When engineering and computer-science graduates seek their first jobs with high-tech companies, they often learn that their academic qualifications aren't enough. Employers are also looking for graduates who have had real-world experience — as company interns.

A new program was announced this week that aims to expand internship and employment opportunities for University of Vermont students in engineering, computer science and mathematics. The program takes the form of a partnership between UVM’s College of Engineering and Mathematical Sciences and Vermont HITEC, a private nonprofit organization that provides technical and career training in collaboration with Vermont employers.

In UVM’s case, Vermont HITEC will not only help match prospective interns with specific companies but also will provide mentoring services to ensure that interns succeed in the temporary jobs that could lead to permanent employment.

In a pilot version of the partnership, that’s how it worked out for Sam Catalano. He did an internship at SemiProbe, a company that specializes in semi-conductor inspection systems, while he was a UVM undergraduate in mechanical engineering. He graduated last spring, and in August he started a full-time job with SemiProbe as a service engineer.

Without the internship, he probably wouldn’t have gotten that job.

“For employers,” said Stephen Mank, chief operating officer at SemiProbe, “it's a much higher risk to hire someone off the street.” By contrast, a successful intern demonstrates an ability both to acquire new technical skills and to comport with the workplace culture.

Chip Cole, interim dean of engineering, recalled being told by a representative of an international company that engineering graduates who had not held internships “are not employable at this company.”
Cole said the partnership will help develop the university’s relationships with employers and lead to more opportunities for students — at a relatively low cost. The partnership is funded partly by UVM — $5,000 for five months — and partly by a 2010 U.S. Department of Labor grant to HITEC.

A robust internship program is key to Vermont’s efforts to develop the academic talent that comes out of colleges into a critical mass of employable talent, Mank said. These are paid internships in the new program — $12 an hour.

Scott MacEwan, a senior majoring in computer science, is just starting an internship in Web design. He said he benefited from Vermont HITEC’s guidance even before he started the job — in revising his resume and his cover letter. He expects to put in about 16 hours a week on his internship.

Cole said some engineering students have gained work experience by taking a year off to work in companies. Then they return to school and get their degree in five years.

Some internships are highly sought after. Mank said his company had two openings last summer and 18 applications.

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