The University of Jordan **School of Engineering** Department **Course Name** Course Semester Number Mechanical Engineering 0904233 Machine Drawing **2019 Course Catalog Description** Mechanical engineering drawing conventions and abbreviations, various systems of size description, including precision dimensioning, fastening elements, standard organization and preparation of engineering drawings, assembly and detailed drawings, design applications. **Instructors Office Hours** Lecture Time Name E-mail Sec **Text Books** Text book 1 Text book 2 Title Engineering Design Graphics. Creo parametric tutorial, version 2 Author(s) Earle, James Prentice Hall, 2004, 11th Edition. Publisher, Year, Edition References Machine Drawing, K.L Narayana, P. Kannaiah, K. Venkata Reddy Books 1. 2. Engineering Drawing, A.W. Boundy 3. Manual of engineering drawing, Colin H. Simmons, Dennis E. Maguire, 2002. Journals Internet http://www.ptc.com links https://sites.google.com/a/umn.edu/me2011/creo-parametric. **Prerequisites Prerequisites by topic Prerequisites by course** Engineering drawing (0904131) **Co-requisites by course** _ **Prerequisite for** -**Topics Covered** Week Topics **Chapter in Text** Sections Introduction to Creo parametric software. Textbook 21 Starting with creating a 2D sketch. 3D modeling using Extrude. 2 Textbook 2 Rounds and chamfer. 3D modeling using revolve. 3 Textbook 2 Using pallete in the sketch Using constrains, mirror, datum planes. 4 Textbook 2 5,6 3D modeling using sweep and swept blend. Textbook 2 3D modeling using helical sweep. Textbook 2 7 How to make pattern. Exercises. Textbook 2 8 9 Midterm exam Textbook 2

10,11,1	2 As	Assembly modeling.						Textbook 2				
13	Se	Sections.						Textbook (Ch.	16)			
14	de	development						Textbook 1(Ch.	.31)			
15	Limits, tolerance and fits,							Textbook 1(Ch.	.17, 21)			
	Welding, bearing, fasteners.											
Mapping of Course Outcomes to ABET Student Outcomes												
SOs		Course Outcomes										
1	1.	1. Develop skills needed for using engineering drawing tools.										
3	2.	2. Develop and ability to communicate graphically using various engineering tools including a										
		modern computer graphic package.										
	3.	3. Introducing the fundamentals of descriptive geometry for spatial visualization and its role to solve different engineering problems										
	4	4 Ability to become familiar with office practice and standards and prepare students for future										
		engineering positions.										
7	5.	5. Emphasize the need for lifelong learning by encouraging learning Creo. Software and its user										
interface to produce 2D and 3D detailed drawings.												
Evaluation												
Assessi	Assessment Tools				Expe	ctea Due L	Date				100/	
Homework, classwork and Quizzes											10%	
Project											20%	
FIRST EXAM											20%	
Final Exam											20%	
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Contribution of Course to Meet the Professional Components												
This course is one of the first opportunities for engineering students to encounter the fundamental principles of												
occur la	problei	n sorvin the prog	ig. It is rams d	s an impor of enginee	tant pr	erequisite c	ourse for a l	number of design	related c	ourse	s, which	
	Relationshin to Student Outcomes											
SO	c	1		2		3	1	5	6		7	
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Availat	onity		1.				· D				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
		Relati	onshi	p to Mec	nanic	al Engine	ering Prog	ram Objectives	G (MEP)	US)		
MEPOI				MEPO2		MEPO3		MEPO4		IV.	IEPO5	
ABET Student Outcomes (SOs)												
1 An ability to identify, formulate, and solve complex engineering problems by applying principles of												
en	igineer	ing, scie	nce, a	nd mathen	natics							
2 Ar	n ability to apply engineering design to produce solutions that meet specified needs with consideration of											
pu	ıblic he	ic health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors										
3 Ar	n abilit	ability to communicate effectively with a range of audiences										
4 Ar	n ability to recognize ethical and professional responsibilities in engineering situations and make informed											
juc	judgments, which must consider the impact of engineering solutions in global, economic, environmental,											
and societal contexts												

5	An ability to function effectively on a team whose members together provide leadership, create a						
	collaborative and inclusive environment, establish goals, plan tasks, and meet objectives						
6	An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use						
	engineering judgment to draw conclusions						
7	An ability to acquire and apply new knowledge as needed, using appropriate learning strategies						
Updated by ABET Committee, 2024							