

PROGRAM STRUCTURE

The program is structured with basis in aircraft technology curricula that is outlined by the governing local and European civil aviation authorities as category “B” under Part 66 and CAR 147 of the corresponding legislations, respectively. The program structure covers three main areas referred to as, General, Core, and Concentration areas. The area of concentrations for AET are two: Aeromechanical, and Aero-electronics (Avionics.) The Aeromechanical option covers all aspects of the curricula relative to mechanical sciences based aircraft systems and leads to the category “B1.1” license. The Aero-electronics (Avionics) option covers those aspects of electrical and electronics based aircraft systems and leads to the category “B2” license. The following is a breakdown of credit hour content of each of the three main areas for each of the concentrations:

a. Aeromechanical option

	Credits
1. General Education Courses	39
2. Core Area Courses	50
3. Area of Concentration (High-Level Courses)	39
Total Credit Hours	128

b. Aero-electronic (avionics) option

	Credits
1. General Education Courses	39
2. Core Area Courses	50
3. Area of Concentration (High-Level Courses)	39
Total Credit Hours	128

In the following, the program structure for each of the options lists the courses constituting the option’s structure. The Diploma program is part of the Higher Diploma program and the course list for the Diploma are also courses in the Higher Diploma. The Study Plans (flow charts) that follow display the course sequences into the three years. The first two years constitute the Diploma degree and the third-year top-up completes the requirements for the Higher Diploma. Upon completion of the Higher Diploma, the student also completes the requirements of the associated license.

PROGRAM STRUCTURE

AIRCRAFT ENGINEERING TECHNOLOGY

Aero-Mechanical

	Credits
General Education Courses	39
Core Area	50
Area of Concentration	39
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Total Degree Credits	128

General Education Courses

CourseTitle

Credits

MATH 100 Precalculus.....	4
MATH 111 Calculus I	3
PHYS 111 Physics I.	3
PHYS 111P Physics I Lab.....	1
PHYS 112 Physics II.	3
PHYS 112P Physics II Lab.....	1
ICT 110 Introd.to Programming & Problem Solving with Lab	3
ENGL 111 English Communication Skills	3
ENGL 112 Technical English	3
ENGL 116 English for Aviation.....	3
HUM 110 Lifelong Learning Skills.....	3
HUM 111 Islamic Culture	3
HUM 112 Emirates Society & Culture.....	3
HUM 402 Creativity Innovation and Entrepreneurship.....	3

Total Credits **39**

Core Area (EASA CAT B)

Course Title

Credits

AVN 110 Electrical Engineering I (3B)	3
AVN 110P Electrical Engineering I Lab.....	1
AVN 211 Electrical Engineering II (3B)	3
AVN 211P Electrical Engineering II Lab.....	1
AVN 219 Electronics I.	3
AVN 229 Digital Techniques I (5B).	3
AVSC 210 Human Factors (9B)	3
AME 212 Adv. Materials & Hardware I	3
AME 214 Adv. Aerodynamics (8 B1).....	3
AME 214P Adv. Aerodynamics (8 B1) Lab	1
AME 218 Adv. Maint. Prac. I (7 B1)	3
AME 218P Adv. Maint. Prac. I Lab.....	2
AME 226 Adv. Materials & Hardware II.....	3
AME 227 Adv. Maint. Prac. II (7 B1)	4
AME 228 Adv. Maint. Prac. III (7 B1)	3
AME 228P Adv. Maint. Prac. III Lab (7 B1)....	1
AME 237 Adv. Maint. Prac. IV (7 B1).....	3

AME 237P Adv. Maint. Prac. IV (7 B1) Lab	2
AME 238 Adv. Maint. Prac. V (7 B1)	3
AME 238P Adv. Maint. Prac. V (7 B1) Lab	2

