VIP Project: BrainBridge Syllabus
VIP 1601, 1602, 2601, 2602, 3601, 3602, 4601, 4602, 6600, 6601, 6602, 6603
Section: VY6
Credits: 1-3

Fall 2026

Instructor Information

Instructor: Christopher Wiese
Email: ChrisWiese@gatech.edu

General Course Information

Have you ever tried collaborating on a project where an engineer, a designer, and a healthcare student sounded like they were speaking completely different languages? The BrainBridge Vertically Integrated Project (VIP) is focused on breaking down those invisible walls. Our team is developing an innovative AI-powered tool that acts as a real-time translator for multi-disciplinary teams, turning complex expert jargon into clear, shared language. By joining this VIP, you aren't just studying teamwork; you are actively building the next generation of AI tools to make collaboration faster, better, and more inclusive.

In this course, you will get hands-on experience at the exciting intersection of artificial intelligence, technology development, and team science. Depending on your background, you might help train the AI models, design the user interface, or study how real teams interact with the tool to solve problems. Whether you are interested in psychology, computer science, engineering, or business, BrainBridge offers a unique opportunity to develop the highly sought-after collaborative skills needed in any career while actively shaping the future of human-AI teaming.

Course Learning Outcomes

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

Technical Skill Development

- **Apply** foundational knowledge in speech recognition, natural language processing (NLP), and jargon detection to build and refine system components.
- **Utilize** collaborative software development tools (e.g., version control, project management platforms) to manage and track the development of the BrainBridge system.

Interdisciplinary Collaboration

- **Collaborate** effectively within diverse teams to navigate and simulate real-world problem-solving environments.
- **Translate** and communicate complex technical and non-technical concepts clearly across different disciplines.

Human-Centered Design and Ethical Awareness

- **Implement** user-centered design principles to ensure the BrainBridge system intuitively meets user needs.
- **Evaluate** the ethical implications of AI and language translation technologies, proactively integrating these considerations into the design and development phases.

Research and Innovation

- **Analyze** the impact of communication barriers on team dynamics and integrate research-backed technology solutions.
- **Formulate** innovative, technology-driven approaches to solving complex interdisciplinary communication challenges.

Project Management and Leadership

- **Design** actionable project plans by setting measurable goals, creating timelines, and adapting strategies to meet weekly deliverables.
- **Lead** sub-team initiatives to coordinate efforts, resolve roadblocks, and foster a culture of accountability.

Professional and Personal Development

- **Construct** a professional portfolio through the iterative development of BrainBridge, showcasing applied skills in engineering, psychology, and user experience design.
- **Deliver** effective project demonstrations and stakeholder updates to gain practical academic and industry presentation experience.

Required Course Material

There is no required course material.

Grading Policy

Your final grade in the BrainBridge VIP course will be determined by your consistent engagement, individual contributions, and collaborative success. The grading process is designed to be transparent, allowing you to reasonably predict and track your progress throughout the semester. In accordance with Georgia Tech Regulation V.A Grades, course grades are calculated based on a weighted point system.

Because this is a project-based research course focused on how team dynamics evolve over time, a significant portion of your grade relies on your active participation and regular documentation of your work, rather than traditional exams.

Assignments and Weighting

- **Student Weekly Reflections (30%):** Completed in OneNote, these reflections track your individual progress, challenges encountered, and insights gained.
- **Team Contract for the Semester (10%):** A collaboratively drafted document that establishes clear expectations, roles, and communication norms for your sub-team.
- **Team Meeting Notes (20%):** Weekly documentation of sub-team meetings, tracking progress toward semester goals, assigning action items, and planning for the next week.
- **Final Deliverables & Presentations (40%):** This encompasses your specific contributions to the iterative development of BrainBridge, building a portfolio of work, and presenting project demonstrations or stakeholder updates.

