0 | 2 |  | Gen Ed 12 |  Rizal’s Life and works | 3 | 0 | 3 |  |
| AVT 211 |  Electronic 1 - Semi Conductors |  3 |  1 | 3 |  AVT 121 |  AVT 221 |  Digital Techniques Components & Cicuitry | 2 | 3 | 3 | AVT 211 |
| AVT 212 |  Antenna System |  3 | 0 | 3 |  |  AVT 222 |  Airbone Communication Elect. | 3 | 0 | 3 |  |
| AVT 213 |  Basic A/C Flight Control & Nav  Instruments |  2 | 3 | 3 |  AVT 113 |  AVT 223 |  Airports, Airways & ATC Systems | 3 | 1 | 4 |  |
| AVT 214 |  Basic A/C Airframe & Electrical | 2 | 3 | 3 |  AVT 121 |  AVT 224 |  A/C Powerplant 1 (Rec. Engines) | 3 | 3 | 4 |  |
|  |  Distibution System |  |  |  |  |  AVT 225 |  Weather Protection & Corrosion Prevention | 3 | 0 | 3 |  |
| AVT 215 |  Aviation Radio-Communication | 2 | 3 | 3 |  AVT 123 |  AVT 226 |  Electronics 2 - Solid State Devices | 3 | 1 | 4 | AVT 211 |
| Theology 3 |  The Sacraments | 1 | 0 | 1 |  Theology2 |  Theology 4 |  Bible Study | 1 | 0 | 1 | Theology 3 |
| PATHFIT3 |  Sports and Management Program | 2 | 0 | 2 |  PATHFIT2 |  PATHFIT 4 |  Sports Coaching and Sports Officiating | 2 | 0 | 2 | PATHFIT3 |
| **Total** |  |  **18** | **10** | **21** |  |  | **29** | **8** | **33** |  |
|  | **Upon completion of the first two years of the course, the student will be conferred the certificate of Associate in Avionics Technology provided he/she has undergone the 2,400 hours ON-THE JOB Training (Requirements for Graduation in Associate in AVT).** |  |
|  |  |  |  |  | **THIRD YEAR** |  |  |  |  |  |
|  | FIRST SEMESTER |  |  |  |  |  | SECOND SEMESTER |  |  |  |  |
| **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** | **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units** | **Pre Req** |
| Mech 310 |  Engineering Mechanic  | 5 |  0 | 5 |  |  Mech 320 |  Strength of Materials | 3 | 0 | 3 |  Mech 310 |
| Research |  Thesis Writing 1  | 3 | 0 | 3 |  |  AVT 320 |  Fundamentals of Aerodynamics | 3 | 0 | 3 |  |
| AVT 310 |  Thermodynamics | 3 | 0 | 3 |  |  AVT 321 |  Modern and Latest Developments | 3 | 0 | 3 |  AVT 311 |
| AVT 311 |  Navigational Aids | 3 |  0 | 3 |  AVT 222 |  AVT 322 |  Elements of Microwave | 3 | 0 | 3 |  AVT 212 |
| AVT 312 |  Radar | 3 | 0 | 3 |  |  AVT 323 |  Wired & Wireless Communication | 3 | 1 | 3 |  |
| AVT 313 |  Data Communication | 3 | 0 | 3 |  AVT 221, AVT 226 |  AVT 324 |  Auto Pilot | 3 | 0 | 3 |  AVT 311, AVT 312 |
| AVT 314 |  Microprocessor | 3 | 0 | 3 |  |  AVT 325 |  Air Laws & Civil Air Regulations (AMO) | 2 | 0 | 2 |  |
| AVT 315 | Powerplant 2 (Turbine Engines) | 3 | 3 | 4 |  AVT 224 |  AVT 326 |  Introduction to Simulator Systems | 3 | 3 | 3 |  AVT 221, AVT 226 |
| **Total** |  | **26** | **3** | **27** |  |  |  | **23** | **4** | **23** |  |
|  |  **SUMMER** |  |  |  |  |  |  |  |  |  |  |
| **AVT 004** | Advanced Sim Systems + Intern (600Hrs) \* | 2 | 4 | 6 |  AVT 326 |  |  |  |  |  |  |
|  |  \*\*Elective | **2** | **4** | **6** |  |  |  |  |  |  |  |
|  |  |  |  |  | **FOURTH YEAR** |  |  |  |  |  |
|  |  FIRST SEMESTER |  |  |  |  |  |  SECOND SEMESTER |  |  |  |  |
| **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units Pre Req** | **Subcodes** | **Descriptive Titles** | **Lec** | **Lab** | **Units**  | **Pre Req** |
| AVT 410 |  Hydraulics, Pneumatics & Servo Mechnanics | 3 | 3 | 4 |  |  AVT 45 | OJT/Practicum (1,200 Hours) | 0 | 0 | 6 |  |
| AVT 411  |  Advanced Avionics (Fire Protection Systems) | 3 | 0 | 3 |  AVT 321, AVT 311 |  |  |  |  |  |  |
| **Total** |  | **6** | **3** | **7** |  |  |  | **0** | **0** | **6** |  |

**Summary**

|  |  |
| --- | --- |
| **First Year** | 31+30= 61 Units |
| **summer** |  **9 Units** |
|  **Second Year** | **27+27= 54 Units**Upon the completion of the four-year course, the student is conferred with the degree in Bachelor of Science in Avionics Technology (BSAVT) provided that he/she has undergone 1,200 hours On-the-Job- Training. |
| **Third Year** | **27+23= 50 Units** |
| **summer** |  **6 Units \*\*** |
| **Fourth Year** | **7 + 6= 13 Units** |
| Total | **187 Units** |