Total Credits **50**

Area of Concentration

CourseTitle

Credits

AVSC 220 Aviation Legislation – EASA (10 B) .	3
AVSC 225 Aviation Legislation - GCAA.....	3
AVSC 260 Engineering Project.....	3
AVN 236 Digital Techniques II (5B).	3
AME 310 Turbine Engines I (15 B1)	3
AME 315 Propellers (17 B1)	3
AME 314 Air. Struct. & Sys. I (11 B1).....	3
AME 316 Air. Struct. & Sys. II (11 B1).....	3
AME 317 Air. Struct. & Sys. III (11 B1)	3
AME 317P Air. Struct. & Sys. III Lab (11 B1) .	1
AME 323 Air. Struct. & Sys. IV (11 B1).....	3
AME 323P Air. Struct. & Sys. IV Lab (11 B1) .	1
AME 325 Turbine Engines II (15 B1)	3
AME 325P Turbine Engines II Lab (15 B1)	1
AME 340 OJT / Internship	3

Total Credits **39**

Total Degree Credits.....**128**

**PROGRAM STRUCTURE
AIRCRAFT ENGINEERING TECHNOLOGY**

Aero-Electronics (Avionics)

Credits

General Education Courses	39
Core Area	50
Area of Concentration	39

Total Degree Credits
128

General Education Courses

CourseTitle

Credits

MATH-100 Precalculus	4
MATH-111 Calculus I	3
PHYS 111 Physics I	3
PHYS 111P Physics I Lab.....	1
PHYS 112 Physics II.....	3
PHYS 112P Physics II Lab.....	1
ICT 110 Introd.to Programming & Problem Solving with Lab	3
ENGL-111 English Communication Skills	3
ENGL-112 Technical English	3
ENGL-116 English for Aviation	3
HUM-110 Life-long Learning Skills	3
HUM-111 Islamic Culture.....	3
HUM-112 Emirates Society & Culture	3
HUM 402 Creativity Innovation and Entrepreneurship	3

Total Credits **39**

Core Area (EASA CAT B)

Course

Title

Credits

AVN 110 Electrical Engineering I (3B)	3
AVN 110P Electrical Engineering I Lab	1
AVN 211 Electrical Engineering II (3B)	3
AVN 211P Electrical Engineering II Lab	1
AVN 219 Electronics I	3
AVN 229 Digital Techniques I (5B)	3

AVSC 210 Human Factors (9B).....	3
AME 212 Adv. Materials & Hardware I	3
AME 214 Adv. Aerodynamics (8 B1)	3
AME 214P Adv. Aerodynamics Lab (8 B1).....	1
AME 218 Adv. Maint. Prac. I (7 B1).....	3
AME 218P Adv. Maint. Prac. I Lab	2
AME 226 Adv. Materials & Hardware II	3
AME 227 Adv. Maint. Prac. II (7 B1).....	4
AME 228 Adv. Maint. Prac. III (7 B1).....	3
AME 228P Adv. Maint. Prac. III Lab (7 B1)	1
AME 237 Adv. Maint. Prac. IV (7 B1)	3
AME 237P Adv. Maint. Prac. IV Lab (7 B1)....	2
AME 238 Adv. Maint. Prac. V (7 B1)	3
AME 238P Adv. Maint. Prac. V Lab (7 B1).....	2

Total Credits **50**

Area of Concentration

CourseTitle

Credits

AVSC 220 Aviation Legislation – EASA (10 B) . 3	3
AVSC 225 Aviation Legislation - GCAA.....	3
AVSC 260 Engineering Project.....	3
AVN 236 Digital Techniques II (5 B).....	3
AVN 237 Electronics II.....	3
AVN 317 Digital Techniques III (5 B2)	3
AVN 317P Digital Techniques III Lab (5 B2) ..	1
AVN 314 Avionics Systems I (13 B2)	3
AVN 315 Avionics Systems II (13 B2)	3
AVN 316 Avionics Systems III (13 B2)	4
AVN 324 Avionics Systems IV (13 B2).....	4
AME 326 Propellers & FADEC (14 B2)	3
AVN 340 OJT / Internship	3

Total Credits **39**

Total Degree Credits **128**