The University of Texas at Tyler Department of Electrical Engineering

EENG 4370: Undergraduate Internship (Elective)

<u>Syllabus</u>

~		_			
Catal	α	I IAC	crin	ıtıΛ	n:
Calai	ou	$-c_{\circ}$	บบน	นเบ	ıı.

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.

Prerequisites:	Consent of the department chair.
Credits: 3	
Text(s): No tex	kt required
Additional Mater	ial: None required
Course Coordina	ator: Ali Ghorshi, PhD

<u>Topics Covered</u>: (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):

- Examinations / Quizzes
- Homework
- 3. Report
- Computer Programming
- Project
- 6. Presentation
- Course Participation

Peer Review

Course Objectives¹: 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]

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

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

- 1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics;
- 2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors:
- 3. an ability to communicate effectively with a range of audiences; [1]
- 4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts;
- 5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives;
- 6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions;
- 7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies. [2]

Contribution to Meeting Professional Component: (in semester hours)

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

Prepared By:	Ron Pieper	Date:	11-29-09
Modified By:	Mukul Shirvaikar	Date:	3-6-2020

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