

BSc (H) Aircraft Maintenance (Mechanical/Avionics)

S.NO	COURSE	THEORY + PRACTICAL	THEORY + TUTORIAL
I	Core Course (C1 to C14)		
1	Core Course Theory – (14 Papers)	14 x 4 = 56	14 x 5 = 70
	Core Course Practical / Tutorial – (14 Papers)	14 x 2 = 28	14 x 1 = 14
II	Elective Course – 08 Papers		
A.1	Discipline Specific Elective (04 Theory Papers)	4 x 4 = 16	4 X 5 = 20
A.2	Discipline Specific Elective Practical Tutorial (04 Papers)	4 X 2 = 8	4 X 1 = 4
B.1	Generic Elective / Interdisciplinary(04 Theory Papers)	4 X 3 = 12	4x 4 = 16
B.2	Generic Elective Practical / Tutorial(04 Tutorial Papers)	4 X 2 = 8	4 X 1 = 4
	Optional Dissertation or project work in place of one DSE paper (6 credits) in 6th semester		

III	Ability Enhancement Courses		
1	Ability Enhancement Compulsory (02 Papers)	2 x 2 = 4	2 x 2 = 4
2	Ability Enhancement Elective - Skill Based – (02 Papers)	2 x 1 = 2	2 x 1 = 2
IV	2 Projects	2 x 8 = 16	2 x 8 = 16
	TOTAL CREDITS	150	150

Note:.. Where ever there is a practical, there will be no tutorial and vice versa

CREDITS FOR B.Sc (Hons) AIRCRAFT MAINTENANCE (Avionics)

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	TOTAL CREDITS	150	150

SYLLABUS AND COURSE STRUCTURE – B.SC(H) Aircraft Maintenance – Mechanical / Avionics

II. Elective Course (8)

A.1 Discipline Specific Elective (4 Theory/4 practical Papers)

Discipline Specific Elective (DSE) Papers, (Credit: 06 each) (4 Papers to be selected)

DSE1	Piston Engines and Propellers
DSE2	Rotorcraft and rotorcraft autopilot

DSE3	Human Factors
DSE4	Transducers and sensors
DSE5	Aviation Legislation
DSE6	Flight Navigation and guidance
DSE7	Topics recommended for dissertation / University recommended subjects
A.2	Discipline Specific Elective Practical / Tutorial (4 Practical Papers)
DSEP1	Piston Engines and Propellers
DSEP2	Rotorcraft including rotorcraft autopilot
DSEP3	Human factors
DSEP4	Transducers and sensors
DSEP5	Aviation Legislation
DSEP6	Flight Navigation and guidance.
Dissertation – University recommended subjects: Optional dissertation (obtain organisation approval) or project work (perform aircraft maintenance in an Aircraft Maintenance Organisation) in place of one Discipline Specific Elective Paper (6 credits) in 6th Semester	

DSEP7	Approval of Maintenance Organisation
DSEP7.2	Approval of continuing Airworthiness Management organization
DSEP7.3	Aircraft line maintenance
DSEP7.4	Aircraft Maintenance – Planning and logistics
DSEP7.5	Aircraft Stores

Generic Elective / Interdisciplinary (4 Theory Papers)

GE1	Mathematics
GE2	Physics
GE3	Chemistry
GE4	Corrosion and NDI Techniques
GE5	Composites and fibers
GE6	Quality Management System

Generic Elective Practical / Tutorial (4 Practical Papers)

GET1	Mathematics
GEP2	Physics
GEP3	Chemistry
GEP4	Corrosion and NDI Techniques
GEP5	Composites and fibers
GET6	Quality Management System

III Ability Enhancement Courses

1. Ability Enhancement Compulsory (2 papers of 2 credit each)

AECC1	Environmental Science
AECC2	English / MIL Communication

2. Ability Enhancement Elective (Skill based) (Minimum 2 papers of 2 credit each)

AEE1	Typical Aircraft Maintenance – Fixed Wing Heavy / Complex Aircraft
AEE2	Typical Aircraft Maintenance – Fixed Wing Light / Composite Aircraft
AEE 3	Typical Aircraft maintenance – Single Engine Helicopters

AEE 4	Typical Aircraft maintenance – Multi Engine Helicopters
AEE 5	Typical Aircraft Maintenance – Avionics (Fixed / Rotor Wing Complex Aircraft – Glass cockpit) Typical Aircraft Maintenance – Avionics (Fixed / Rotor Wing Light Aircraft – Glass cockpit)
AEE 6	Typical Aircraft Maintenance – Avionics (Fixed / Rotor Wing Light Aircraft – Analog System)
AEE 7	Typical Piston Engine Maintenance
AEE 8	Typical Gas Turbine Engine Maintenance
AEE 9	Aircraft (Hydraulic) Component Maintenance
AEE 10	Aircraft (landing gear) component maintenance
AEE 11	Aircraft (Pneumatic) Component Maintenance
AEE 12	Aircraft wheels and Breaks – Component Maintenance
AEE 13	Aircraft Electrical Component Maintenance
AEE 14	Aircraft Instruments Maintenance
AEE 15	Aircraft communication and navigation system component maintenance
AEE 16	Typical Aircraft Maintenance – Avionics (Fixed Wing aircraft – Fly by wire)

AEE 17	Typical Aircraft Maintenance – Fixed Wing Heavy / Complex Aircraft
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