



EEL 6931

Special Topics in Electrical and Computer Engineering

Section: U2

In-Person meetings arranged

Spring Term 2026

Course Meeting Information

This is an in person class.

Students are required to meet every Friday between 11:30am-1pm.

Professor Information

John Volakis

Roles: Primary Instructor

Email: jvolakis@fiu.edu

Phone: 7-2243

Office Hours: arranged upon request

Office Location: EC 3912

Website: <https://volakis.eng.fiu.edu/>

Department or Academic Unit: ECE

Course Prerequisites

Course prerequisites, if any, are listed below.

Course Description

This course is primarily for graduate students to carry out introductory research prior to becoming PhD students. The purpose of the course is to guide students on their assigned research projects.

The goal is to carry out novel research in radio systems and communication links, including security across the entire frequency spectrum up to 6G/Future G and TeraHertz.

Textbook and Course Materials

NONE

Required/Recommended: N/A

Authors: N/A

Publisher: N/A

Publication Date: N/A

Copyright Date: N/A

ISBN 10: N/A

ISBN 13: N/A

Chapters/Pages: N/A

Course Goals

Course Objectives

Upon completing this course, students will be able to:

- Explain past work in the student's assigned research
- Identify and defend the contributions and research uniqueness
- Critically evaluate past work and be able to review journal papers.
- Write professionally using established standards that are well-established in leading journals.
- Prepare and present presentation.

Student Learning Outcomes/Objectives

- become familiar in the assigned research area
- develop technical writing skills
- critically evaluate assigned journal papers
- write a technical report
- Be able to provide a brief weekly summary of activities (one to two sentences)

Expectations of the Course

Students are expected to actively participate and undertake independent hands-on research activities under the guidance of the advisor. These activities may include: developing research goals or hypotheses, designing and executing research projects, analyzing and interpreting research findings & communicating research ideas and findings effectively through presentations and discussions, culminating in a written research product such as a research proposal, abstract or manuscript.

Ethical Conduct and Research Integrity:

1. Adhere to the highest standards of ethical conduct in all research activities.
2. Recognize and address ethical considerations in research design, data collection, and reporting.
3. Adhere to the University Graduate School “Use of AI in Graduate Research, Theses, and Dissertations” <https://gradschool.fiu.edu/wp-content/uploads/2026/01/Guidance-for-the-Effective-and-Responsible-use-of-AI-in-Dissertations.pdf>) as well as any additional program requirements.

Professionalism:

1. Demonstrate professionalism in all interactions with peers, instructors, and.
2. Respect diverse perspectives and foster an inclusive learning environment.

Time Management and Deadlines:

1. Manage time efficiently to meet deadlines for assignments, presentations, and the research products.
2. Develop a realistic and effective timeline for completing research milestones.

Assignments & Assessments

- Schedule regular meetings (weekly or at the latest bi-weekly) with the major professor throughout the semester
- Attend weekly group meetings at 11:30-1pm on Fridays
- Present at the weekly meeting when assigned (1 to 2 times)

- Presentation should explain the background and new research/ accomplishments
- Write a professional document (research report, chapter, conference or journal paper). The specific writing will be assigned and discussed at the start of the semester and must adhere to professional standards and expected research novelty/innovation required for publication in peer reviewed journals or conference venues

Grading

Letter	Range%	Letter	Range%	Letter	Range%
A	95 or above	B	83 - 86	C	70 - 76
A-	90 - 94	B-	80 - 82	D	60 - 69
B+	87 - 89	C+	77 - 79	F	59 or less

Schedule of Topics

Research topics will be assigned for individual students with goals at the art of the semester

Course Communication

in person and via email as needed

Policies & Resources

Before starting this course, please review the Policies & Resources Page in Canvas, which includes comprehensive information on various University and Course Level Policies such as:

- University Policies
- Accessibility and Accommodations
- Online Etiquette
- Before starting this course, please review the Policies & Resources Page in Canvas, which includes comprehensive information on various University and Course Level Policies such as:
- UGS Guideline's for the Use of AI in Graduate Research, Thesis, and Dissertations (<https://gradschool.fiu.edu/wp-content/uploads/2026/01/Guidance-for-the-Effective-and-Responsible-use-of-AI-in-Dissertations.pdf>)
 - University Policies
 - Accessibility and Accommodations
 - Online Etiquette
 - Technical Requirements and Skills
 - Computer & Digital Literacy Skills
 - Course Technology Accessibility Statements and Privacy Policies
 - Academic Integrity
 - Copyright Statement
 - Nondiscrimination Statement
 - Panthers Care & Counseling and Psychological Services (CAPS)
 - Fair Use Policy

Nondiscrimination Statement

The **Office of Civil Rights Compliance and Accessibility** (CRCA) is responsible for ensuring that FIU maintains a workplace and learning environment free from discrimination, where current and prospective faculty,

staff, and students are treated equitably. If any student, employee, or applicant has a sincere and reasonable belief that they have been discriminated against or harassed based on age, color, disability, marital status, ethnic or national origin, race, religion, retaliation, sex, or any other protected category, they can report their concerns to the CRCA team through report.fiu.edu.