ECE 8019: Advanced Topics in Electromagnetics and Optics

Course Description

Topics are chosen to prepare graduate students for research and application in current problems in electromagnetics and optics.

Transcript Abbreviation: Adv Top EM Opt
Grading Plan: Letter Grade
Course Deliveries: Classroom
Course Levels: Graduate
Student Ranks: Doctoral
Course Offerings: Spring
Flex Scheduled Course: Never
Course Frequency: Odd Years
Course Length: 14 Week
Credits: 3.0
Repeatable: Yes
Maximum Repeatable Credits: 9.0
Total Completions Allowed: 3
Allow Multiple Enrollments in Term: No
Time Distribution: 3.0 hr Lec
Expected out-of-class hours per week: 6.0
Graded Component: Lecture
Credit by Examination: No
Admission Condition: No
Off Campus: Never
Campus Locations: Columbus
Prerequisites and Co-requisites: Prereq: 6010 (719).
Exclusions:
Cross-Listings:

Course Rationale: Existing course.

The course is required for this unit's degrees, majors, and/or minors: No
The course is a GEC: No
The course is an elective (for this or other units) or is a service course for other units: Yes

Subject/CIP Code: 14.1001
Subsidy Level: Doctoral Course

General Information

Repeatable for different titled topics only.

Course Goals

Prepare graduate students for research and application in current problems in electromagnetics and optics

Course Topics

Topic	Lec	Rec	Lab	Cli	IS	Sem	FE	Wor
Advanced topics in electromagnetics and optics chosen to prepare graduate students for research and applications in current problems in electromagnetics and optics								

ABET-EAC Criterion 3 Outcomes

Course Contribution		College Outcome
***	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.

Additional Notes or Comments

Updated prereqs, goals and topics to match university format 3/20/12

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