Cognitive Engineering

Last Updated: Wed, 10/22/2025

Course prefix: AE

Course number: 6551

Section: A

CRN (you may add up to five):
xxxxxx

Instructor First Name: Karen

Instructor Last Name: Feigh

Semester: Fall

Academic year: 2026

Course description:

Initial graduate course on Cognitive Engineering.

Course learning outcomes:

Course Goals: Provide students with the knowledge and skills to:

1. Understand how human performance impacts the performance of large-scale systems involving humans, technologies, and procedural/regulatory demands on behavior.
2. Understand the fundamental determinants of human behavior within these systems, including their interaction with technological artifacts (such as computer displays and decision aids, information systems, and automated systems), context and situational factors, and their personal attributes and goals.
3. Apply structured design methods to developing technologies (such as information systems) and procedures, in order to enable desired human behavior and system performance.
4. Develop ability to critically review and discuss literature in the domain, connecting concepts and using precise terminology associated with cognitive Engineering.

Required course materials:

There are no textbooks required for this course. All materials will be provided via CANVAS or the GT Library.

Grading policy:

Specification based grading. 3 mini projects are given and students must meet the specification for each project as well as weekly quizzes and in-class participation.

Attendance policy:

Attendance is required.

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.

Core IMPACTS statement(s) (if applicable):

N/A