

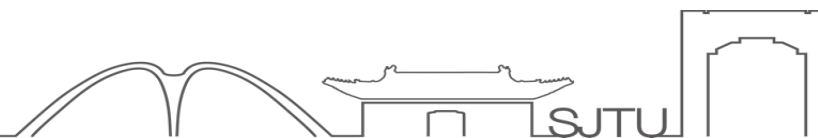


JOINT INSTITUTE
交大密西根学院

ECE2150J Introduction to Circuits

Introduction

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Teaching Members

Instructor

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TAs

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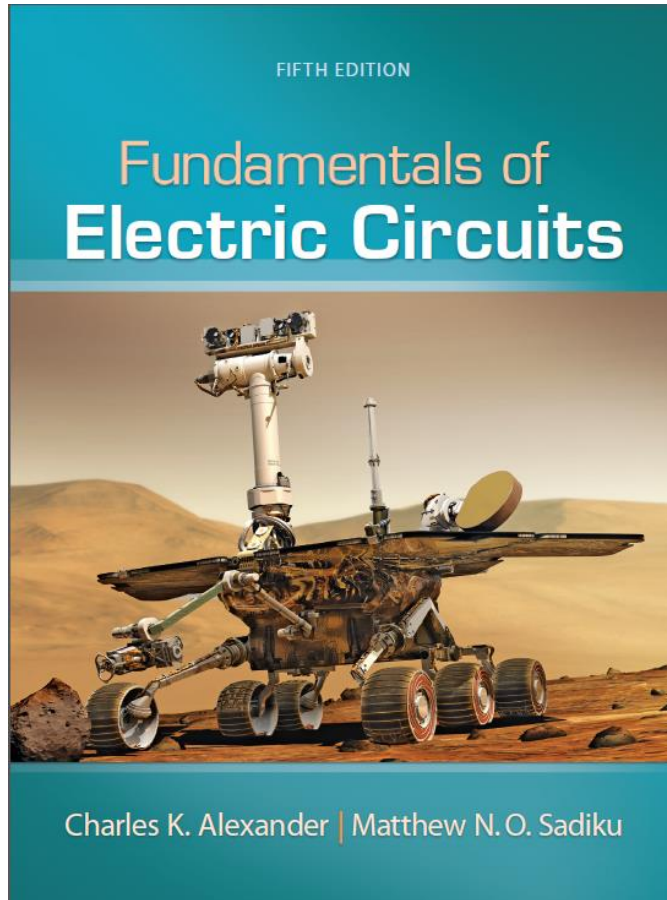
ZHANG Kangqi, kangqi_zhang@sjtu.edu.cn

Course pre-requisites

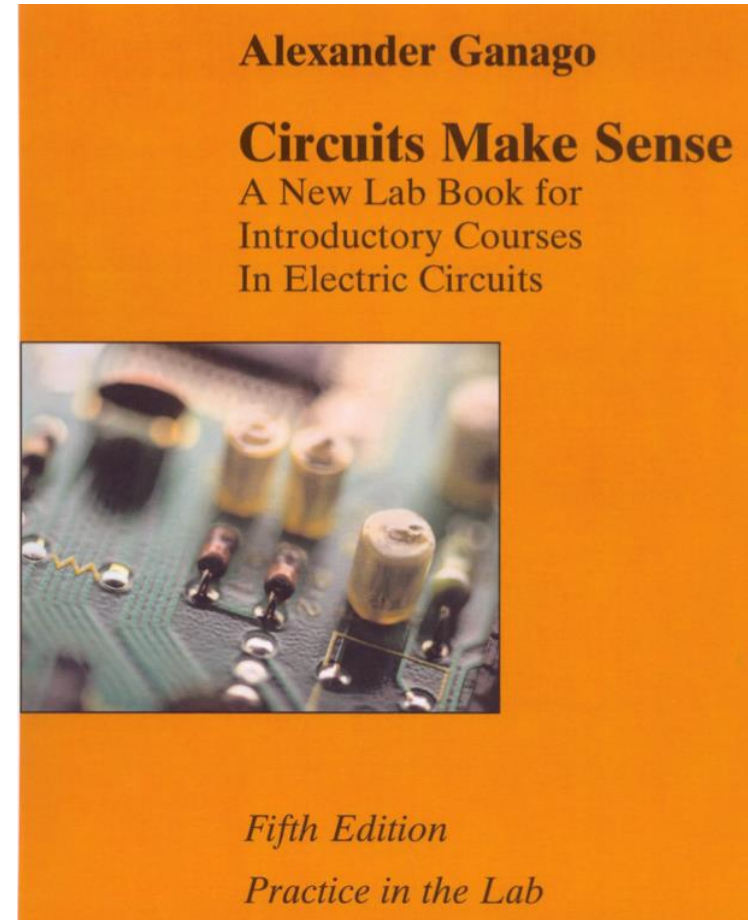
- Pre-requisites: VV156 or VV186, VG101
- Co-requisites: VP240 or VP260
- Basic college math and physics
 - Scalar & Vector
 - Differentiation & Integration
 - Electric Charge Current & Voltage

