



ABU DHABI POLYTECHNIC

Aircraft Engineering Technology AET





Study Plan



Applied Bachelor in Aircraft Engineering Technology ABAET

Aeromechanics

ABAET - Aeromechanics

Year 1

Semester	Course Code	Course Title	LT	PT	TT	CH	CR
Fall	MATH 1003	Mathematics for Aviation CAT B	3	0	4	7	3
	PHYS 1015	Physics I For Aviation	3	0	0	3	3
	PHYS 1016	Physics I Lab. For Aviation	0	3	0	3	1
	PHYS 1017	Physics II For Aviation	3	0	1	4	3
	ENGL 1001	English Skills	1	2	0	3	0
	ICT 1011	Introd. to Progr. & Probl. Solving	2	2	0	4	3
	HUM 1013	Arabic Communications (W.B.)	3	0	0	3	3
Spring	ENGL 1011	Academic English I	3	2	0	5	3
	AETV 1010	Electrical Engineering I	3	0	2	5	3
	AETV 1011	Electrical Engineering I Lab	0	3	1	4	1
	AETV 1020	Electrical Engineering II	3	0	3	6	3
	AETV 1021	Electrical Engineering II Lab	0	3	1	4	1
	AETM 2112	Aerodynamics - CAT B	3	0	2	5	3
	AETM 2113	Aerodynamics Lab -CAT B	0	2	1	3	1
HUM 1011	Islamic Culture	3	0	0	3	3	
Summer	ENGL 1012	Academic English II	3	2	0	5	3
	AETV 2008	Electronics for B1	3	0	0	3	2
	AETV 2009	Electronics Lab for B1	0	2	0	2	1

Year 2

Semester	Course Code	Course Title	LT	PT	TT	CH	CR
Fall	AETM 2110	Adv. Materials & Hardware I	2	2	1	5	2
	AETM 2210	Adv. Materials & Hardware II	2	2	1	5	2
	AETM 2014	Aviation Legislation-EASA	2	0	3	5	2
	AETM 2012	Aviation Legislation-GCAA	2	0	3	5	2
	AETV 2018	Digital Techniques for B1	3	0	3	6	3
	AETV 2019	Digital Tech Lab for B1	0	3	1	4	1
Spring	AETM 2120	Adv. Maint. Prac. I	3	0	1	4	3
	AETM 2121	Adv. Maint. Prac. I Lab	0	6	0	6	2
	AETM 2122	Adv. Maint. Prac. II	2	3	0	5	3
	AETM 2212	Adv. Maint. Prac. III	3	0	0	3	3
	AETM 2213	Adv. Maint. Prac. III Lab	0	3	2	5	1
	AETM 2214	Adv. Maint. Prac. IV	3	0	1	4	3
Summer	AETM 2215	Adv. Maint. Prac. IV Lab	0	6	0	6	2
	AETM 2310	Adv. Maint. Pract. V	3	0	3	6	3
	AETM 2311	Adv. Maint. Pract. V Lab	0	6	1	7	2

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Year 3

Semester	Course Code	Course Title	LT	PT	TT	CH	CR
Fall	AETM 3120	Adv.AC Systems and Comp I	3	2	1	6	3
	AETM 3122	Adv. A/C Systems & Components II	3	3	1	7	3
	AETM 3220	Adv. A/C Systems & Components III	3	0	1	4	3
	AETM 3221	Adv. A/C Systems & Components III Lab	0	3	2	5	1
	AETM 3224	Adv. A/C Systems & Components IV	3	0	4	7	3
	AETM 3225	Adv. A/C Systems & Components IV Lab	0	2	0	2	1
Spring	MATH 1010	Calculus I	3	0	0	3	3
	AETM 3110	Gas Turbine Engines I	3	2	1	6	3
	AETM 3210	Gas Turbine Engines II	2	0	2	4	2
	AETM 3211	Gas Turbine Engines II Lab	0	3	1	4	1
	ENGL 2013	Report Writing	1	2	0	3	1
	ENGL 2012	Literature Review	1	2	0	3	1
	ENGL 2011	Public Speaking	1	2	0	3	1
Summer	HUM 1012	Emirates Society & Culture	3	0	0	3	3
	AETM 3212	Propellers	3	0	0	3	3
	AETM 2010	Human Factors	3	1	1	5	3

Year 4

Semester	Course Code	Course Title	LT	PT	TT	CH	CR
Fall	AETM 4101	Aircraft Materials and Structures	3	0	2	5	3
	AETM 4102	Advanced Aerodynamics	2	2	2	6	3
	AETM 4103	Aircraft Components Modeling and Design	2	3	0	5	3
	AETM 4104	Flight Stability and Control	3	2	0	5	3
	AETM 3080	Graduation Project I	3	0	0	3	3
Spring	AETM 4105	Inspection Procedures	3	1	0	4	3
	HUM 3011	Creativity, Innovation and Entrepreneurship	3	0	0	3	3
	AETM 4080	Graduation Project II	3	0	0	3	3
		Elective	3	0	0	3	3
Summer	AETM 3099	OJT / Internship		360		360	6

Total Credit Hours: 142

Legend	
LT	Lecture Hours
PT	Lab Hours
TT	Tutorial Hours
CH	Contact Hours
CR	Credit Hours

