

# ❖ ECE\_1701 (Fundamentals Of Electric Power Engineering)

## Instructor : Jeungphill Hanne

### ❖ Agenda for today

#### 1. SCUPI 2026 Spring Academic Calendar

- Academic Calendar : Midterms & Final etc.
- My Schedule : Office hours etc.

#### 2. Course Introduction

- Course information
  - Subject, Text book, Lecture Hour, Office hour, Course website, etc.
- Course Objective & Scope, Course Learning Key Points
- Course Grading & Tentative Course Schedule

#### & After the break

#### 3. Review on

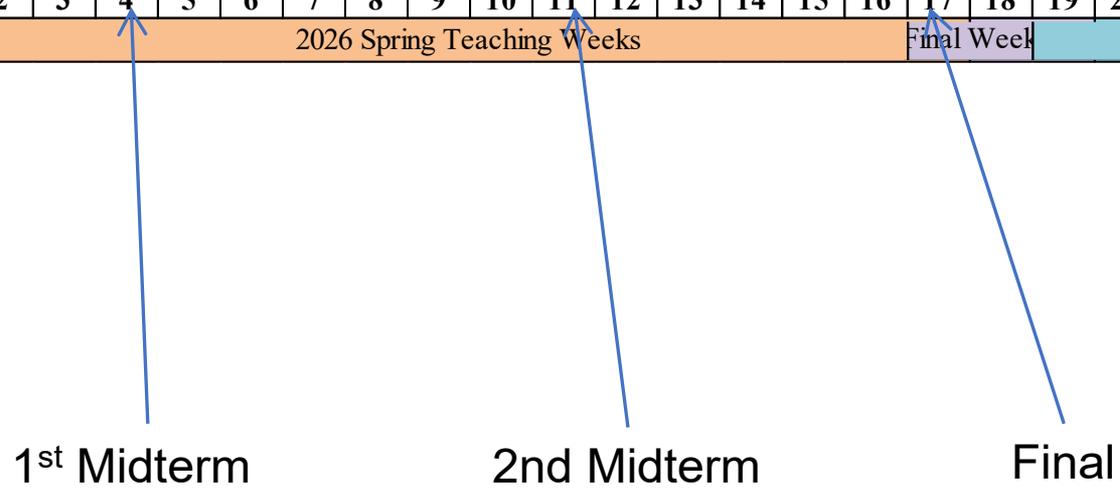
**Chap 8 (Thomas), Or Chap 10 (Svoboda )!**

**“Sinusoidal Steady-State Response, or Analysis ”**

# 1. SCUPI 2026 Spring Academic Calendar

- Academic Calendar : Midterms & Final etc.

SCUPI Academic Calendar for 2025-2026 Spring																											
	Mar.		Mar.			Apr.				May					Jun.				Jul.					Aug.			
<b>Monday</b>	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	13	20	27	3	10	17	24
<b>Tuesday</b>	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	7	14	14	21	28	4	11	18	25
<b>Wednesday</b>	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	15	22	29	5	12	19	26
<b>Thursday</b>	5	12	19	26	2	9	16	23	30	7	14	21	28	4	11	18	25	2	9	16	16	23	30	6	13	20	27
<b>Friday</b>	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	3	10	17	17	24	31	7	14	21	28
<b>Saturday</b>	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	18	25	1	8	15	22	29
<b>Sunday</b>	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	5	12	19	19	26	2	9	16	23	30
<b>SCU Week</b>	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
<b>SCU Term</b>	2026 Spring Teaching Weeks																	Final Week	Summer Recess								



*This schedule is preliminary!!*

# 1. SCUPI 2026 Spring Academic Calendar

- My Schedule : Office hours etc.

2025-2026 Spring Semester Course Schedule					
Class time	Monday	Tuesday	Wednesday	Thursday	Friday
08:15-09:00			Optical Engineering N-209	Linear Control Systems S-506	
09:10-09:55			Optical Engineering N-209	Linear Control Systems S-506	
10:15-11:00			Optical Engineering N-209	Office Hour Linear Control N-412	
11:10-11:55			Optical Engineering N-209	Office Hour Power Engineering N-412	
Lunch Break					
13:50-14:35		Linear Control Systems S-506	Funamentals of Electric Power Engineering S-201	Office Hour Power Engineering N-412	
14:45-15:30		Linear Control Systems S-506	Funamentals of Electric Power Engineering S-201	Office Hour Optical Engineering N-412	
15:40-16:25		Office Hour Linear Control N-412	Funamentals of Electric Power Engineering S-201	Office Hour Optical Engineering N-412	
16:45-17:30					

*But, you can come to my office anytime when I am in my office ^^*

# 2. Course Introduction

## Fundamentals Of Electric Power Engineering

- Fundamentals of Electrical Power Engineering and Design the Power systems

### Text Book

- Power System Analysis and Design, 6th Edition

J. D. Glover, M. S. Sarma, and T. J. Overbye,

ISBN 978-1305632134, Cengage

- Electrical Power Systems

C. L. Waldhwa,

ISBN : 978 1 906574 39 0, New Academic Science

- Reference : Introduction of Electrical Circuits, 9th Ed.

