

Computer Vision

Last Updated: Tue, 03/17/2026

Course prefix: CS

Course number: 6476

Section: 001

CRN

84338

Instructor first name: Irfan

Instructor last name: Essa

Semester: Fall

Academic year: 2026

Course description: Introduction to computer vision including fundamentals of image formation, camera imaging geometry, feature detection and matching, stereo, motion estimation and tracking, image classification and scene understanding. Credit not awarded for both CS 6476 and CS 4495 or CS 4476.

Academic honesty/integrity statement:

One serious kind of academic misconduct is plagiarism, which occurs when a writer, speaker, or designer deliberately uses someone else's language, ideas, images, or other original material or code without fully acknowledging its source by quotation marks as appropriate, in footnotes or endnotes, in works cited, and in other ways as appropriate (modified from WPA Statement on "Defining and Avoiding Plagiarism"). If you engage in plagiarism or any other form of academic misconduct, you will fail the assignment in which you have engaged in academic misconduct and be referred to the Office of Student Integrity, as required by Georgia Tech policy. We strongly urge you to be familiar with these Georgia Tech sites: · Honor Challenge —<https://osi.gatech.edu/students/honor-code> · Office of Student Integrity — <http://www.osi.gatech.edu/index.php/>

Core IMPACTS statement(s) (if applicable):

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

o How do I write effectively in different contexts?

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

- o Students will communicate effectively in writing, demonstrating clear organization and structure, using appropriate grammar and writing conventions.
- o Students will appropriately acknowledge the use of materials from original sources.
- o Students will adapt their written communications to purpose and audience.
- o Students will analyze and draw informed inferences from written texts.

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

- o Critical Thinking
- o Information Literacy
- o Persuasion