

EC501- Project I

CREDIT HOURS

3 Hours

COURSE DESCRIPTION

Topics will depend on student's and supervisor's interest and the graduation project title. They may include data acquisition and interpretation- computer models and simulation or design and experimentation. Standard and multiple realistic constraints must be available. Students are required to give a seminar to present the project results and submit a final report.

RELATION OF COURSE TO PROGRAM

Required

CONTRIBUTION OF COURSE TO MEET THE REQUIREMENTS OF CRITERION 5:

Professional component Content			
Math and Basic Sciences	Engineering Topics	General Education	Other
	✓		

RELATIONSHIP OF COURSE TO STUDENT OUTCOMES:

Student Outcomes		Course aspects
A	An ability to apply knowledge of mathematics, science, and engineering	a ₁ a ₂
B	An ability to design and conduct experiments, analyze and interpret data.	b ₁ b ₂ b ₃ b ₄
C	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economics, environmental, social, political, ethical, health, and safety, manufacturability, and sustainability	c ₁ c ₂ c ₃
D	An ability to function on multi-disciplinary teams.	d ₁ d ₂ d ₃ d ₄
E	An ability to identify, formulate, and solve engineering problems	e ₁ e ₂ e ₃
F	An understanding of professional and ethical responsibility	f ₁ f ₂
G	An ability to communicate effectively	g ₁ g ₂ g ₃
H	The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and social content	h ₂ h ₃
I	A recognition of the need for, and an ability to engage in life-long learning.	i ₁ i ₂ i ₃ i ₄
J	A knowledge of contemporary issues within and outside the electrical engineering profession.	j ₁ j ₂
k	An ability to use the techniques, skills, and modern engineering tools necessary for electrical engineering practice.	k