

Abu Dhabi Polytechnic

Aircraft Maintenance Diploma and Higher Diploma

Curriculum and Study Plan

Aircraft Maintenance Diploma and Higher Diploma (AM)

Curriculum

Degree Requirements	Total Credit Hours: 124-128 Credit Hours
ADPoly General Requirements	23
Humanities and Social Science Requirements	12
Program Major Requirements (compulsory)	55
Program Minor Requirements	37 (Aeromechanical track) 33 (Avionics track)

ADPoly General Requirements				23 Credit Hours
Course Code	Course Title	Prerequisite(s)	Co-requisite	Credit Hours
MATH100	Precalculus			4
ICT110	Introduction to Programing & Problem Solving			3
PHYS 111	Physics I		PHYS 111P	3
PHYS 111P	Physics I Lab		PHYS111	1
ENGL 111	English Communication Skills			3
ENGL 112	Technical English	ENGL111		3
ENGL 116	English for Aviation	ENGL112		3
AME 101	W/S Pracs/Orientation			3

Humanities and Social Science Requirements				12 Credit Hours
Course Code	Course Title	Prerequisite(s)	Credit Hours	
HUM 110	Lifelong Learning Skills		3	
HUM 111	Islamic Culture		3	
HUM 112	Emirates Society & Culture		3	
HUM 402	Creativity, Innovation and Entrepreneurship		3	

Program Core Area				55 Credit Hours
Course Code	Course Title	Prerequisite(s)	Credit Hours	
AME 113	Maintenance Practice I (7 A)		3	
AME 114	Basic Materials & Hardware (6 A)	PHYS 111	3	
AME 115	Basic Aerodynamics (8 A)	PHYS 111	2	
AME 116	Aircraft Structures & Systems I (11 A)	AME 115	3	
AME 117	Maintenance Practice II (7 A)	AME 113	3	
AME 121	Maintenance Practice III (7 A)	AME 113	3	

Program Core Area			55 Credit Hours
AME 124	Maintenance Practice IV (7 A)	AME 113	3
AME 221	Aircraft Structures & Systems II (11 A)	AVN 211 AVN 112	4
AME 223	Turbine Engines (15 A)		3
AME 225	Propellers (17 A)	AME 115 AME 223	2
AME 340	On-Job-Training/Internship		3
AVN 210	Electrical Engineering I (3 B)	MATH 100	3
AVN 210P	Electrical Engineering I Lab		1
AVN 112	Electronics with Lab	AVN 110	3
AVN 123	Fund. Digit. Tech. (5 A)	AVN 211 AVN 112	3
AVN 211	Electrical Engineering II (3 B)	AVN 110	3
AVN 211P	Electrical Engineering II Lab	AVN 110P	1
AVSC 210	Human Factors (9 B)		3
AVSC 220	Aviation Legislation – EASA (10 B)		3
AVSC 225	Aviation Legislation – GCAA		3

Program Area of Concentration (Aeromechanical Track)			37 Credit Hours
Course Code	Course Title	Prerequisite(s)	Credit Hours
AME 211	Materials & Hardware I (6 B1 for AM)	AME 114	3
AME 214	Aerodynamics (8 B1 for AM)	PHYS 111	3
AME 215	Maintenance Practice I (7 B1 for AM)	AME 113 AME 117	3
AME 217	Maintenance Practice II (7 B1 for AM)	AME 215	3
AME 222	Materials & Hardware II (6 B1 for AM)	AME 211	3
AME 230	Aircraft Structures & Systems I (11 B1 for AM)	AME 116	3
AME 234	Aircraft Structures & Systems II (11 B1 for AM)	AME 221	3
AME 324	Turbine Engines (15 B1 for AM)	AME 221	4
AME 336	Propellers (17 B1)	AME 225	3
AVN 311	Electronic Comm. Tech	AVN 112	3
AVN 321	Digital Techniques I (5B1 for AM)	AVN 311 AVN 123	3
AVSC 340	Technology Project Management		3

Program Area of Concentration (Avionics Track)			33 Credit Hours
Course Code	Course Title	Prerequisite(s)	Credit Hours
AME 211	Materials & Hardware I (6 B1)	AME 114	3
AME 214	Aerodynamics (8 B1)	PHYS 111	3
AME 215	Maintenance Practices I (7 B1 for AM)	AME 113 AME 117	3
AME 217	Maintenance Practices II (7 B1 for AM)	AME 215	3
AME 222	Materials & Hardware II (6 B1)	AME 211	3
AVN 326	Propulsion & FADEC (14 B2)	AVN 314 AVN 237	3
AVN 327	Avionics Systems I (13 B2 for AM)	AME 116 AVN 112	3
AVN 333	Avionics Systems II (13 B2 for AM)	AVN 112 AVN 327	3
AVN 311	Electronic Communications technology	AVN 112	3
AVN 321	Digital Techniques I (5B1)	AVN 311 AVN 123	3
AVSC 340	Technology Project Management		3

Aircraft Maintenance Diploma and Higher Diploma (AM)

