CSE 9000 W13: Doctoral Thesis

Summer 2026

Georgia Institute of Technology

Instructor: Anqi Wu
Department: School of Computational Science and Engineering
CRN: 55883
Course Format: Independent doctoral thesis research
Meeting Time/Location: By arrangement
Office Hours: By appointment
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Catalog Description

Doctoral thesis research conducted under the supervision of a faculty advisor.

Course Overview

This course supports doctoral students conducting original dissertation research. Students are expected to pursue a significant and novel research direction, develop rigorous methodologies, and contribute new knowledge to their field. The work culminates in a doctoral dissertation and, when applicable, a formal defense.

Learning Objectives

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

- conduct independent, original research at the doctoral level;
- develop and apply advanced theoretical, computational, or experimental methods;
- generate novel insights or contributions to the field;
- demonstrate deep expertise in a specialized research area;
- communicate research contributions clearly in written and oral forms.

Research Activities

Activities typically include:

- conducting original research and experiments;
- developing models, algorithms, or theoretical frameworks;
- analyzing and interpreting results;
- writing dissertation chapters or manuscripts;
- preparing conference or journal submissions;
- meeting regularly with the advisor and research group.

Expectations

Students are expected to:

- demonstrate independence, initiative, and sustained effort;
- maintain regular communication with the advisor;
- make continuous and measurable research progress;
- incorporate feedback and refine research direction;
- uphold professional and ethical standards in research.

Assessment

Evaluation is based on research progress and scholarly contributions:

- Research progress and productivity: 40%
- Technical depth and originality: 30%
- Communication (papers, presentations, writing): 20%
- Engagement and professionalism: 10%

Deliverables

Deliverables may include:

- dissertation chapters or written reports;
- publications or manuscript submissions;
- research artifacts such as code, datasets, or systems;

- presentations or thesis defense.

Specific deliverables will be determined in consultation with the advisor.

Attendance and Communication

There are no formal lectures. Regular meetings with the advisor and participation in research group activities are expected.

Late Work

Research timelines are flexible but must align with program milestones. Students are expected to communicate proactively regarding progress and any delays.

Academic Integrity

All research must comply with the Georgia Tech Honor Code and relevant research ethics standards. Proper attribution and responsible conduct of research are required.

Accessibility and Student Support

Students requiring accommodations should contact the Office of Disability Services and notify the instructor early. Georgia Tech provides additional academic and wellness resources.

Institute Policies

All Georgia Tech policies regarding academic conduct, non-discrimination, accessibility, and student behavior apply.

Note: This syllabus provides general guidance for CSE 9000. Specific expectations may vary depending on the student's research area, advisor, and program requirements.