

Adv Design Methods I

Last Updated: Tue, 03/17/2026

Course prefix: AE

Course number: 6373

Section: Q01

CRN

86813

Instructor first name: Dimitrios

Instructor last name: Mavris

Semester: Fall

Academic year: 2026

Course description: Introduction to modern probabilistic design methods and techniques. Design of experiments, Taguchi methods, response surface equations, robust design, risk and uncertainty, technology assessment and selection.

Academic honesty/integrity statement:

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards.

For information on Georgia Tech's Academic Honor Code, please visit

<https://policylibrary.gatech.edu/student-life/academic-honor-code>[Links to an external site.](#)

Any student suspected of cheating or plagiarizing on any course activity will be either

- reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations if any, and/or
- addressed in a Faculty Conference Resolution between the course instructor and the student.

In either case, evidence of cheating or other violations of the Georgia Tech Honor Code may be submitted directly to the Office of Student Integrity (OSI) and to the student's designated facilitator at their high school.

Details on the Faculty Conference Resolution process are here:

<https://osi.gatech.edu/content/faculty-conference-resolution>Links to an external site.

Cheating includes, but is not limited to the following.

- Copying directly from **any** source during a closed-book exam, including friends, classmates, or a solutions manual.
- Allowing another person to format the work that you submitted for course credit.
- Taking a test using someone else's name, or having someone else take a test in your name.

Core IMPACTS statement(s) (if applicable):

This is a Core IMPACTS course that is part of the Technology, Mathematics, and Sciences area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I ask scientific questions or use data, mathematics, or technology to understand the universe?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Inquiry and Analysis
- Problem-Solving
- Teamwork