Course Grading Scale

Final course grades will be calculated out of 100% and assigned based on the following scale:

- **A:** 90.0% – 100%
- **B:** 80.0% – 89.9%
- **C:** 70.0% – 79.9%

- **D:** 60.0% – 69.9%
- **F:** Below 60.0%

By consistently completing your weekly reflections and actively contributing to your team's meetings and deliverables, you will have a clear, ongoing picture of your standing and progress toward your final grade in the course.

Course Policies

Attendance and Participation Policy
The BrainBridge VIP is a highly collaborative, project-based course. Because our work centers on understanding and improving team dynamics, we recognize that a team's effectiveness relies heavily on how communication and interactions are sustained over time. Therefore, your active presence and participation during our scheduled class times are essential.

If you were to skip team meetings but still complete your individual tasks, you would miss the core learning experience of this course: navigating the complexities of interdisciplinary teamwork. More importantly, your absence directly impacts your sub-team's ability to troubleshoot, integrate systems, and meet weekly milestones.

Excused Absences and Institute Expectations: We adhere to all Georgia Tech Institute policies regarding excused absences. Absences due to documented illness, family emergencies, or Institute-approved activities will be excused. Furthermore, professional development is highly encouraged; absences for events such as the All-Majors Career Fair or off-campus job/graduate school interviews are permitted, provided they are communicated in advance.

Communication and Catching Up: If you must miss a class, you are responsible for mitigating the impact on your team. You must:

1. **Communicate Early:** Notify your sub-team as soon as possible, adhering to the communication norms established in your Team Contract.
2. **Consult the Documentation:** Review the weekly Team Meeting Notes in OneNote to catch up on missed discussions, decisions, and action items.
3. **Realign on Deliverables:** Proactively reach out to your team lead or peers to ensure your individual tasks for the week remain on track despite your absence.

Consistent, unexcused absences that negatively impact your sub-team's progress will be reflected in the "Team Meeting Notes" and "Student Weekly Reflections" portions of your final grade.

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

Campus Resources for Students

In your time at Georgia Tech, you may find yourself in need of support. Below you will find some resources to support you both as a student and as a person.

Academic support

- Center for Academic Success http://success.gatech.edu
  - 1-to-1 tutoring http://success.gatech.edu/1-1-tutoring
  - Peer-Led Undergraduate Study (PLUS) http://success.gatech.edu/tutoring/plus
  - Academic coaching http://success.gatech.edu/coaching
- Residence Life's Learning Assistance Program https://housing.gatech.edu/learning-assistance-program
  - Drop-in tutoring for many 1000 level courses
- OMED: Educational Services (http://omed.gatech.edu/programs/academic-support)
  - Group study sessions and tutoring programs
- Communication Center (http://www.communicationcenter.gatech.edu)
  - Individualized help with writing and multimedia projects
- Academic advisors for your major http://advising.gatech.edu/

Personal Support

Georgia Tech Resources

- The Office of the Dean of Students: http://studentlife.gatech.edu/content/services; 404-894-6367; Smithgall Student Services Building 2nd floor
  - You also may request assistance at https://gatech-advocate.symplicity.com/care_report/index.php/pid383662?
- Counseling Center: http://counseling.gatech.edu; 404-894-2575; Smithgall Student Services Building 2nd floor
  - Services include short-term individual counseling, group counseling, couples counseling, testing and assessment, referral services, and crisis intervention. Their website also includes links to state and national resources.
  - *Students in crisis may walk in during business hours (8am-5pm, Monday through Friday) or contact the counselor on call after hours at 404-894-2204.*
- Students' Temporary Assistance and Resources (STAR): http://studentlife.gatech.edu/content/need-help
  - Can assist with interview clothing, food, and housing needs.
- Stamps Health Services: https://health.gatech.edu; 404-894-1420
  - Primary care, pharmacy, women's health, psychiatry, immunization and allergy, health promotion, and nutrition
- Veteran's Resource Center: http://veterans.gatech.edu/; 404-385-2067
- Georgia Tech Police: 404-894-2500