# TOROS ÜNİVERSİTESİ

Faculty Of Engineering Electrical And Electronics Engineering (English)

### **Course Information**

TECHNICAL DRAWING FOR ELECTRICAL & ELECTRONICS ENGINEERING						
Code Semester		Theoretical	Practice	National Credit	ECTS Credit	
		Hour / Week				
EEE105	Fall	2	2	3	5	

Prerequisites and co- requisites		
Language of instruction	English	
Туре	Required	
Level of Course	Bachelor's	
Lecturer	Prof. Dr. C. Cengiz ARCASOY	
Mode of Delivery	Face to Face	
Suggested Subject		
Professional practise ( internship )	None	
Objectives of the Course	The aim of this lecture is to gain the technical drawing skills (making of mechanical parts, making mechanical design, reading the drawings sketched by others, using computer for drawing effectively) to the students "	
Contents of the Course	"Terminology of technical drawing, Types of technical drawings, Drawing tools, standard line types and thicknesses, Basic geometric drawings, Isometric perspective projections, Six principal views and auxiliary views, Dimensioning elements and rules, Types of section, Freehand sketching techniques, Introduction to computer aided design. "	

## **Learning Outcomes of Course**

#	Learning Outcomes
1	Analyses the basic principles of technical drawing
2	Draws the perspective view of a mechanical part
3	Draws the six principal views of a mechanical part from the perspective.
4	Draws the third view of a mechanical part from the two known views.
5	Examine dimensions the six principal views and perspectives.
6	Analyses and applies the sectioning methods
7	Makes technical drawings by computer.

### **Course Syllabus**

#	Subjects	Teaching Methods and Technics	
1	General definitions, engineering drawing tools, drawing papers, standard line types and thicknesses, scale,	Lecture	
2	Norm writing, dimensioning elements and rules, basic geometric drawings.	Lecture	
3	Six principal views (front, left side, right side, top, bottom and rear views). and auxiliary views.	Lecture	
4	Drawing applications for principal views from perspectives	Lecture	
5	Types of section views	Lecture	
6	Isometric perspective projections.	Lecture	

7	Midterm Exam	Exam
8	Introduction to computer aided design, explaining the general structure of AutoCAD software.	Lecture
9	Drawing toolbar	Lecture
10	Modify toolbar	Lecture
11	Drawing applications for principal views from perspectives by CAD software,	Lecture
12	Dimesioning toolbar	Lecture
13	Drawing applications for section views by CAD software	Lecture
14	Perspective drawing applications from basic principal views.	Lecture
15		
16	Final Exam	Exam

### **Course Syllabus**

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	T.E. French, C.J Vierck, R.J. Foster, Engineering Drawing and Graphic Technology, Thirteenth Edition, McGraw-Hill International Editions.		

#### **Method of Assessment**

#	Weight	Work Type	Work Title	
1	40%	Mid-Term Exam	Mid-Term Exam	
2	60%	Final Exam	Final Exam	

## Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Analyses the basic principles of technical drawing	1,2	1,2
2	Draws the perspective view of a mechanical part	2,3	1,2
3	Draws the six principal views of a mechanical part from the perspective.	2	1,2
4	Draws the third view of a mechanical part from the two known views.	2,3	1,2
5	Examine dimensions the six principal views and perspectives.	1	1,2
6	Analyses and applies the sectioning methods	2,3	1,2
7	Makes technical drawings by computer.	2	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

#### **Work Load Details**

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	4	56
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	2	28
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	1	10	10
8	Midterm Exam	1	2	2

9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	15	15
16	Final Exam	1	2	2
				113