



Course Specifications

Program(s) on which this course is given:	Production Technology(2)
Department offering the program:	Aerospace Engineering
Department offering the course:	Mechanical Design & Production
Academic Level:	1 st year Aerospace
Date	2014-2015
Semester (based on final exam timing)	<input checked="" type="checkbox"/> Fall <input type="checkbox"/> Spring

A- Basic Information

1. Title:	Production Technology(2)		Code:	MDP122				
2. Units/Credit hours per week:	Lectures	4	Tutorial	2	Practical	0	Total	5

B- Professional Information

1. Course description:	Knowledge of different machine tools
2. Intended Learning Outcomes of Course (ILOs):	a) Knowledge and Understanding
	The student should know some basics of machine tools
	b) Intellectual Skills
	The student should develop problem solving
	c) Professional and Practical Skills
	The student should be able to estimate machining time and power consumption.
d) General and Transferable Skills	The student should practice on using technological tool.

3. Contents

Topic	Total hours	Lectures hours	Tutorial/ Practical hours
Introduction to machining processes	4	2	2
Cutting elements	4	2	2
Cutting with single edge cutting tools	4	2	2
Cutting tool materials and its characteristic	4	2	2
Cutting velocity and feed	4	2	2
Machining time- power consumption in cutting	4	2	2

Practical machining operation	6	4	2
4. Teaching and Learning Methods	Lectures (/)	Practical Training/ Laboratory ()	Seminar/Workshop (/)
	Class Activity ()	Case Study ()	Projects ()
	E-learning ()	Assignments /Homework ()	Other:
5. Student Assessment Methods			
• .Assessment Schedule		Week	
-Assessment 1;Attendance		Every lecture	
-Assessment 2; Homework		Weekly	
-Assessment 3;Project		Week 6 and 13	
-Assessment 3; Midterm exam		Week 7	
-Assessment 4; Final exam		Finals week	
• Weighting of Assessments			
-Mid-Term Examination		20 %	
-Final-term Examination		60 %	
-Project		10 %	
-Class Tests		10 %	
-Presentation		0 %	
6. List of References			
Course Notes			
Fundamentals of metal machining and machine tools (Boothroyd)			
7. Facilities Required for Teaching and Learning			
Data show, educational video films			
Course Coordinator:	Prof. Dr. Said Megahed		
Head of Department:	Prof. Ayman Hamdy		