Textbook

Main Textbook



Laboratory book



Contents (Mid-term)

- Chapter 1. Basic Concepts
- Chapter 2. Basic Laws
- Chapter 3. Methods of Analysis
- Chapter 4. Circuit Theorems
- Chapter 5. Operational Amplifier
- Chapter 6. Capacitors and Inductors
- Chapter 7. First-Order Circuits
- Chapter 8. Second-Order Circuits

Contents (Final)

- Chapter 9. Sinusoids and Phasors
- Chapter 10. Sinusoidal Steady-State Analysis
- Chapter 11. AC Power Analysis
- Chapter 12. Three-Phase Circuits
- Chapter 13. Magnetically Coupled Circuits
- Chapter 14. Frequency Response

Why We Learn This Course

- Learn basic skills for circuit analysis and advanced Classes, for example, ECE3110J – Electronic Circuits, ECE3120J – Digital Integrated Circuits, ECE4110J – Microwave Circuits and ECE4270J – VLSI Design
- Base of other ECE courses and future application aspects

Course Schedule

- Lectures: 10:00 - 11:40 am on Tuesdays and Thursdays DZY (东中院) 1-107.

Jl		Mon	Tues	Wed	Thu	Fri	Sat	Sun
Fall	1	Sep	17	18	19	20	21	22
	2	23	24	25	26	27	28	29
	3	30	Oct	2	3	4	5	6
	4	7	8	9	10	11	12	13
	5	14	15	16	17	18	19	20
	6	21	22	23	24	25	26	27
	7	28	29	30	31	Nov	2	3
	8	4	5	6	7	8	9	10
	9	11	12	13	14	15	16	17
	10	18	19	20	21	22	23	24
	11	25	26	27	28	29	30	Dec
	12	2	3	4	5	6	7	8
	13	9	10	11	12	13	14	15
	14	16	17	18	19	20	21	22

Course Schedule

Instructor

- Office hours: 9:00 am – noon Fridays at 544 Longbin building, or you are welcome to send an email to me to arrange a meeting.

TAs

- Recitation: TBD, Will be announced by TAs
- TA office hours: TBD, Will be announced by TAs

Labs

TBD

Canvas and Feishu

- Announcements, Class materials, etc. will be uploaded in Canvas and Feishu.

Feishu Course Group



The JI Honor Code

- Personal integrity as students and professionals.
- Respect other people and their work.
- Respect yourself and your own efforts.
- Mutual trust
- Applicable to all your academic activities here, including homework, quizzes, lab reports, projects and exams. Violations will be reported to the Honor Council.
 - Copy other student's homework, quizzes, lab reports, and exams.
 - Illegal copy of online resource and academic literatures.
 - Helping others on the abovementioned activities. Fake ID for exams.

Other Guidelines

- It is highly encouraged to come to the class.
- Some contents covered in class may not be in the textbook. Please review all the contents covered in the class. If you are not clear with them, please ask me or TAs anytime.

ECE2150J Has Two Sections

- The same homework assignments
- The same quizzes
- The same labs
- The same midterm and final exam
- The same curving

Grading Policy

- 6 Homework assignments – 12%
- 5 In-class quizzes (also for checking attendance) – 5%
- 8 Labs (Lab participations + Lab reports) – 16% (8 + 8)
- Midterm Exam – 33%
- Final Exam – 34%

Homework and Lab Report Rules

- Homework and lab report will be assigned online at Canvas as scheduled. The due date will be also announced at the same time.
- For late submission, there is a penalty of -1% per hour, and late submission over 3 days (72 hours) cannot be accepted.
- Students should complete the homework and lab report independently. Copying others' work is not allowed and is a violation of the Honor Code.

Quiz Rules

- 5 quizzes without announcement for checking attendance.
- Discussions are allowed since we do not check whether the answer is right or not. However, no point will be given to **an answer with no trace of trials**, i.e. a blank sheet with only name.
- No make-up quizzes are allowed.
- The submission must be done **one-to-one in person** to TAs after the lecture.

Exam Rules

- There will be one midterm exam and one final exam.
- Each lasts 100 minutes.
- Students should complete the exam independently.
- No talk and collaboration are allowed.
- Closed book, one cheating sheet (A4 size; double side) are allowed for the midterm and final exams, respectively.
- Only calculator will be allowed to use.

Syllabus

- Syllabus is available in Canvas