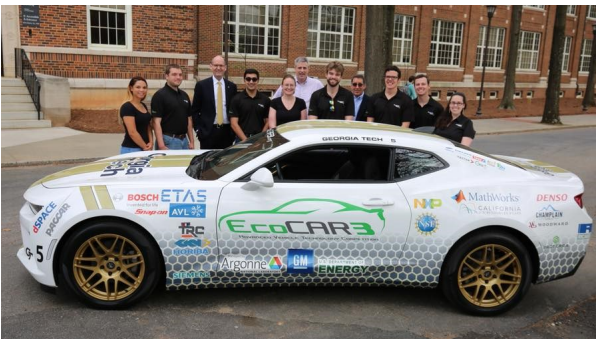




VIP Innovation Competition participants

The VIP Experience

VIP students work closely with faculty, graduate students and peers. Teams and sub-teams meet weekly, and teams operate more like small start-up companies than traditional courses. Returning students help new students get up to speed on the project, and students learn new skills as they need them. Prior experience is not necessary, but a willingness to learn and collaborate is a must.



VIP EcoCAR Team

Current VIP Teams www.vip.gatech.edu

- 21st Global Atlanta
- 2D Heterostructure Synthesis
- Active Safety for Autonomous & Semi-Autonomous Vehicles
- Advanced Graphene Battery Technology
- Agile Communication Architectures
- AquaBots
- Augmented Reality Experiences
- Automated Algorithm Design
- Automotive LIDAR
- Bee-Snap
- Big Data & Quantum Mechanics
- BioBots
- Bio-inspired Network Dynamics & Geomechanics
- Brain Trauma Assessment Protocols
- ChemFlow
- Chip Scale Power & Energy
- Community & Digital Archives
- Civic Design
- Collaborative Air, Sea, & Underwater Autonomous Vehicles
- Concussion Connect
- Configurable Computing & Embedded Systems
- Data-Driven Education
- Digital Deliberation
- Design Bloc
- Diabetes & Chronic Diseases
- EcoCAR
- Embedded System Cyber Security
- EnerCage
- Engineering for Smart Cities
- Engineering for Social Innovation
- Everyday Georgia
- Evolutionary Mechanics
- Exploratory Robotics
- Future Technology for Sports
- Gravitational Wave Astrophysics
- GT Mobile STEM Lab
- GT Motorsports
- GT Off-Road
- GT Solar Racing
- GT USLI Rocket
- GTRI Agricultural Robotics
- Health Informatics on FHIR
- HumaniTech
- Humor Genome
- Intelligent Digital Communication
- Intelligent Platform for Crowdsourcing
- Intelligent Transportation Systems
- Intelligent Tutoring Systems
- IoT in Health
- Lightning from the Edge of Space
- Living Dynamical Systems
- M.A.R.S.
- Patagonia
- Polivision
- Retrofuturistic Hardware
- RoboSense
- Robotic Human Augmentation
- Robotic Musicianship
- Secure Hardware
- Smart and Connected Bioelectronics
- Smart City Infrastructure
- Smart^3 Makerspaces
- Stadium-IoPT
- STEM comm

Georgia Tech Vertically Integrated Projects

Work Closely
with
Faculty &
Grad Students

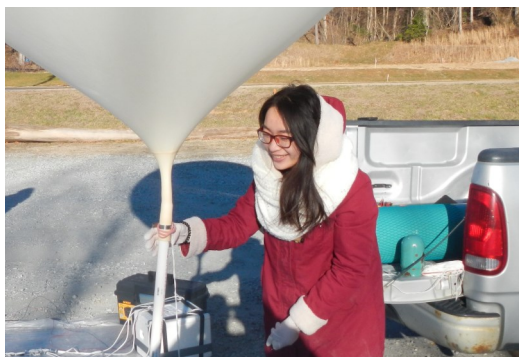
In-Depth
Experiences
within Field

Career and
Grad School
Preparation

Academic
Credit for
Multidisciplinary
Projects

The VIP Program:

- Multidisciplinary teams led by faculty, contributing to their research, innovation, and/or design efforts.
- Students earn 1 to 2 credits each semester, with two semesters “adding up” to a typical 3-credit hour course.
- Students can participate for multiple semesters/years, providing deeper learning experiences and leadership opportunities.



Lightning from the Edge of Space team releasing a weather balloon.

“These interactions have a different dynamic than the typical student-teacher relationship, as **students are more like collaborators than pupils.** The ability to work directly with researchers and graduate students was fantastic.”

Richard C. Reece, VIP Alumnus

What You Need To Know:

- Faculty establish VIP teams because they want students to help them with ongoing research, innovation, and design efforts. Projects are long-term and large-scale, enabling teams to address real-world problems.
- Each VIP Team:
 - 10-20+ students
 - Sophomores, juniors, seniors, & grads
 - Multidisciplinary
- Students can participate in VIP for multiple semesters and years
- Strong working relationships with faculty and team members are established.
- Deeper learning experiences, technical and professional growth and leadership opportunities are abundant



VIP Poster Session Fall 2018

Career & Graduate School Preparation:

VIP students gain practical experience in working teams while developing and applying a variety of professional skills (communication, management, leadership, etc.). At the same time, students build deeper disciplinary expertise and broad multidisciplinary perspectives. These skills prepare students for both graduate school and the workplace.

“**VIP is an abundant opportunity to network** with other students across campus, to grow more as a person **and, simply, to do what you love.**”

Nicholas Oyeboji, Current VIP Student

What is the difference...

...between VIP and other undergraduate research?

Both are great experiences! Differences:

- ⇒ VIP students work in teams.
- ⇒ VIP teams are multidisciplinary.
- ⇒ VIP application process is straightforward

... between VIP and PURA (Presidents Undergraduate Research Award)?

VIP is a great feeder for PURA!

- ⇒ PURA students are paid for doing research with a professor. To apply, students propose a project with a professor.
- ⇒ VIP students can get to know a project and professor. Then they can apply to PURA with their VIP professor and continue their work with their teams.

... between VIP and CREATE-X?

Both are great programs!

- ⇒ CREATE-X projects are based on student ideas and focus on entrepreneurialism.
- ⇒ VIP projects are housed in faculty research. Projects may still be commercialized, and students retain intellectual property rights.