

The University of Texas at Tyler  
Department of Electrical Engineering

EENG 4370 Undergraduate Internship

Syllabus

Catalog Description:

An 8- to 16-week program providing for a learning experience in an engineering environment. A written report of the experience is required at the conclusion of the internship period. May be repeated once for credit. A maximum of three credit hours may be applied toward the undergraduate degree. **Prerequisite:** Consent of the department chair.

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Credits: 3

Text(s): No text required

Additional Material: None required

Course Coordinator: Electrical Engineering Faculty

Topics Covered: (paragraph of topics separated by semicolons)

Topics will depend on the available internship opportunities. The internship will lead to a practical engineering experience in one of the many areas of electrical engineering which include but are not limited to: power systems; motors and generators; communications; electronics; microprocessors; semiconductors; and electro-magnetics..

Evaluation Methods: (only items in dark print apply):

1. Examinations / Quizzes
2. Homework
3. Report
4. Computer Programming
5. Project
6. Presentation
7. Course Participation
- Peer Review

Course Objectives<sup>1</sup>: By the end of this course students will be able to:

1. Organize a technical report which integrates essential components of his/her technical work experience [3]
2. Deliver a presentation to convey the main ideas embodied in the report [6]

<sup>1</sup>Numbers in brackets refer to method(s) used to evaluate the course objective.

Relationship to Program Outcomes (only items in dark print apply)<sup>2</sup>: This course supports the following Electrical Engineering Program Outcomes, which state that our students will:

1. have the ability to apply mathematics, science, and engineering principles in the practice of electrical engineering; [1-2]
2. have the ability to use modern engineering tools and techniques in the practice of electrical engineering; [1-2]
3. have the ability to analyze electrical circuits, devices, and systems; [1-16]
4. have the ability to design electrical circuits, devices, and systems to meet application requirements; [1-2]
5. have the ability to design and conduct experiments, and analyze and draw conclusions from experimental results;
6. have the ability to identify, formulate, and solve problems in the practice of electrical engineering using appropriate theoretical and experimental methods; [1-2]
7. have effective written, visual, and oral communication skills; [1-2]
8. possess an educational background to understand the broader context in which engineering is practiced, including:
  - a. knowledge of contemporary issues related to science and engineering;
  - b. the impact of engineering on society;
  - c. the role of ethics in the practice of engineering;
9. have the ability to contribute effectively to multi-disciplinary engineering teams;
10. have a recognition of the need for and ability to pursue continued learning throughout their professional careers. [1-2]

<sup>2</sup>Numbers in brackets refer to course objective(s) that address the Program Outcome.

Contribution to Meeting Professional Component: (in semester hours)

|                                  |   |       |
|----------------------------------|---|-------|
| Mathematics and Basic Sciences:  | 0 | hours |
| Engineering Sciences and Design: | 3 | hours |
| General Education Component:     |   | hours |

Prepared By: Ron Pieper

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