Elective Courses		
Course Code	Course Title	CR
AETM 4201	Aircraft Performance and Design	3
AMT 407	Aircraft Line, Base and Components Maintenance	3
AVSC 403	Safety Management Systems	3
AETM 4202	Advanced Propulsion Systems	3



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Avionics



ABAET - Avionics

Year 1

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Fall	MATH 1003	Mathematics for Aviation CAT B	3	0	4	7	3
	PHYS 1015	Physics I For Aviation	3	0	0	3	3
	PHYS 1016	Physics I Lab. For Aviation	0	3	0	3	1
	PHYS 1017	Physics II For Aviation	3	0	1	4	3
	ENGL 1001	English Skills	1	2	0	3	0
	ICT 1011	Introd. to Progr. & Probl. Solving	2	2	0	4	3
	HUM 1013	Arabic Communications (W.B.)	3	0	0	3	3
Spring	ENGL 1011	Academic English I	3	2	0	5	3
	AETV 1010	Electrical Engineering I	3	0	2	5	3
	AETV 1011	Electrical Engineering I Lab	0	3	1	4	1
	AETV 1020	Electrical Engineering II	3	0	3	6	3
	AETV 1021	Electrical Engineering II Lab	0	3	1	4	1
	AETM 2112	Aerodynamics - CAT B	3	0	2	5	3
	AETM 2113	Aerodynamics Lab - CAT B	0	2	1	3	1
	HUM 1001	Islamic Culture	3	0	0	3	3
Summer	AETV 2010	Electronics for B2	3	0	3	6	3
	AETV 2011	Electronics for B2 Lab	0	3	1	4	1

Year 2

Semester	Course Code	Course Title	LT	PT	TT	CH	CR
Fall	AETM 2110	Adv. Materials & Hardware I	2	2	1	5	2
	AETM 2210	Adv. Materials & Hardware II	2	2	1	5	2
	AETV 2020	Digital Tech I for B2	3	0	2	5	3
	AETV 2021	Digital Tech I Lab for B2	0	3	0	3	1
	AETV 2022	Digital Tech II for B2	3	0	2	5	3
	AETV 2023	Digital Tech II Lab for B2	0	3	1	4	1
	ENGL 1012	Academic English II	3	2	0	5	3
Spring	AETM 2120	Adv. Maint. Prac. I	3	0	1	4	3
	AETM 2121	Adv. Maint. Prac. I Lab	0	6	0	6	2
	AETM 2122	Adv. Maint. Prac. II	2	3	0	5	3
	AETM 2212	Adv. Maint. Prac. III	3	0	0	3	3
	AETM 2213	Adv. Maint. Prac. III Lab	0	3	2	5	1
	AETM 2214	Adv. Maint. Prac. IV	3	0	1	4	3
	AETM 2215	Adv. Maint. Prac. IV Lab	0	6	0	6	2
Summer	AETM 2310	Adv. Maint. Pract. V	3	0	3	6	3
	AETM 2311	Adv. Maint. Pract. V Lab	0	6	1	7	2

ABAET - Avionics

Year 3

Semester	Course Code	Course Title	LT	PT	TT	CH	CR
Fall	AETV 3110	Avionics Systems I	3	0	1	4	3
	AETV 3111	Avionics Systems I Lab	0	3	1	4	1
	AETV 3112	Avionics Systems II	3	0	4	7	3
	AETV 3113	Avionics Systems II Lab	0	3	1	4	1
	AETM 2012	Aviation Legislation-GCAA	2	0	3	5	2
	ENGL 2011	Public Speaking	1	2	0	3	1
	AETM 2014	Aviation Legislation-EASA	2	0	3	5	2
Spring	AETV 3210	Avionics Systems III	3	0	4	7	3
	AETV 3211	Avionics Systems III Lab	0	3	1	4	1
	AETV 3212	Avionics Systems IV	3	0	4	7	3
	AETV 3213	Avionics Systems IV Lab	0	3	1	4	1
	MATH 1010	Calculus I	3	0	0	3	3
	ENGL 2013	Report Writing	1	2	0	3	1
	HUM 1002	Emirates Society & Culture	3	0	0	3	3
Summer	AETM 2010	Human Factors	3	1	1	5	3
	AETV 3010	Propulsion and FADEC	2	2	1	5	2
	ENGL 2012	Literature Review	1	2	0	3	1

Year 4

Semester	Course Code	Course Title	LT	PT	TT	CH	CR
Fall	AETV 4101	Antenna, Radar & Navigation	3	2	0	5	3
	AETV 4102	Flight Control Theory	3	1	1	5	3
	AETM 4105	Inspection Procedures	3	1	0	4	3
	AETV 4104	Aircraft Reliability & Fault Diagnosis	3	0	2	5	3
	AETV 3080	Graduation Project I	3	0	0	3	3
Spring	AETV 4201	Avionics Systems Integration	3	2	2	7	3
	HUM 3011	Creativity, Innovation and Entrepreneursh	3	0	0	3	3
	AETV 4080	Graduation Project II	3	0	0	3	3
		Elective	3	0	0	3	3
Summer	AETV 3099	OJT / Internship		360		360	6

Total Credit Hours: 142

Legend	
LT	Lecture Hours
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Elective Courses		
Course Code	Course Title	CR
AETV 4103	Embedded Systems	3
AMT 407	Aircraft Line, Base and Components Maintenance	3
AVSC 403	Safety Management Systems	3
AETV 4202	Unmanned Airborne System	3



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October 2024