Study Plan

1 st Year (Freshman)				
	Course Code	Course Title	Co/Prerequisite(s)	Credit Hours
Semester 1	AME 101	W/S Pracs/Orientation		3
	ENGL 111	English Communication Skills		3
	HUM 110	Lifelong Learning Skills		3
	ICT 110	Introduction to Programing & Problem Solving		3
	MATH 100	Pre-calculus		4
	PHYS 111	Physics I	PHYS 111	3
	PHYS 111P	Physics I Lab		1
	Total Credit Hours			20
	Course Code	Course Title	Prerequisite(s)	Credit Hours
Semester 2	AME 113	Main. Practice I (7 A)		3
	AME 114	Basic Materials & Hardware (6 A)	PHYS 111	3
	AVN 210	Electrical Engineering I (3 B)	MATH 100	3
	AVN 210P	Electrical Engineering I Lab		1
	ENGL 112	Technical English	ENGL111	3
	HUM 111	Islamic Culture		3
	Total Credit Hours			16
	Course Code	Course Title	Prerequisite(s)	Credit Hours
Semester 3	AVN 211	Electrical Engineering II (3 B)	AVN 210	3
	AVN 211P	Electrical Engineering II Lab	AVN 210P	1
	ENGL 116	English for Aviation	ENGL112	3
Total Credit Hours			7	

2 nd Year (Sophomore)				
Semester 1	Course Code	Course Title	Co/Prerequisite(s)	Credit Hours
	AME 115	Basic Aerodynamics (8 A)	PHY 111	2
	AME 116	Air. Struct. & Systems I (11 A)	AME 115	3
	AME 117	Main. Practice II (7 A)	AME 113	3
	AME 223	Turbine Engines (15 A)		3
	AVN 112	Electronics with Lab	AVN 210	3
	AVSC 210	Human Factors (9 B)		3
Total Credit Hours			17	
Semester 2	Course Code	Course Title	Prerequisite(s)	Credits
	AME 121	Main. Practice III (7 A)	AME 113	3
	AME 124	Main. Practice IV (7 A)	AME 113	3
	AME 221	Air. Struct. & Systems II (11 A)	AVN 211 AVN 112	4
	AME 225	Propellers (17 A)	AME 115 AME 223	2
	AVN 123	Fund. Digit. Techniques. (5 A)	AVN 211 AVN 112	3
	AVSC 220	Aviation Legislation – EASA (10 B)		3
Total Credit Hours			18	
Summer 3	Course Code	Course Title	Prerequisite(s)	Credits
	AME 240	OJT/Internship		3
Total Credit Hours			3	

3 rd Year (Aeromechanical Track)				
Semester 1	Course Code	Course Title	Prerequisite(s)	Credits
	AME 211	Materials & Hardware I (6 B1)	AME 114	3
	AME 214	Aerodynamics (8 B1)	PHYS 111	3
	AME 215	Maint. Prac. I (7 B1)	AME 113 AME 117	3
	AME 230	Air. Struct. & Sys. I (11 B1)	AME 116	3
	AVN 311	Electronic Comm. Tech	AVN 112	3
	AVN 321	Digital Techniques I (5B1)	AVN 311 AVN 123	3
Total Credit Hours			18	
Semester 2	Course Code	Course Title	Prerequisite(s)	Credits
	AME 217	Maint. Prac. II (7 B1)	AME 215	3
	AME 222	Materials & Hardware II (6 B1)	AME 211	3
	AME 234	Air. Struct. & Sys. II (11 B1)	AME 221	3
	AME 324	Turbine Engines (15 B1)	AME 221	4
	AME 336	Propellers (17 B1)	AME 225	3
	HUM 112	Emirates Society & Culture		3
Total Credit Hours			19	
Semester 3	Course Code	Course Title	Prerequisite(s)	Credits
	AVSC 340	Technology Project Management		3
	AVSC 225	Aviation Legislation – GCAA		3
	HUM 402	Creativity, Innovation and Entrepreneurship		3
Total Credit Hours			9	

3 rd Year (Avionics Track)				
Semester 1	Course Code	Course Title	Prerequisite(s)	Credits
	AME 211	Materials & Hardware I (6 B1)	AME 114	3
	AME 214	Aerodynamics (8 B1)	PHYS 111	3
	AME 215	Maint. Prac. I (7 B1)	AME 113 AME 117	3
	AVN 327	Avionics Systems 1	AME 116 AVN 112	3
	AVN 311	Electronic Comm. Tech	AVN 112	3
	AVN 321	Digital Techniques I (5B1)	AVN 311 AVN 123	3
Total Credit Hours:			18	
Semester 2	Course Code	Course Title	Prerequisite(s)	Credits
	AME 217	Maint. Prac. II (7 B1)	AME 215	3
	AME 222	Materials & Hardware II (6 B1)	AME 211	3
	AME 234	Air. Struct. & Sys. II (11 B1)	AME 221	3
	AVN 326	Props and FADEC	AVN 314 AVN 237	3
	AVN 333	Avionics Systems II	AVN 112 AVN 327	3
	HUM 112	Emirates Society & Culture		3
Total Credit Hours:			18	
Semester 3	Course Code	Course Title	Prerequisite(s)	Credits
	AVSC 340	Technology Project Management		3
	AVSC 225	Aviation Legislation – GCAA		3
	HUM 402	Creativity, Innovation and Entrepreneurship		3
Total Credit Hours			9	