

**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** |