

ESG 375: FUNDAMENTALS OF PROFESSIONAL ENGINEERING (REQUIRED)

Credit: 1

COURSE CATALOG DESCRIPTION:

The course provides an overview of professional licensure and focuses on the general fundamentals of the engineering exam. Students take a practice exam for both the general exam and in-depth general exam option and review the results.

PRE- OR COREQUISITE(S): U3 or U4 standing

TEXT(S) OR OTHER REQUIRED MATERIAL: FE Review Manual, ,Michael R Lindeburg, PE latest edition

COURSE LEARNING OUTCOMES	SOS	ASSESSMENT TOOLS
Students briefly review areas on FE Exam	a,e,i	Weekly quiz of relevant topic
Students will take one midterm exam	a,e,i	Review topics, math, chem. statics
Students will review their performance on the general practice F.E. Exam	a,e,i	Final exam, 60FE questions

COURSE TOPICS:

- Week 1. Overview of professional licensure and the F.E. Exam, Math 1
- Week 2. Overview of math 2
- Week 3. Overview of chemistry and biology
- Week 4. Overview of Statics
- Week 5. Overview of dynamics
- Week 6. Overview of fluid mechanics and dynamics
- Week 7. Overview of thermodynamics
- Week 8. Overview of heat exchange
- Week 9. Overview of electrical circuits, AC/DC
- Week 10. Overview of mechanics of materials
- Week 11. Overview of structure of matter
- Week 12. Overview of engineering economics
- Week 13. Overview of ethics and misc. topics

CLASS/ LABORATORY SCHEDULE

ESG	375	Fund. of Professional Engineering	TUT	T01	TU	8:30 PM	9:30 PM
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CURRICULUM

This course contributes 1 credit hour toward meeting the required 48 hours of engineering topics.

STUDENT OUTCOMES (SCALE 1-3):

A	B	C	D	E	F	G	H	I	J	K
3				3				3		

3 – Strongly supported

2 – Supported

1- Minimally supported

LEAD COORDINATOR(S) WHO PREPARED THIS DESCRIPTION AND DATE OF PREPARATION:

Frank Szalajda, PE 5-27-2010