

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Computer Aided Design								
Course Code	ADY115		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit 3	Workload	75 (Hours)	Theory 3		Practice	0	Laboratory	0	
Objectives of the Course	Understanding and applying the basics of CAD drawing by using Computer Aided Design tools, Preparing montage drawings, Dimensioning and tolerancing, Drawing of machine elements, Reading engineering drawings, 3D part modeling, 3D montage abilities								
Course Content  This derste provides a pre-graduate student with the basics of draft geometry, vertical projections, technical drawing standards, dimensional drawings, drawings of basic machine parts and computer aid design bases. The content of the first half of this lesson is as follows: 2D drawing with commercial CAI software; point, line and plane relations in a projection; multi-faceted technical drawings; auxiliary and sectional views; basic measurement; drawings of basic machine elements. In the second half of the semester students, 3D geometric modeling and their CAD applications are shown. Contents include: 3 CAD drawing, 3D surface and part modeling techniques with commercial CAD software, assembly and 2D technical drawing in 3D model.							uter aided ial CAD ry and f the lude: 3D		
Work Placement	N/A								
Planned Learning Activities and Teaching Methods			Demor	nstration	n, Case	Study			
Name of Lecturer(s)									

Assessment Methods and Criteria						
Method	Quantity	Percentage (%)				
Midterm Examination		1	40			
Final Examination		1	70			

## **Recommended or Required Reading**

- 1 Mustafa Bağcı, Teknik Resim Cilt:2, Birsen Yay., 2010. Mustafa Bağcı, Technical Drawing Volume: 2, Birsen Yay., 2010.
- David Byrnes, AutoCAD 2011 for Dummies, John Wiley & Sons, 2010. David Byrnes, AutoCAD 2011 for Dummies, John Wiley & Sons, 2010.

Week	<b>Weekly Detailed Cour</b>	se Contents
1	Theoretical	General information about technical drawing, projections
2	Theoretical	Projections
3	Theoretical	Coordinate Systems CAD Menus
4	Laboratory	Basic Geometric Shapes Two-Dimensional Drawing Commands and Icons Opening and Saving the Installation Files
5	Laboratory	Basic Edit and Query Instructions Format (Format) Commands Tools
6	Laboratory	Two Dimensional Design CAD Menus with Design Center Command Draw and Modify Menu
7	Practice	Model drawing
8	Intermediate Exam	Midterm
9	Practice	Drawings of construction elements, construction drawings.
10	Laboratory	Building project drawing details.
11	Laboratory	Building project drawing details.
12	Practice	Building project drawing
13	Practice	Building project drawing
14	Practice	Advanced drawing modeling
15	Final Exam	Final Exam

Workload Calculation							
Activity	Quantity	Preparation	Duration	Total Workload			
Lecture - Theory	14	0	3	42			
Lecture - Practice	1	10	1	11			
Midterm Examination	1	8	1	9			



Final Examination	1		12	1	13	
	Total Workload (Hours) 75					
	[Total Workload (Hours) / 25*] = <b>ECTS</b>					
*25 hour workload is accepted as 1 ECTS						

### **Learning Outcomes**

- Understanding of two-dimensional views of 3D objects (conjugate projection, auxiliary and cross-section) in terms of vertical projection
- 2 Dimensioning of 2D technical drawings and recognition of tolerances
- 3 Understanding technical drawing standards and practices applied in the industry
- 4 Use CAD software to create 2D technical image and 3D models
- 5 Can make 2D drawings in Autocad.

#### **Programme Outcomes** (Emergency and Disaster Management)

- 1 Improving the ability to cope with life-threatening emergencies
- 2 The awareness of the necessity of lifelong learning and the ability to do so
- To be able to use basic science (Mathematics, Chemistry, Physiology, Anatomy etc.) in the field of Emergency Aid and Disaster Management
- 4 Ability to analyze and interpret hazards and risks
- 5 Sensitivity to global and local disasters
- 6 Effective communication skills and foreign language knowledge
- 7 Skills and creativity in interdisciplinary teams
- 8 Providing physical and mental stability
- 9 To be able to organize, search and rescue search and rescue operations
- 10 To reach sufficient education level to understand the effects of disasters in universal and social dimensions
- 11 To recognize the cooperation between actors and their actors in Emergency Aid and Disaster Management
- 12 Emergency Aid and Disaster Management vocational, ethical and social responsibility awareness
- 13 Ability to assume an educational role in Emergency Aid and Disaster Management
- 14 To be able to use technology effectively in the field of Emergency Aid and Disaster Management
- Emergency Aid, Search-Rescue and Disaster Management as a whole and manage emergency situations and responsibility awareness

#### Contribution of Learning Outcomes to Programme Outcomes 1: Very Low, 2:Low, 3: Medium, 4: High, 5: Very High

	L1	L2	L3	L4	L5
P1	1	1	1	1	1
P2	1	1	1	1	1
P3	1	1	5	1	1
P4	1	1	1	1	1
P5	1	1	2	1	1
P6	1	1	2	1	1
P7	1	1	1	1	1
P8	1	1	1	1	1
P9	1	1	2	1	1
P10	1	1	2	1	1
P11	1	1	2	1	1
P12	1	1	2	1	1
P13	1	1	2	1	1
P14	1	1	2	1	1
P15	1	1	2	1	1

