

Department of Building Engineering			
CAD Applications for Buildings (68320)			
Total Credits	3		
major compulsory			
Prerequisites	P1 : Principles of Architectural Design (68430) OR Principals of Architectural Design (68260)		
Course Contents			
<p>This course Aims at providing the students with the fundamental principles of computer drafting and modeling and show these techniques may be used to analyze ,generate and represent architectural spaces and forms, in addition to represent structural design ,mechanical design and environmental design of building construction Course outline to be covered : Section one This is AutoCAD, Creating Your first Drawing ,Organizing your work , Printing and Plotting Advanced Editing Method and more topics . Section two. Introducing the Autodesk Revit Architecture Interface , Walls and Curtain Walls , Floors, Roofs, and Ceilings , Floors, Roofs, and Ceilings , Stairs, Ramps, and Railings, Schematic Design, Adding Families ,Materials, Rendering, and Visualization , Materials, Rendering, and Visualization, Creating Drawing Sets and more .</p>			
Intended Learning Outcomes (ILO's)		Student Outcomes (SO's)	Contribution
1	To be able to deal with and follow local and international standards in building construction.	K	10 %
2	To be able to communicate effectively to technical and non-technical audiences.	G	15 %
3	To be able to work individually and in a team both in lab and on site	G	10 %
4	An ability to use the computer as a tool for presentation, analysis and communication.	K	20 %
5	An ability to use the techniques ,skills and modern engineering tools necessary for engineering practice .	K	15 %
6	An ability to identify , formulate, an solve engineering problems.	E	10 %
7	An ability to function in multi-disciplinary teams.	D	20 %
Textbook and/ or References			
Mastering in AutoCAD (2007,2010) George Omura			
Assessment Criteria		Percent (%)	
First Exam		25 %	
Second Exam		25 %	
Projects		30 %	
Final Exam		20 %	
Course Plan			
Week	Topic		
1-4	Introduction to Computer aided design		
5-8	Command for drawing and editing elements ,2D drawings		
9-12	Introducing Revit, Walls and Curtain Walls , Floors, Roofs, and Ceilings, Stairs, Ramps, and Railings		
12-15	Schematic Design, Adding Families ,Materials, Rendering, and Visualization , Materials, Rendering, and Visualization, Creating Drawing		

