

Kurdistan Region Government Ministry of Higher Education and Scientific Research Erbil Polytechnic University



Module (Course Syllabus) Catalogue

2022-2023

Collogo/Instituto	Erbil Tochnical End	tinooring		
	Erbil Technical Engineering			
Department	Civil Engineering			
Module Name	Computer Application - AutoCAD Drawing			
Module Code	COA205			
Degree	Technical Diploma Bachler			
	High Diploma	Master PhD		
Semester	2			
Qualification	Education: 1- Bsc. Civil Techni University 2011 - 2- Msc. Civil Engin 2016– USA. Experience: 1- Civil Drawing – 2- Transportation I till now. 3- Mathematic – Fi 4- Construction Tec 2019.	ical Engineering at Erbil Polytechn – Iraq eering at Portland State University First Stage – 2012 & 2013. Engineering – Fourth Stage 2018 frst Stage – 2018. chnique – Second Stage – 2018 &		
Scientific Title	Assistant Lecturer			
ECTS (Credits)	5			
Module type	Prerequisite	Core Assist. 🗴		
Weekly hours	4			
Weekly hours (Theory)	(N/A)hr. Class	(N/A)Total hrs Workload		
Weekly hours (Practical)	(4)hr. Class	(136)Total hrs Workload		
Number of Weeks	12			

Directorate of Quality Assurance and Accreditation

بەر يۆ مبەر ايەتى دڭنيايى جۆرى و متمانەبەخشىن

Lecturer (Theory)	Bayad A. Ahmed (Msc.)
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Lecturer (Practical)	Twana Ali Omar (Msc.)
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Websites	N/A

Course Book

Course Description	AutoCAD is the standard design software used in the engineering, architecture, interior design and construction industries. Designers and drafters use it to create two-dimensional (2D) and three-dimensional (3D) computer drawings. Students interested in learning how to use this software can complete coursework to earn non-credit classes at a higher education institution. Moreover, passed of this course may find employment with architectural and design firms, construction businesses or engineering companies.
Course objectives	In this course students will learn sketching and taking field dimensions. Also, they will take data and transform it into graphic drawings. Students will learn basic engineering drawing formats. Learn basic AutoCAD skills. Furthermore, learn who draw 2D drawings in AutoCAD.
Student's obligation	Attending the lecture is a fundamental part of the course. Students are expected to attend every class meeting for the entire class period. Only extreme circumstances should require your missing class. If you do miss class, it is your responsibility to obtain announcements, course documents and assignments. You are responsible for implementations presented in the PDF lecture class whether or not it is implemented in the computer lab. You should expect questions on the exams to test your understanding of ideas that discussed in the lecture and in the homework assignments. It can be very helpful to study with a group. This type of cooperative learning is inspired however, be sure that you have a thorough comprehending of the concepts besides the practice drawing steps used to solve a problem. You must be able to draw extra figures through the AutoCAD drawing on your own. Students will need to submit the required homework, reports, seminars and/or any other assignments requested by the lecturer in time and in accurate method.

Required Learning	The different types of teaching-learning materials are, video TLMs, ,					
Materials	overl	overhead projector, Power Point slides, computers.				
	Task		Weight	Due	Relevant Learning	
	Г	apar Daviau	(Marks)) Week	Outcome	
	Homowork		10%			
	Assi	Class Activity	20/0	- 1-12	1-6	
		Class Activity Benort	Ζ/0			
	gnm	Seminar	Q 0/			
Evaluation	nents	Essay	070			
		Project	8%			
	Oui	7	8%	2570	2_5	
	Quiz Lab		070	5,5,7,5	2-5	
	Lau. Midterm Exam		2/1%	10_12	1_6	
	Final Exam		2470 /10%	14-20	1-6	
	Total		100%	14 20	10	
	On successful completion of this module, students should be able to:					
	1- Improving perform basic sketching techniques.					
Coosifie learning	2- Draw projections and sections					
Specific learning	3- Use engineering scales will increase					
outcome:	4- Produce engineered drawings will improve					
	5- Become familiar with office practice and standards					
	6- Become familiar with AutoCAD two-dimensional drawings					
	1 Residential Design Using AutoCAD 2017 - With Code - 16					
Course References:	edition by Daniel John Stine					
	2. AutoCAD 2017 Tutorial: First Level 2D Fundamentals - 16					
	 AutoCAD 2017 for the Interior Designer - 16 edition by 					
	Muccio					
					Learning	
Practical Topics				Week	Outcome	
Introduction to CAD, the commands and the techniques		1	1			

Introduction to computer aided drafting software, Limits command, Grid & Snap 1	2	1
Drawing commands: Line, Construction line,	3	2, 3
Drawing commands: Circle, Rectangle, Ray 1	4	2,3,4
Modify commands: Erase, Offset, Fillet,	5	2,3,4
Modify commands: Chamfer, Trim, Extend, Zoom command	6	2,3,4
Drawing commands: Polygon, Arc, Ellipse, Polyline ,Multiline, Text, Hatch 1	7	2,3,4
Modify commands: Explode, Move, Break Stretch and Layer properties	8	2,3,4,5
Modify command: Copy, Mirror, Rotate, Array,	9	2,3,4,5
Dimension command and Plot command	10	2,3,4,5
Drawing standard part of figures and given shapes	11	2,3,4,5,6
Drawing standard part of figures and given shapes	12	2,3,4,5,6

Questions Example Design

- Examinations (question design):

The exam questions may have similarities with the examples and Homework assignments taught during the course, but it is not necessary to be the same.

Question: - Draw the figure below when dimensions are in millimeters with drawing scale 1:50



Extra notes:

Lecturing will be kept to a level necessary to create greater comprehending of the principles and techniques described in the PDF lecture. Students will be actively involved in learning during the class. Also, it is preferred to have your own PC and bring it to lab with yourself.

Because each class builds on previous classes, it is necessitating to keep up with assignments. Collaboration on homework is allowed for the purpose of improving learning. Any student may be called upon at any time to present a homework to the class. Homework will be checked for completion. Also late homework will not be possible.

((Using cell phones are not allowed at all, MUST be OFF and invisible Please.))

External Evaluator

As a lecturer I have reviewed the Course Book related to the subject of Engineering drawing for first year, Department of Civil Engineering, Erbil Engineering Technical College, I found that the Course Catalogue is very good describing the aim and objectives of the subject. Moreover, it is covering all the required syllabus and contents of the course and describes satisfactorily the aspects related to the course.

Dr. Bahman Omar Taha Lecture Ph.D. in Structural Engineering.

Engineers shall act in such a manner as to uphold and enhance the honour, integrity and dignity of the engineering profession