

VIP 4603 Syllabus

VIP Project Team (ACT Driving Simulator), Section: VWU, 0-3 Credits

Fall 2026

Instructor Information

Instructor: Srinivas Peeta

General Course Information

Description

The Vertically-Integrated Projects (VIP) Program operates in a research and development context. Undergraduate students that join VIP teams earn academic credit for their participation in design/discovery efforts that assist faculty and graduate students with research and development issues in their areas of expertise.

The teams are:

Multidisciplinary - drawing students from all disciplines on campus;

Vertically-integrated - maintaining a mix of sophomores through PhD students each semester;

Long-term - each undergraduate student may participate in a project for up to three years and each graduate student may participate for the duration of their graduate career.

The continuity, technical depth, and disciplinary breadth of these teams are intended to:

- Provide the time and context necessary for students to learn and practice many different professional skills, make substantial contributions to the project, and experience many different roles on a large, multidisciplinary VIP team.
- Support long-term interaction between the graduate and undergraduate students on the team. The graduate students mentor the undergraduates as they work on VIP projects embedded in the graduate students' research.
- Enable the completion of large-scale projects that are of significant benefit to faculty members' research programs.

Course Learning Outcomes

Upon successful completion of this course, you should be able to:

- Learn and practice professional skills;
- Make substantial contributions to the team project;
- Experience different roles on a large, multidisciplinary team.

ACT Driving Simulator Team Focus

The ACT (Autonomous and Connected Transportation) Driving Simulator Team addresses problems that arise in multiple dimensions due to the emergence of autonomy, connectivity, and novel tech-leveraged modes in transportation. A major focus is to understand the interactions among drivers/travelers, emerging vehicular technologies related to connectivity and autonomy, and novel infrastructure designs by leveraging driving simulator environment, analytical modeling, and living labs. Using the collected data, the team seeks to develop analytical models and perform data analytics to predict the autonomous and connected transportation future. Another focus is to leverage these emerging technologies and modes to develop sustainable travel solutions and deployment tools for smart and connected communities (SCCs) using the City of Peachtree Corners, GA, as an immersive living lab.

Required Course Materials

There is no required textbook for this course.

Grading Policy:

The letter grade for the course will be based on the following grading scheme:

- A: 90% and above
- B: 80% to below 90%
- C: 70% to below 80%
- D: 60% to below 70%
- F: Below 60%

Description of Graded Components

Course grading is out of 100%:

1. Documentation and records (30%)
2. Personal accomplishments and contributions to your sub-team's goals (40%)
3. Teamwork and interaction (30%)

As part of the assessment of the above, each student is required to:

- a. Maintain a VIP notebook. Example design notebooks are available at: https://vip.gatech.edu/current-students/#VIP_Notebooks.
- b. Complete the web-based midterm and final peer evaluation forms, which will be made available on the VIP website. GT VIP will send emails once the forms are open, and team and sub-team leaders will also provide reminders. The final evaluation form will be open for one week during the week preceding finals. Please note that missing the midterm peer evaluation deadline will result in a full letter grade reduction for the midterm, and missing the final peer evaluation deadline will result in a full letter grade reduction for the final.

Course Policies

Attendance and/or Participation

Students are required to attend all weekly meetings. They are also required to attend a certain number of interactive sessions and monthly presentations subject to the number of registered credit hours.

Academic Integrity

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. Review [Georgia Tech's Honor Code](#) and the student [Code of Conduct](#).

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Core IMPACTS

Not applicable.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. [The Student-Faculty Expectations](#) articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.