Vertically Integrated Project (VIP)   VIP @Howard

College of Engineering and Architecture
Howard University

As a long-term multidisciplinary undergraduate education and training, a framework for faculty-student research projects has been experimented in the College of Engineering and Architecture (CEA) at Howard University. The framework is called a Vertically Integrated Project (VIP), the essence of which is fostering long-term faculty research-based team projects open to any student in any discipline.   In the VIP framework, a vertical mentorship is practiced from the professor to undergraduate students through graduate students.   The long term participation of the students in the projects would provide enough time to master technical and soft skill sets.   Undergraduate students may receive stipend in participating team projects and this financial aid would make them be more serious about the project and tasks assigned to them.

From the last 5 years of the VIP, diversification has gradually increased over the period for multidisciplinary faculty and student participation and for multi-level student participation. The participating students have gained soft skills as well, and they have been gradually acclimated to the real research environment. The VIP framework at Howard University has brought a unique opportunity for underrepresented students to acquire practical experiences and skill sets which would help them remain in their respective disciplines and graduate with a degree in STEM field. Providing financial aid in stipend would further increase the retention and graduation rate of our STEM students.

Through the VIP framework, companies can sponsor, initiate, or join a VIP team. VIP team sponsoring (and new team formation) is possible any time even in the middle of a semester. Through team and program sponsorships, companies can identify and reach:

- Motivated students earlier in their academic careers: VIP attracts sophomores, juniors, and seniors actively seeking challenges beyond classroom. Students can participate for multiple semesters, with new students replacing graduates, and returning students taking on leadership roles with the teams.
- Large number of students from many majors: Each team is multidisciplinary by design, and VIP attracts students from all majors from CEA and other colleges.
- Students doing R&D in company's area of interest: VIP teams are embedded in faculty research efforts. Companies can sponsor teams of interest, and team-sponsor relations are tailored to meet the need of teams and sponsors.
- Team-oriented students: VIP cultivates a culture of peer-mentorship, with returning students onboarding new students and taking on increasing level of responsibility each semester. VIP students report high marks in understanding of technology applications relevant to their field of study, ability to work with individuals from diverse background, and ability to work in a multidisciplinary team.

VIP Sponsorship Opportunity:

Amount	Expenses/Budget
$30,000/yr	Stipend for 4 – 6 students for 2 semesters; component parts cost; faculty trip cost (or summer stipend). About 70% of the budget is used for student support.

  * Sponsoring company's logo will be displayed in the VIP at Howard website.

***VIP at Howard* Website**: www.mwftr.com/VIPatHOWARD.html

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