

CSE 8803 NBD: Special Topics

Fall 2026

Georgia Institute of Technology

Instructor: Anqi Wu

Department: School of Computational Science and Engineering

CRN: 90811

Course Format: Seminar / lecture-based special topics course

Meeting Time/Location: [To be announced]

Office Hours: By appointment

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Catalog Description

Topics of current interest in Computational Science and Engineering.

Course Overview

This course covers a selected advanced topic of current interest in computational science and engineering. The course is intended for graduate students and advanced undergraduate students with appropriate background. Emphasis will be placed on foundational concepts, recent research developments, technical methodologies, and critical discussion of current literature in the selected topic area.

Learning Objectives

By the end of the course, students are expected to:

- understand the core concepts and methods of the selected special topic;
- analyze and discuss relevant research literature;
- apply computational or mathematical tools to problems related to the topic;
- communicate technical ideas clearly in written and oral form;
- develop deeper understanding of current research directions in the area.

Course Topics

Specific topics may vary depending on the focus of the offering, but may include:

- foundational theories and methods;
- modern computational approaches;
- recent research papers and emerging directions;
- applications, limitations, and open problems.

Course Activities

Course activities may include:

- lectures and in-class discussion;
- reading and presenting research papers;
- homework or written technical exercises;
- a course project, final report, or presentation.

Assessment

Grades may be based on the following components:

- Class participation and discussion: 15%
- Paper reading summaries and/or assignments: 25%
- Presentation: 20%
- Final project, report, or equivalent deliverable: 40%

The precise assessment structure may be adjusted depending on the topic and enrollment size.

Expectations

Students are expected to attend class regularly, complete assigned readings and coursework on time, participate actively in discussion, and engage thoughtfully with technical material. Because this is a graduate-level special topics course, students should be prepared to read current research papers and explore material beyond standard textbook content.

Attendance and Communication

Regular attendance and participation are expected. Students should check course announcements and email regularly. Office hours are available by appointment.

Late Work

Late submissions may be penalized unless prior arrangements have been made or documented circumstances arise. Specific policies for assignments and project milestones will be communicated during the semester.

Academic Integrity

All students are expected to comply with the Georgia Tech Honor Code. Proper attribution of ideas, text, code, data, and external resources is required.

Accessibility and Student Support

Students requiring accommodations should contact the Office of Disability Services and notify the instructor as early as possible. Georgia Tech also offers academic and wellness resources to support student success.

Institute Policies

All Georgia Tech policies related to academic integrity, non-discrimination, accessibility, and student conduct apply in this course.

Note: Because CSE 8803 is a special topics course, the exact content, assignments, and project structure may vary by offering. Additional course-specific details will be provided at the beginning of the semester.