

P@UniversityOfHawaii

Vertically Integrated Project (VIP) Program

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Hallmarks of VIPs

- Project-based learning integrated with scholarly work
- Vertically integrated teams
- Long-term projects
- Often interdisciplinary
- Students receive curricular credit



Faculty advisor

Graduate students

Undergrads (3rd year+)

Undergrads (1st, 2nd year)



UH VIP Teams (Overview)

Autonomous and Other Vehicles

- Space & Aerial Robotics
- Kanaloa
- Unmanned Aircraft Systems (UAS)
 Applications and Security
- Fixed-Wing UAVs
- HI Engaged STEM Pathways (HESTEMP)
- Aerospace Technologies
- Autonomous Electric Vehicle System

Other

- Cyber Security
- Smart Needle



- Manoa Astronomical Technologies
- Microrobotics
- Liquid-Metal Electronics
- Applied Materials and Nanosystems
- Bioprinting



Renewable Energy

- Smart Campus Energy Lab
- Open Power Quality
- Renewable Energy Design
- UH Energy & Sustainability

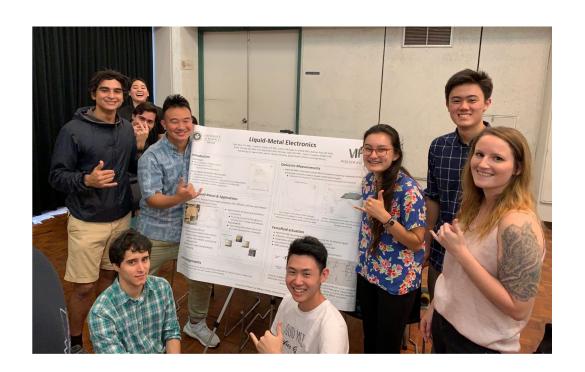






VIP Teams Similar to K-12 Projects

- Similarities between VIP teams and your projects / clubs:
- Long-term
- Projects are self-supporting
- Lots of (rewarding) work for the advisor







Lesson Learned About VIP Teams

- VIP faculty advisor mostly autonomous, but some suggestions:
- Weekly meeting with entire team
- Split team into sub-teams
- Experienced student leads a sub-team (peer mentoring)
- Make sure each student has some task that they "own"
- All students document their work in a notebook/wiki/repository. If it is not documented, they do not receive credit
- Give important tasks to non-engaged students → they will rise to the occasion
 - Have a backup plan in case they don't
- Students evaluate peers at least twice a semester
- Ask fellow VIP advisors for help
 - Shared resources (peer evaluation forms, syllabi, etc.)





Interested in Learning More?

Please contact me: <u>aohta@hawaii.edu</u>

808-956-8196

- Website: https://manoa.hawaii.edu/uh-vip/
- Poster Session:
 - March 1, 3:30 to 5 pm, UH Manoa Campus Center Ballroom