J.A Svoboda and R.C. Dorf, 2014 (国际学生版 )

ISBN 978-1-119-54657-3, WILEY

- The Analysis and Design of Linear Circuits, 8th Edition,

R. E. Thomas, A. J. Rosa, and G. J. Toussaint,

ISBN: 978-1-119-23538-5, 2016 John Wiley & Sons

### Lecture

- Instructor : Jeungphill Hanne, PhD

[jeungphill.hanne@scupi.cn](mailto:jeungphill.hanne@scupi.cn)

- Time : Wed. (13:50-16:25) @ S201,SCUPI Building

- Office Hour: Thr.(11:10-11:55) / Thr.(13:50-14:35)

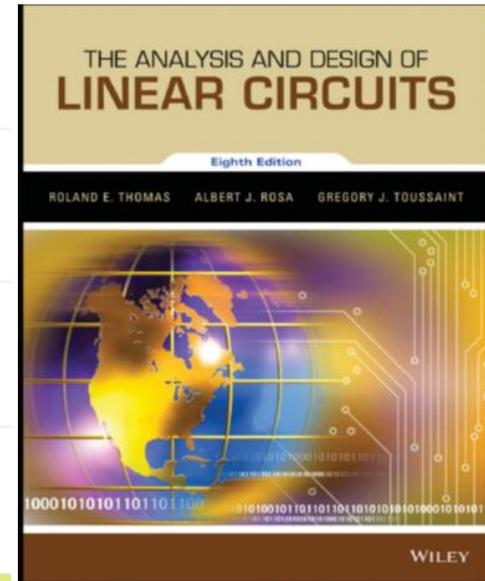
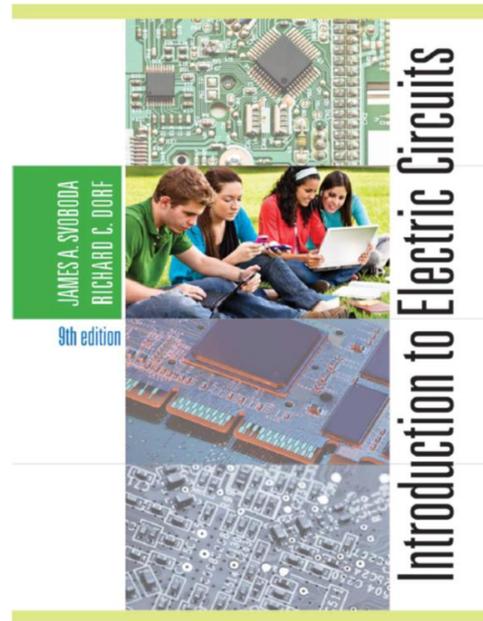
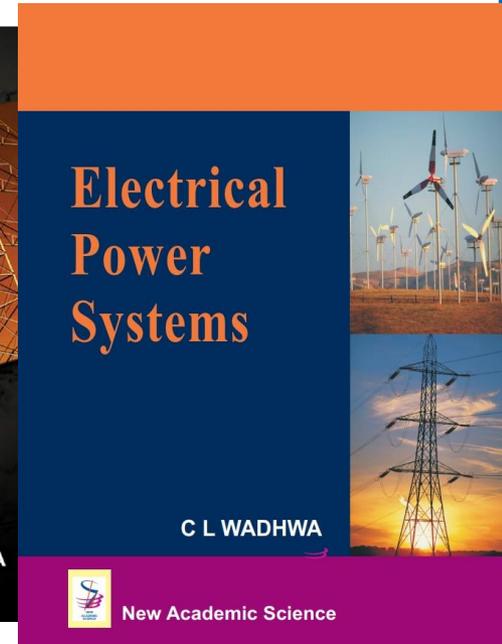
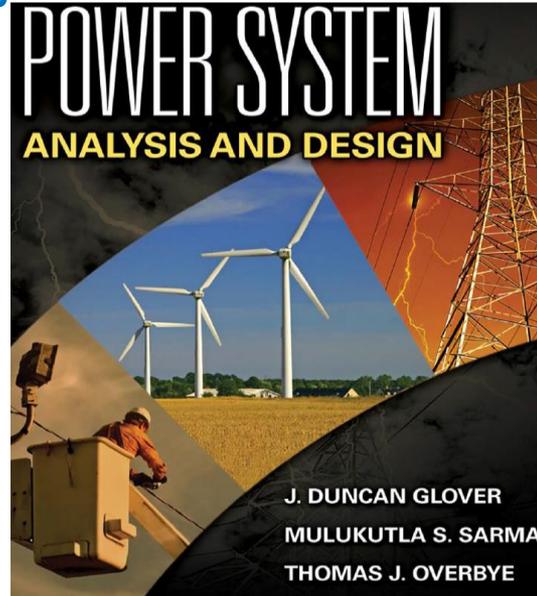
@ N412,SCUPI Building

