Alanya Alaaddin Keykubat University | Rafet Kayış Faculty of Engineering
Electrical-Electronics Engineering Department
2025-2026 Spring Semester

Syllabus

Code/Name	EEE 206 / Electronic Circuits Laboratory
Type	Required
Credit/ECTS	4/4
Hour per Week	4
Level/Year	Undergraduate/2
Semester	Spring
Classroom	Electrical and Electronics Engineering Laboratory
Content	Fundamental electronic circuit analysis and practical implementation, including RC/RL/RLC circuits, filters, and operational amplifier applications through laboratory experiments.
Prerequisites	None
Textbooks	***Primary*** J. David Irwin, Basic Engineering Circuit Analysis, 10th ed. John Wiley ***Supplementary*** J.W. Nilsson, S.A. Riedel, Electric Circuits, 9th. Ed., Prentice Hall.
Objectives	• To get hand on experience on electronic components. • To be able to lay out, wire and troubleshoot electronic circuits • To be able to carry out basic measurements
Course Outcomes	In this course you will be able to: CO1 Analyze the operating principles and frequency responses of fundamental electronic circuits, including RC, RL, RLC, filter, integrator, and differentiator circuits. CO2 Construct and test electronic circuits using laboratory instruments such as oscilloscopes, signal generators, and breadboards, and perform accurate electrical measurements. CO3 Interpret experimental results by comparing theoretical and measured data, and prepare technical laboratory reports in accordance with engineering standards.

Weekly Schedule of Topics

W	Topic
1	Laboratory safety rules, introduction to laboratory equipment, breadboard, oscilloscope and signal generator usage
2-4	AC analysis of first-order RC, RL and RLC circuits
5-7	Filter circuits
8-9	Integrator and differentiator circuits using operational amplifiers
10-11	Frequency response analysis of passive and active filter circuits
12-13	Practical applications of operational amplifier circuits and signal processing
14	Final laboratory applications, overall evaluation, and submission of laboratory reports

Contribution to Program Outcomes*

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	5	5	1	5	0	5	1	3	1	3	0
CO2	5	5	1	4	0	5	4	3	4	3	0
CO3	5	5	3	5	2	5	1	3	1	3	0

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

Requirements	Basic knowledge of Electromagnetic Field Theory	
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.	
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	Midterm Final Exam Total	40% 60% 100%

Instructor

Name/Surname	Enis Körpe	Email	enis.korpe@alanya.edu.tr
Room	109	Office Hours	Tuesday 13.30-17.30 | Wed 13.30-17.30