Vertically Integrated Projects (VIP)
ECE 279, 379, 479
ENGR 279, 379, 479

Introduction Session

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22 August 2018
What’s (relatively) new? – 1/4

**New registration options** for Fall 2018

Students register directly for the team to which they wish to be assigned

Team prerequisites are posted at website with team description

Students self-select

Process is modeled after EPICS which has worked for 600+ students across Purdue campus

Students outside of ECE can register for CoE-wide courses: ENGR 279/379/479, rather than being limited to ECE 279/379/479

Next we go for campus-wide course designators – stay tuned!
What’s (relatively) new? – 2/4

Senior Design credit!

Our ECE Senior Design Committee and ECE Curriculum Committee have approved two teams to allow an option for Senior Design credit as a pilot:

SoCET

Automatic Attendance Camera for Classrooms
Image Processing and Analysis
What’s (relatively) new? – (3/4)

Weekly VIP Program-wide lecture

- Professional practice
- Ethics
- Design
- Team leadership

Required attendance

But there are a variety of options for fulfilling the requirements
What’s (relatively) new? – (4/4)

New dedicated space for VIP!
Rules for Use of the VIP Lounge

It is **ONLY** for use by VIP students, and **ONLY** for VIP-related activities!

It is **NOT** to be used as the personal study space for VIP students!

**No** food or drink is allowed!

**No** opening the windows in the back meeting rooms!

**PLEASE** keep the room neat at all times. Keep the table surfaces **CLEAN**. Pick up any litter that you drop.

**PLEASE** report all infractions of these rules that you observe to a VIP staff person.
What’s really new? – (1/3)

Setting expectations

Your team advisor and/or student mentors should make the following items clear and explicit early in the semester:

• What are the goals of the team?
• How are you expected to document your work?
• What are the requirements for participating in the weekly team meetings?
• What is expected for the final presentation?
• What is expected for the final report?
• How many hours/week are you expected to work on VIP-related activities?

It is your RIGHT to know these things!!
What is really new? – (2/3)
Midterm Evaluations

• This has been part of the VIP framework for several semesters. But it has not been uniformly enforced.
• The midterm evaluation will be required to include a final grade projection based on the student’s performance to date.
• This semester your VIP Team TA will be responsible for assuring that midterm evaluations are completed in a timely fashion.
• All midterm evaluations will be uploaded to BlackBoard.

It is your RIGHT to receive the midterm evaluation!
What’s really new? – (3/3)
New VIP website!!
What are the goals of VIP?

- Provide undergraduate students an opportunity to work one-on-one with a faculty member and/or graduate student mentor
- Give undergraduate students exposure to faculty member’s research area
- Provide undergraduate students an opportunity to experience team-work
  - Collaboration
  - Mutual respect
  - Communication
  - Shared responsibility
  - Teaching each other
  - Leadership
- Allow undergraduate students to stretch their imagination and express their creativity
Typical elements of the VIP experience

- Weekly review meetings with the faculty advisor and/or graduate student mentor
- Weekly homework assignments to learn background for project during early part of semester
- Mixture of hardware and software experiences with real applications
- Each group gives a presentation on their project
  - What were the goals?
  - What did they accomplish?
  - How does it work?
- Poster session and call-out at mid-point of semester
- Final project presentations and review
VIP Projects for Fall 2018

- Adept-M Simulation and Analysis of Semiconductor Devices
- Aerial Robotics
- Automatic Attendance Camera for Classrooms
- Autonomous Land Vehicle (Crawler)
- CATME
- Continuous Analysis of Many CAMeras
- Data Analytics for Smart Cities
- Earth History Visualization
- Earth Remote Sensing with Signals of Opportunity
- EMC/Signal Integrity
- Forest Inventory Analysis
- Imaging and Printing
- Image Processing and Analysis (IPA)
- Indoor Positioning System
- Intellectual Property
- Mars Rover
- SoCET
- Visual and Data Analytics
VIP Administrative Staff and Sponsors

- **VIP Coordinators**
  - Carla Zoltowski
  - Jan Allebach
  - Yung-Hsiang Lu

- **VIP Partners**
  - DLS Electronics
  - Dzine Steps
  - Episq Solutions
  - Hewlett Packard Enterprise
  - HP Labs – Palo Alto
  - Indiana University Maurer School of Law
  - International Commission on Stratigraphy
  - National Science Foundation
  - Poshmark

- **VIP TAs**
  - Emily Bartusiak
  - Zhi Li
  - Ryan Dailey
VIP Meeting Space (EE 013)*

*In Basement of EE Building around corner from HKN Lounge
VIP Hardware Laboratory (EE 238)

- VIP Hardware Lab provides space and facilities for hardware development
- Windows!
- Hardware!
VIP Website

https://engineering.purdue.edu/vip/

Vertically Integrated Projects

Learn more about VIP:
- See the intro slides from the Spring 2017 semester.
- Check out the photo gallery of our poster session.
- Read about our current teams.
- Download Spring 2017 Course Syllabus, and Individual Evaluation Form.
- Check us out on Facebook: www.facebook.com/purduevip

Register for VIP
- Registration information for Fall 2017 is here.
- Check out the teams for Fall 2017 here.

Events:

Professional Development Opportunities

Want to learn project management, leadership, communication, and other professional skills to be more effective in your VIP teams? Prof. Carla Zoltowski will be offering three professional development sessions. All are in EE 115 from 5:30 – 6:30 pm.
- Wednesday, January 18th: Project Management
- Wednesday, January 25th: Leadership
- Wednesday, February 1st: Managing Conflict and your Boss

Purdue University
Join us on Facebook!
Poster Session
Have a great semester!