T.C. ESKİŞEHİR OSMANGAZİ UNIVERSITY
ARCHITECTURE AND ENGINEERING FACULTY
MECHANICAL ENGINEERING DEPARTMENT

COURSE INFORMATION FORM

SEMESTER	SPRING

COURSE CODE	151818671-151838671	COURSE NAME	Computer Aided Design

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Laboratory	Credit	ECTS	TYPE	LANGUAGE
8	3	0	0	3	6	COMPULSORY ( ) ELECTIVE (x)	Turkish

COURSE CATAGORY			
Basic Science	Basic Engineering	**Mechanical Engineering** [if it contains considerable design, mark with (√)]	Social Science
		(√)	

ASSESSMENT CRITERIA			
	Evaluation Type	Quantity	%
MID-TERM	Mid-Term		
	Quiz		
	Homework	2	40
	Project		
	Report		
	Others (Laboratory)		
FINAL EXAM	Written	1	60

PREREQUIEITE(S)	
COURSE DESCRIPTION	Learning AutoCAD and Solid EDGE design programs and Fundamentals of CAD.
COURSE OBJECTIVES	Learning fundamentals of 2 and 3D design and parametric moddelling in computer.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	Understand design programs and design criterias.
COURSE OUTCOMES	Lerning AutoCAD and Solid EDGE software in advanced level, 2 and 3 dimension design theory and to understand the importance of computer aided design in production.
TEXTBOOK	The design Manual, David Withbread, New South Publishing, 2009.
OTHER REFERENCES	Autocad and solidedge training videos
TOOLS AND EQUIPMENTS REQUIRED	Computer and projector.

COURSE SYLLABUS

WEEK	TOPICS
1	Introduction, importance of CAD, requirements for CAD
2	Drawing in AutoCAD (Grid, Snap, Ortho, Osnap),
3	Draw and Edit commands
4	Adding text on draw, isometric draw,
5	Dimensions
6	Section views,
7	Block and engineering libraries.
8	Midterm Exam
9	Midterm Exam
10	3D draw modelling, Solids
11	3D draw modelling, Solids
12	3D modelling, Solids
13	3D modelling, Sheet Metals
14	3D modelling, Welding
15,16	Final Exam

NO	PROGRAM OUTCOMES	3	2	1
1	Sufficient knowledge of engineering subjects related with mathematics, science and Mechanical engineering; an ability to apply theoretical and practical knowledge on solving and modeling of Mechanical engineering problems.	X		
2	Ability to determine, define, formulate and solve complex Mechanical engineering problems; for that purpose an ability to select and use convenient analytical and experimental methods.		X	
3	Ability to design a complex system, a component and/or an engineering process under real life constrains or conditions, defined by environmental, economical and political problems; for that purpose an ability to apply modern design methods.	X		
4	Ability to develop, select and use modern methods and tools required for Mechanical engineering applications; ability to effective use of information technologies.	X		
5	In order to investigate Mechanical engineering problems; ability to set up and conduct experiments and ability to analyze and interpretation of experimental results.		X	
6	Ability to work effectively in inner or multi-disciplinary teams; proficiency of interdependence.		X	
7	Ability to communicate in written and oral forms in Turkish/English; proficiency at least one foreign language.			X
8	Awareness of life-long learning; ability to reach information; follow developments in science and technology and continuous self-improvement.	X		
9	Understanding of professional and ethical issues and taking responsibility			X
10	Awareness of project, risk and change management; awareness of entrepreneurship, innovativeness and sustainable development.			x
11	Knowledge of actual problems and effects of engineering applications on health, environment and security in global and social scale; an awareness of juridical results of engineering solutions.			X
1:None. 2:Partially contribution. 3: Completely contribution.				

Prepared by: Prof. Dr. Nejat KIRAÇ **Date:**

Doç. Dr. Osman Nuri ÇELİK

Signature(s):