

ECE 495 – INTERNSHIP IN ELECTRICAL ENGINEERING

Type (check one): Required: _____ Elective: X

2005-2006 Catalog Data: ECE 495-496. Internships in Electrical and Computer Engineering. (Formerly EE 495-496) Students majoring in electrical engineering may be placed in the engineering offices of contracted firms to receive job training under the supervision of qualified engineers. Tasks completed as part of the internship must be approved by an authorized work supervisor. Credit is granted upon faculty approval of periodic review reports and a final summary report describing the work performed. Minimum time 200 hours. Prerequisites: Junior standing and permission of the department. *Pass/Fail Grading. One semester; three credits.*

Prerequisites: Junior standing and faculty approval of project

Co-Requisites: None

Textbook: None

Other Required Materials: None

Other References: Varies depending upon project

Instructor: Dr. Eric B. Welch, Associate Professor of Electrical and Computer Engineering

Course Objectives: These courses are designed to permit juniors or seniors in electrical engineering the opportunity to investigate under industry supervision and guidance, a specific area in electrical engineering to gain research and/or design practice. Writing technical reports and maintaining a logbook is a must.

Prerequisites by Topics: Varies depending upon project

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Class Schedule: One hour meeting with faculty advisor per week plus minimum of 200 documented hours of work in industry

Prepared by: Dr. Eric B. Welch **Date:** November 2005

**Professional Component:
ECE 495 – INTERNSHIP IN ELECTRICAL ENGINEERING**

This section varies depending upon project

Category (check one)	<input type="checkbox"/> Math/Basic Science <input type="checkbox"/> Engineering <input type="checkbox"/> General Education <input type="checkbox"/> Other
Design (check one)	<input type="checkbox"/> Significant <input type="checkbox"/> Some <input type="checkbox"/> None
Realistic Constraints (check all that apply)	<input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input type="checkbox"/> Sustainability <input type="checkbox"/> Manufacturability <input type="checkbox"/> Ethical <input type="checkbox"/> Health & Safety <input type="checkbox"/> Social <input type="checkbox"/> Political

Relationship to Program Outcomes:

Check all that apply:

This section varies depending upon project

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs
- (d) an ability to function on multi-disciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of engineering solutions in a global and societal context
- (i) a recognition of the need for and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice