

Department of Electricity and Energy / Department of Electricity and Energy /

Course Code	Course Name	Teoretical	Practice	Laboratory	Credits	ECTS
ENR221	COMPUTER AIDED TECHNICAL DRAWING	2.00	1.00	0.00	3.00	4.00
Course Detail						
Course Language	: Turkish					
Qualification Degree	: PreBachelor					
Course Type	: Optional					
Preconditions	: Not					
Objectives of the Course	: The aim of this course is to enable students to draw electrical projects using advanced AutoCAD software, perform the necessary calculations, and apply them in the field with proper scaling.					
Course Contents	: AutoCAD software and commands, taking measurements from architectural projects and preparing them for electrical projects, drawing electrical project components, ensuring compliance with TSE standards, and performing the necessary calculations.					
Recommended or Required Reading	: PC, projeksiyon, AUTOCAD programing					
Course Instructors	: Öğr. Gör. Ensar Koşatepe					
Presentation Of Course	: formal					
Update Date	: 9/7/2025 8:41:30 PM					
Dosya İndirilme Tarihi	: 9/11/2025					

## Course Outcomes

## Upon the completion of this course a student :

- 1 learn the AutoCAD program
- 2 Knows AutoCAD commands
- 3 Can draw electrical projects using autocad commands
- 4 can scale projects
- 5 can implement the electricity project in the field

## Preconditions

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Weekly Contents

	<b>Teorical</b>	<b>Practice</b>	<b>Laboratory</b>	<b>Preparation Info</b>	<b>Teaching Methods</b>	<b>Course Learning Outcomes</b>
1. Week	*Introduction to AutoCAD	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.1
2. Week	*Introduction to AutoCAD	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.1
3. Week	*AutoCAD commands	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.1 Ö.C.2
4. Week	*AutoCAD commands	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.1 Ö.C.2
5. Week	*electrical project drawing	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.1 Ö.C.2 Ö.C.3
6. Week	*electrical project drawing	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.1 Ö.C.2 Ö.C.3
7. Week	*electrical project drawing	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.1 Ö.C.2 Ö.C.3
8. Week	*Midterm Exam					Ö.C.1 Ö.C.2 Ö.C.3
9. Week	*electrical project drawing	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.3 Ö.C.4
10. Week	*electrical project drawing	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.3 Ö.C.4
11. Week	*electrical project drawing	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.3 Ö.C.4
12. Week	*reading a real project, implementing it in the field and taking quantity surveys	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.3 Ö.C.4 Ö.C.5
13. Week	*reading a real project, implementing it in the field and taking quantity surveys	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.3 Ö.C.4 Ö.C.5
14. Week	*reading a real project, implementing it in the field and taking quantity surveys	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.3 Ö.C.4 Ö.C.5
15. Week	*reading a real project, implementing it in the field and taking quantity surveys	*Doing market work with AutoCAD program	*Using AutoCAD program using a computer	*lecture notes, internet videos	*lecture, question-answer and practice	Ö.C.3 Ö.C.4 Ö.C.5
16. Week	*final exam					Ö.C.1 Ö.C.2 Ö.C.3 Ö.C.4 Ö.C.5

Assesment Methods %

2 Final : 60.000

3 Vize : 40.000

ECTS Workload

<b>Activities</b>	<b>Count</b>	<b>Time(Hour)</b>	<b>Sum of Workload</b>
Vize	1	1.00	1.00
Final	1	1.00	1.00
Derse Katılım	14	2.00	28.00
Uygulama / Pratik	14	1.00	14.00
Laboratuvar	14	1.00	14.00
Proje	1	10.00	10.00
Final Sınavı Hazırlık	1	5.00	5.00
Ara Sınav Hazırlık	1	5.00	5.00
Saha/Arazi Çalışması	1	2.00	2.00
Teorik Ders Anlatım	14	2.00	28.00

Total : 108.00

Sum of Workload / 30 ( Hour ) : 4

ECTS : 4.00

## Program And Outcome Relation

	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14	P.O. 15	P.O. 16	P.O. 17	P.O. 18	P.O. 19	P.O. 20
L.O. 1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L.O. 2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L.O. 3	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L.O. 4	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L.O. 5	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**BEWARE OF PLAGIARISM** Please pay attention to proper academic citation rules and avoid plagiarism, an unethical and academically fraudulent behavior, when completing reports, assignments, or other academic works, and it is treated with the same disciplinary action as cheating in a classroom setting. It is imperative to refrain from presenting another person's ideas, language, expressions, or any other form of intellectual property as your own. Regardless of quality, your assignments/projects/research should reflect your original work. Perfection is not a requirement, and in case of any uncertainties regarding academic writing guidelines, you may seek clarification from your course instructor.

Engel Durumu/Uyarlama Talebi : Engel durumuna ilişkin herhangi bir uyarlama talebinde bulunmak isteyen öğrenciler, dersin öğretim elemanı ya da Nevşehir Engelli Öğrenci Birimi ile en kısa sürede iletişime geçmelidir.