

MSE 9000 - Doctoral Thesis

Instructor: C.P. Wong, Regents' Professor and Charles Smithgall Institute Endowed Chair

Course Description: Doctoral Thesis research conducted under the guidance of a faculty mentor.

Learning objects:

1. Recognizes research problems and generate hypothesis.
2. Seek and apply solutions to the problem based on the hypothesis
3. Come up with methods and master the skills apply to the research project
4. Demonstrates ability to properly identify and/or generate reliable data
5. Learn the principles of Responsible Conduct of Research (RCR)

Course Materials: No textbooks or materials are required. Resources for research are determined in consultation with the thesis advisor.

Credit (1-21 Credit Hours)

Grades: Your grade is determined based on your attendance, research effort, and participation in lab.

Pass: 60-100%

Fail: 0-59%

Attendance: Doctoral Thesis research students will participate in research activities on a weekly basis and discuss with faculty research mentors.

Research Integrity: Students need to follow the standards of academic integrity. All work submitted must be original and properly cited, particularly including the usage of generative AI under school policy: <https://oit.gatech.edu/ai/guidance>. Plagiarism, cheating, or any form of academic dishonesty will subject to consequence under school policy: <https://policylibrary.gatech.edu/student-life/academic-honor-code>

Accommodation: If students encounter academic, physical, or other barriers on campus, here is the school's resource: <https://disabilityservices.gatech.edu/>

Expectations: Faculty research mentors and students should discuss and agree on expectations before an undergraduate research course, including the student's weekly time commitment; methods and frequency of communication between the student and mentor(s); how research will be recorded, stored, and shared. At Georgia Tech, it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body, where simple respect for knowledge, hard work, and cordial interactions will help. To support mutual respect and understanding between students and faculty, Georgia Tech faculty and students collectively adopted a list of student-faculty expectations: <https://catalog.gatech.edu/rules/22/>