

Alanya Alaaddin Keykubat University | Rafet Kayış Faculty of Engineering
Electrical-Electronics Engineering Department
 2023-2024 Spring Semester

Syllabus

Code/Name	EEE 108 / Introduction to Electrical Engineering
Type	Required
Credit/ECTS	6/6
Hour per Week	2 (2+0+0)
Level/Year	Undergraduate/1
Semester	Spring
Classroom	WWF A103
Content	An orientation course introducing the students to engineering in general and to electrical and electronics engineering in particular with a discussion of the past, present and future of major areas. The course also aims to emphasize the ethical issues and current debates in electrical engineering and bring career and research opportunities to the attention of students. A general portrayal of electrical engineering is presented by means of practical, hands-on design projects and technical tutorials.
Prerequisites	None
Textbooks	<p>Primary Class Notes AR Hambley, Electrical Engineering Principles and Applications, Pearson Education, 6th Ed., 2016.</p> <p>Supplementary JW Nilson, SA Riedel, Electric Circuits, Pearson Education, 8th Ed., 2008.</p>
Objectives	<ul style="list-style-type: none"> • To learn the history of electrical engineering • To develop engineering ethics and understand the impacts of unethical engineering decisions on the environment, society, public health, privacy etc. • To gain a practical perspective to main engineering systems and challenges prior to theoretical courses of the following years with practical design projects
Course Outcomes	In this course you will be able to: CO1 get an ability to communicate effectively with a range of audiences. CO2 get an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts. CO3 get an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

Weekly Schedule of Topics

W	Topic
1	The History of Electrical Engineering
2	Electrical Engineering: An overview
3	Major classifications of Electrical Engineering
4	International System of Units
5	Problem Solving in Engineering
6	The Ethical Issues and Current Debates in Electrical Engineering
7	Career and Research Opportunities
8	Basics of Electrical Circuits

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9	Current, Voltage and Resistance
10	Electrical Power and Energy
11	Circuit Analysis Methods
12	Thevenin and Norton Equivalent Circuits
13	Maximum Power Transfer
14	Phasors

Professional Contribution Be provided with an overview of the EE profession, careers, and the field in general, learn the current research areas and career opportunities and will be more equipped to make career decisions.

Contribution to Program Outcomes*

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
C01	5	4	2	4	1	4	2	2	3	5	1
C02	4	5	1	4	1	4	4	2	2	3	1
C03	3	5	3	4	3	4	2	2	2	3	0
C04	4	4	3	3	0	4	3	2	4	4	0
C05	5	2	4	4	1	5	5	3	1	1	2

* Contribution Level | 0: None | 1: Very Low | 2: Low | 3: Medium | 4: High | 5: Very High

Course Policy

- Be in the class on time.
- English should always be used to communicate with one another.
- At least 70% attendance is required, otherwise a grade of **DZ** will be assigned.
- You must be present in class for the exercises and solve problems.

Cheating & Plagiarism

- Copying or letting someone copy your work on exams, assignments, or reports is cheating.
- Cutting and pasting text, figures and tables from web sources or any other electronic source is plagiarism.
- The consequence of academic dishonesty is to receive a grade of **FF** for the course.

Evaluation

Exercises	10%
Midterm	30%
<u>Final Exam</u>	<u>60%</u>
Total	100%

Instructor

Name/Surname	Emrah Irmak	Email	emrah.irmak@alanya.edu.tr
Room	228	Office Hours	Tu 10.30-11.30 F 15.30-17.30

Prepared by Emrah Irmak on June 7th, 2024.