

VIP Syllabus • Fall 2026

Vertically Integrated Projects Program • vip.gatech.edu

VIP Team Name:
Smart Stadium (VP3)

Team Meetings:
Fridays, 11-Noon

Instructor:
Prof. Edward Coyle
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(404) 894-8136

Office Hours & Location
Klaus 3132
Hours by Appointment

Each team will determine working times, designated as “sub-team meetings.” Students are responsible for participating in their team and sub-team meetings. If you miss any meeting, you are responsible for knowing what occurred in that meeting, typically by discussing it with other team members or checking for Zoom recordings and/or transcripts of the meeting. An excused absence does not relieve you of that responsibility.

About VIP

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.

0, 1, 2, and 3 credits options are available for students depending on a student's year, major, capstone experience credit, etc. The 0-credit option is for students who are paid (hourly for undergrads and on-line OMSCS students, by stipend for Graduate Research Assistants working with the team). A different number of credits may be taken each semester. Check with your academic adviser if you have questions about how many credits you can take. All students are evaluated by the same criteria, as described later.

Learning Objectives

Through VIP students will:

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

Team Focus:

Create an Internet of People and Things (IoPT) within Bobby Dodd stadium to enhance the game-day experiences and safety of 55,000 Georgia Tech football fans. This IoPT is composed of large network of sensors in the stadium that collect information on fan behavior, plays in the game, structural vibrations, etc. The information collected from this network and from fans is used by the systems we create to improve the game-day experience for everyone.

Semester Overview

Week	Activity/Event
Week 1	Introductions Overview of team's work Description of the team's goals and subteams Each new member selects a subteam to join
Week 2	Sub-team selections finalized Sub-team meeting times finalized
Week 2-3	Verification of Student Participation in Class. Due by Friday at 4pm
Week 3	Assignment: Self-grade VIP notebook with rubric
Week 4	Due: Self-graded rubric
Week 8	Midterm grades for 2000-level courses due in OSCAR (S for satisfactory, U for unsatisfactory).
Week 7	Web-based peer-evaluations released for students to complete. Online form due by end of the day Friday. Late submissions will not be accepted. Failure to complete will result in a penalty of one letter grade.
Week 7 or 8	Turn in the PDF of a scan of your VIP notebooks by the start of the weekly team meeting for mid-term grading. In addition to your entries in your notebook, the last page(s) of your notebook should include lists of what you have learned during this part of the semester, what you have accomplished this part of the semester, and any suggestions you have for improving the team.

Week 7	Midterm presentations (optional – depends on if an external guest will attend.)
Week preceding finals	Web-based peer-evaluations released for students to complete. Online form closes at 11:59PM on Tuesday. Late submissions will not be accepted. Failure to complete the peer evaluation will result in a penalty of one letter grade.
Last week of class	Final presentations Turn in VIP notebooks at team meeting for final grading (see midterm notebook requirements for details). Complete End-of-Semester Checklist Form and turn it in.
Finals Week	No final. No assignments.

Grading

The premise of VIP is teams working on projects. Much like a real-world team, individual members work on different aspects of the project. Team members range from sophomores through graduate students, from first-time participants to students who have been involved for four or more semesters. The number of credits for which a student is enrolled is considered in grading. Zero-credit students (reserved for paid participation only) participate in the same grading process.

Your grade is based on three areas, along with three requirements. Although each student contributes in different ways, you must demonstrate achievements in all three areas below.

1. Documentation and records (33%)
 - a. VIP Notebook (not optional);
 - b. VIP Wiki/blog/etc. documentation;
 - c. Team and subteam presentations
 - d. Code checked into GT GitHub

2. Personal accomplishments and contributions to your team's goals (33%)
 - a. Quizzes, learning modules, essays, reports required by your advisor(s);
 - b. Engagement in project;
 - c. Pursuit of knowledge necessary for project;
 - d. Contributions to the technical progress of the team;
 - e. For more experienced members of the team, contributions to the management of the project may be expected.