• Grader : Alston Zhao

• Course Format : Lecture

• Course Grading

- HW+Quiz, 2 Midterm, 1 Final and Attitude etc.



## 2. Course Introduction

### • Course Scope & Objective

- **Scope & Objective & Scope:** This is a first course in electric power engineering for electrical and computer engineers. The course provides the fundamental background to solve some common problems in electric power engineering, and to design power systems using engineering assumptions based on this background. The main objective is to cover topics in AC single phase and three phase power, transformers, transmission lines and electric machinery by integrating their knowledge of linear circuit analysis, electricity, and magnetism to these power systems topics. This course will also provide the prerequisite knowledge for the study of load flow, symmetrical components, fault analysis, stability etc.

#### - **Topics (selected):**

- AC Steady-State Power / Three-Phase Circuits
- Power Transformers
- Power Flows/ Power Transmission Lines
- Symmetrical , or Unsymmetrical Faults
- Transient Stability
- Power System Controls
- Power Distribution

### • Course Grading :

- **Grading** : HW+ Quiz (15%), Midterm I (25%), Midterm II (25%), Final (27%) and Attitude(7% : Attendance, Focus, Engagement, Punctuality for HW, etc.)

→ Less than 60% attendance might be failed for the course!

*Can be flexible!*

# • Tentative Course Schedule

Week	Fundamentals Of Electric Power Engineering	Topics	Assignment
Week 1 (3/9-3/15)	Introduction & Chap 8 (Thomas)	Syllabus & Sinusoidal Steady-State Response	
Week 2 (3/16-3/22)	Chap 11 (Svoboda & Dorf)	AC Steady-State Power	
Week 3 (3/23-3/29)	Chap 11 & Chap 13 (Svoboda & Dorf)	AC Steady-State Power/ Three-Phase Circuits	HW1
Week 4 (3/30-4/5)	Chap 13 (Svoboda & Dorf)	Three-Phase Circuits	HW2
Week 5 (4/6-4/12)	Chap 17 (Svoboda & Dorf)	Two-Port and Three-Port Networks	HW3
Week 6 (4/13-4/19)	Chap 3 (J. D. Glover)	Power Transformers	HW4
Week 7 (4/20-4/26)	Chap 4&5 (J. D. Glover) & Mid Term 1	Transmission Line	
Week 8 (4/27-5/3)	Chap 6 (J. D. Glover)	Power Flows	HW6
Week 9 (5/4-5/10)	Chap 7 (J. D. Glover)	Symmetrical Faults	
Week 10 (5/11-5/17)	Chap 8 (J. D. Glover)	Symmetrical Faults & Components	HW7
Week 11 (5/18-5/24)	Chap 9 (J. D. Glover)	Unsymmetrical Faults	HW8
Week 12 (5/25-5/31)	Chap 10 (J. D. Glover) & Mid Term 2	System Protection	HW9
Week 13 (6/1-6/7)	Chap 11 (J. D. Glover)	Transient Stability	HW10
Week 14 (6/8-6/14)	Chap 12 (J. D. Glover)	Power System Controls	HW11
Week 15 (6/15-6/21)	Chap 13 (J. D. Glover)	Transmission Lines: Transient Operation	HW12
Week 16 (6/22-6/28)	Chap 14 (J. D. Glover) & Review	Power Distribution	HW13
Week 17 (6/29-7/5)	Final		
Week 18 (7/6-7/12)			
Week 19 (7/13-7/19)			

**Any question so far?**

**And let's move on Reviewing  
Chap 8 (Thomas), Or Chap 10 (Svoboda )!  
“Sinusoidal Steady-State Response,  
or Analysis ”**