The University of Texas at Tyler Department of Electrical Engineering

Course: EENG 4199-4399 - Independent Study (Elective)

Syllabus

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Independent study in a specific advanced area of engineering not covered by organized courses. May be repeated as content changes. A maximum of six (6) hours may be used for undergraduate credit on the degree plan if topics vary. Prerequisite: Consent of Instructor and Department Chair

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Credits: (1-3 hours lecture,	0	hours laboratory per week)		
Text(s): Text to	be chosen by the instructo	or			
Additional Materia	I: To be specified by inst	tructor			
Course Coordinate	or:				
Topics Covered: (paragraph of topics separ	rated by s	semicolons)		
Topics this co		ubject ma	terial of the particular offering of		

<u>Evaluation Methods: (only items in dark print apply):</u> Any and all methods below may be used.

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

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

- 1. Analyze systems or algorithms studied in this course [1-6]:
- Design systems or algorithms as appropriate to the subject material [1-6];
- 3. Evaluate the merits of various approaches to solving problems related to the subject material [1-6].

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:

- have the ability to apply knowledge of the fundamentals of mathematics, science and engineering
- 2. have the ability to use modern engineering tools and techniques in the practice of electrical engineering [1-3];

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

- 3. have the ability to analyze electrical circuits, devices, and systems [1];
- 4. have the ability to design electrical circuits, devices, and systems to meet application requirements [2];
- have the ability to design and conduct experiments, and analyze and interpret experimental results;
- 6. have the ability to identify, formulate, and solve problems in the practice of electrical engineering using appropriate theoretical and experimental methods [3];
- have effective written, visual, and oral communication skills;
- possess an educational background to understand the global 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;
- have the ability to contribute effectively as members of multi-disciplinary engineering teams;
- 10. have a recognition of the need for and ability to pursue continued learning throughout their professional careers. [3]

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:	Mukul V. Shirvaikar	Date:	13 Nov 2009
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²Numbers in parentheses refer to the degree to which this course supports the listed Electrical Engineering Program Outcome. Numbers in brackets refer to course objective(s) that address the Program Outcome.