3. Teamwork and interaction (33%)
 - a. Peer Evaluations;

- b. On-time attendance in meetings;
 - c. Actively contributes to overall team goals;
 - d. Coordinates activities with other team members;
 - e. Assists other team members;
 - f. Team presentation(s).
- As part of the assessment of the above, each student is required to:
 - a. Maintain a VIP notebook. An example of a scan of a well-maintained VIP notebooks is available on the VIP website. **Each student must understand that if work is not documented in their VIP notebook, “Then you didn’t do it,”** (i.e. work that is not documented in the notebook will not count toward your grade).
 - b. Complete the mid-term peer evaluation. This is a web-based form, and links are available on the VIP website. **Failure to complete the peer evaluation will result in a full letter grade deduction. Late submissions are not accepted.**
 - c. Complete the final peer evaluation, which will be available for one week during the week preceding finals. **Failure to complete the peer evaluation will result in a full letter grade deduction. Late submissions are not accepted.**

Performance Assessments

Performance assessments account for a student’s major, number of VIP credits being taken, number of semesters on the team so far, undergraduate or graduate status, and the area of the project the student has been contributing to.

Performance assessments will be done once at mid-terms and again at the completion of the semester. The mid-term assessment is advisory.

<p>Documentation</p> <ul style="list-style-type: none"> ▼ Notebook Maintenance ▼ To Do Lists ▼ Meeting Notes ▼ Usability ▼ Overall Design Notebook Evaluation ▼ Wiki Content Quantity ▼ Wiki Content Quality ▼ SVN code logged frequently ▼ Code Quality ▼ Overall Documentation <p>Accomplishments and Effort</p> <ul style="list-style-type: none"> ▼ Tutorials and Learning Modules ▼ Team and sub-team quizzes ▼ Papers and Technical Articles ▼ Pursues Independent Learning ▼ Self Motivated ▼ Independent Effort ▼ Quality of Effort (results) ▼ Overall Effort <p>OVERALL GRADE (final eval): <input type="text"/></p> <p>Individual Comments:</p> <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	<p>Teamwork and Interaction</p> <ul style="list-style-type: none"> ▼ Team meeting attendance ▼ Team meeting participation ▼ sub-team meeting attendance ▼ sub-team meeting involvement ▼ Contributes useful ideas ▼ Recognizes others ideas ▼ Focuses effort on achieving goals ▼ Involves others in effort ▼ Assists others with their efforts ▼ Manages time and tasks well ▼ Leadership skills ▼ Final Presentation ▼ Peer Evaluations ▼ Overall Teamwork Evaluation
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Notes on Documentation

Notebook Maintenance	<ul style="list-style-type: none"> - If a paper notebook is used as a VIP Journal, the notebook must be a bound notebook, with a sewn or glued binding, such as a composition book or lab notebook. If an electronic notebook is used, it must be possible to print a PDF of the entries for each half of the semester. - Your name, your project's name, your contact info, and your team members' contact info must be recorded on the outer or inside cover of the paper notebook and the title of the first page of an electronic notebook. - Each page must be numbered, dated, and signed.
To-Do List Maintenance	<ul style="list-style-type: none"> - Maintain check-boxes for items to be done. - Check-off and date items when done.
Meeting Notes	<ul style="list-style-type: none"> - For meeting notes, include check-boxes for items for which you are responsible and deadlines for your sub team and the overall team.
Usability	<ul style="list-style-type: none"> - Will your VIP notebook be of use to people who join the team later and need to refer to it? This includes legibility, intelligible technical and meeting notes, and overall organization.
Overall	<ul style="list-style-type: none"> - An overall rating of your notebook. (Detailed design notes, design decisions, copies of or pointers to code that you wrote, records of important websites, etc.)

Wiki content	- Wiki content refers to documentation produced online, either through the VIP wiki site, T-square, or other VIP-approved site.
GT GitHub (if student is developing software)	- GitHub code refers to code produced and checked into the GT GitHub or other VIP-approved code repository. The frequency, quantity and quality of contributions are evaluated.

