

ECE 8101: Advanced Topics in Networking

Course Description

Advanced topics and new areas of interest in the theory of networking and networked systems.

Prior Course Number: N/A

Transcript Abbreviation: Adv Top in Network

Grading Plan: Letter Grade

Course Deliveries: Classroom

Course Levels: Graduate

Student Ranks: Masters, Doctoral

Course Offerings:

Flex Scheduled Course: Never

Course Frequency: Even Years

Course Length: 14 Week

Credits: 3.0

Repeatable: Yes

Maximum Repeatable Credits: 6.0

Total Completions Allowed: 2

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: 6001 (804).

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

The specific content of the course will vary depending on the special topic selected. Possible topics include, but are not restricted to, network information theory, distributed optimization, queueing network design and analysis, and game theory

Course Goals

Expose graduate students to fundamental theories and recent advances in communications and networking areas

Present applications of analysis and design methods from diverse areas to communication networks
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Guide discussions on recent seminal works that relate to the broad areas of networking and communications

Course Topics

Topic	Lec	Rec	Lab	Cli	IS	Sem	FE	Wor
Advanced topics and new areas of interest in the theory of networking and networked systems								

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

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