Course Specifications

Program(s) on which this course is given:	Aerospace Engineering
Department offering the program:	**Aerospace Engineering**
Department offering the course:	**Aerospace Engineering**
Academic Level:	M.Sc.
Date	
Semester (based on final exam timing)	☐ Fall ■ Spring

A- Basic Information

1. Title:	Aircraft Maintenance			**Code:**		**AER683**		
2. Units/Credit hours per week:	Lectures	2	Tutorial	1	Practical		Total	3

B- Professional Information

1. Course description:	
2. Intended Learning Outcomes of Course (ILOs):	**a) Knowledge and Understanding**
	Basic concepts of management and planning aircraft maintenance systems
	b) Intellectual Skills
	Determine objectives and optimized performance of aircraft maintenance systems
	c) Professional and Practical Skills
	Plane and optimize the aircraft inspection, replacement, repair, and overhaul
	d) General and Transferable Skills
	Solve management problems and write reports

3. Contents

Topic	Total hours	Lectures hours	Tutorial/ Practical hours
Objectives of aircraft maintenance systems	2		
Subsystems of aircraft maintenance systems	4		
Follow up of the maintenance system	4		
Practical maintenance operations in airlines	4		
Military aircraft maintenance systems	2		
Statistical preliminaries	4		
Planning of inspection operations	4		
Planning of replacement operations	4		

Planning of repaire and overhaul operations	4		
4. Teaching and Learning Methods	Lectures (32)	Practical Training/ Laboratory ( )	Seminar/Workshop ( )
	Class Activity ( )	Case Study ( )	Projects ( )
	E-learning ( )	Assignments /Homework ( )	Other:

5. Student Assessment Methods	
• **.Assessment Schedule**	**Week**
-Assessment 1; Class test	
-Assessment 2; Project Assignment	
-Assessment 3; Presentations	
-Assessment 3; Midterm Exam	
-Assessment 4; Final Exam	
• **Weighting of Assessments**	
-Mid-Term Examination	
-Final-term Examination	70%
-Project	
-Class Test	10%
-Presentation	20%
-Total	

6. List of References
Jardine, “Maintenance replacement and reliability”
Churchman, “The systems approach”
Chauder, Graham and Williamson, “Practical systems analysis”
Negm, “Course notes”

7. Facilities Required for Teaching and Learning	
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Course Coordinator:	**Prof. Hani M. Negm**
Head of Department:	**Prof. Ayman H. Kassem**