Academic Honesty

The main principle in VIP academic honesty is that you will not present someone else's work as your own. Tests and specific assignments (homework, lab assignments, etc.) must be your own work. For other work you are encouraged to consult whatever sources are helpful in learning and understanding the issues associated with the material, but you should always provide appropriate references and citations where such material is included in your VIP notebook, programming code, presentations, etc.

Additionally, to provide a good working environment for all students, you're expected to adhere to rules given here, posted, or disseminated in class. Academic Honesty is taken seriously and failure to follow these principles will result in disciplinary actions as stated in the Student/Faculty Handbook.

Accommodations for Students with Disabilities

Georgia Tech offers accommodations to students with disabilities. If you need a classroom accommodation, please make an appointment with the Office of Disability Services (www.disabilityservices.gatech.edu). If you have an accommodation letter from ODS, please provide your team advisor with a copy of your accommodation letter and discuss with them how your accommodations will be applied. This should be done as early as possible in the semester.

Labs and Facilities

VIP has rooms and equipment that are shared by many VIP teams. In order to provide a good working environment, the following rules apply to anyone with access to these rooms and equipment:

- 1) The room priorities are:
 - a. Scheduled team meetings, lectures, and learning modules;
 - b. Weekly sub-team meetings (multiple groups can use rooms at same time);
 - c. Video conferences or special meetings with VIP stakeholders;
 - d. Other project-related work (multiple groups can use rooms at same time).

Room schedules can be viewed on the VIP website.

While the above priorities indicate which events take precedence, a good neighbor policy on using the rooms applies. If you need to access computers, equipment, or work on a project in the room while other activities are going on (sub-team meetings, etc.), you are welcome to do so as long as it does not disrupt a scheduled activity. Similarly, multiple groups may use a VIP room at the same time. Also, where it does not disrupt one of the above uses, VIP participants

may use the rooms for other activities such as studying.

- 2) Everyone is expected to pitch in to keep the rooms and labs clean. Food is allowed in the rooms provided any spills or messes are cleaned up immediately. The rooms are monitored by camera, and **staff will pull videos to identify offenders**. Gum is a particular problem, especially in carpeted rooms. Do not place used gum anywhere other than in a trash can.
- 3) The rooms have equipment both for general use and for specific teams. General use equipment includes the projector in Klaus 1440, and monitors in VL 465 and VL 463B. Other equipment may be for general use or dedicated to a team specific purpose; some equipment may be general use one semester and assigned to a team another semester. If you are unsure of whether equipment is available for general use, contact the VIP trouble-ticket system at vip-request@ece.gatech.edu. You should only use equipment for the designated purpose. Some equipment may pose personal hazards if used inappropriately!
 - a. Equipment owned by the VIP Program may not be removed from a VIP room without completed an equipment loan agreement, which would need to be approved by one of the VIP Directors. To request permission, email vip-request@ece.gatech.edu.
 - b. You will be responsible for the replacement cost of any equipment not returned in good condition.
 - c. You must be sure you know how to operate the equipment safely. Written approval to use the equipment does not indicate that the team advisor has reviewed equipment use and safety. You are responsible for knowing the hazards and safe operation of any equipment you use.
- 4) Computer accounts are issued for your use only. You may not share computer accounts with anyone else, even another team member. All computer usage is subject to rules and policies of Georgia Tech, the University System of Georgia Board of Regents, and the State of Georgia. Additionally, you are expected to be considerate of other users. Computer permissions are not authoritative. For example, just because you have file access to something does not indicate that it is appropriate for you to read or modify that file.
- 5) Buzz-card access to VIP facilities is a privilege contingent on abiding by the above rules. **Buzz-card access is logged, and rooms are video recorded**. Be aware that if there is a problem (theft, vandalism, or simply a mess left in a room), the logs and video records will be consulted. Do not allow unknown people to access VIP facilities. Be sure to secure the facilities (i.e. close the door) when you leave.