

**The University of Texas at Tyler  
Department of Electrical Engineering**

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

**Syllabus**

**Catalog Description:**

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 instructor

**Additional Material:** To be specified by instructor

**Course Coordinator:**

**Topics Covered:** (paragraph of topics separated by semicolons)

Topics vary depend upon the subject material of the particular offering of this course.

**Evaluation Methods:** (only items in dark print apply): 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
8. Peer Review

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

1. Analyze systems or algorithms studied in this course [1-6];
2. 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].

<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 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];

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];
5. 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];
7. have effective written, visual, and oral communication skills;
8. 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;
9. 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]

<sup>2</sup>Numbers 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.

**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