

# ECE 8001: Advanced Topics in Communications

## Course Description

Current topics in information theory and the practice of digital communications.

**Transcript Abbreviation:** Adv Top Comm

**Grading Plan:** Letter Grade

**Course Deliveries:** Classroom

**Course Levels:** Graduate

**Student Ranks:** Masters, Doctoral

**Course Offerings:**

**Flex Scheduled Course:** Never

**Course Frequency:** Odd 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: 7001 (806).

**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

## Course Topics

| Topic   | Lec | Rec | Lab | Cli | IS | Sem | FE | Wor |
|---|-----|-----|-----|-----|----|-----|----|-----|
| Current topics in information theory and the practice of digital communications |     |     |     |     |    |     |    |     |

## 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.             |

| <b>Course Contribution</b> |   | <b>College Outcome</b>  |
|----------------------------|---|---|
|                            | 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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