Matching UPEI Science Co-op students with employers

by Gloria Welton and Heidi Riley

The **UPEI Science Co-operative Education Program** allows students majoring in Physics or Computer Science to combine academic studies with practical work experiences.

Students apply theoretical knowledge from course studies and return to the classroom with a total of at least 16 months of related professional experience. During work terms, students earn a salary and make valuable contacts. Employers find students with knowledge relevant to the position and can use the work term as a future recruitment tool.

Computer Science

Over the last 10 years, the IT sector has grown significantly on PEI, and many companies plan to hire more staff. According to the **PEI IT Labour Force study**, 58 percent of companies reported having difficulty filling their IT positions.

In response to the demand for IT workers, the Computer Science Co-op program was established in 2000. "In the past, there have been more positions open in the IT sector than students," says **Heather MacMillan**, Science Co-op Coordinator. "This year there is an increase in CS co-op students, which is wonderful for both the university and employers."

Physics

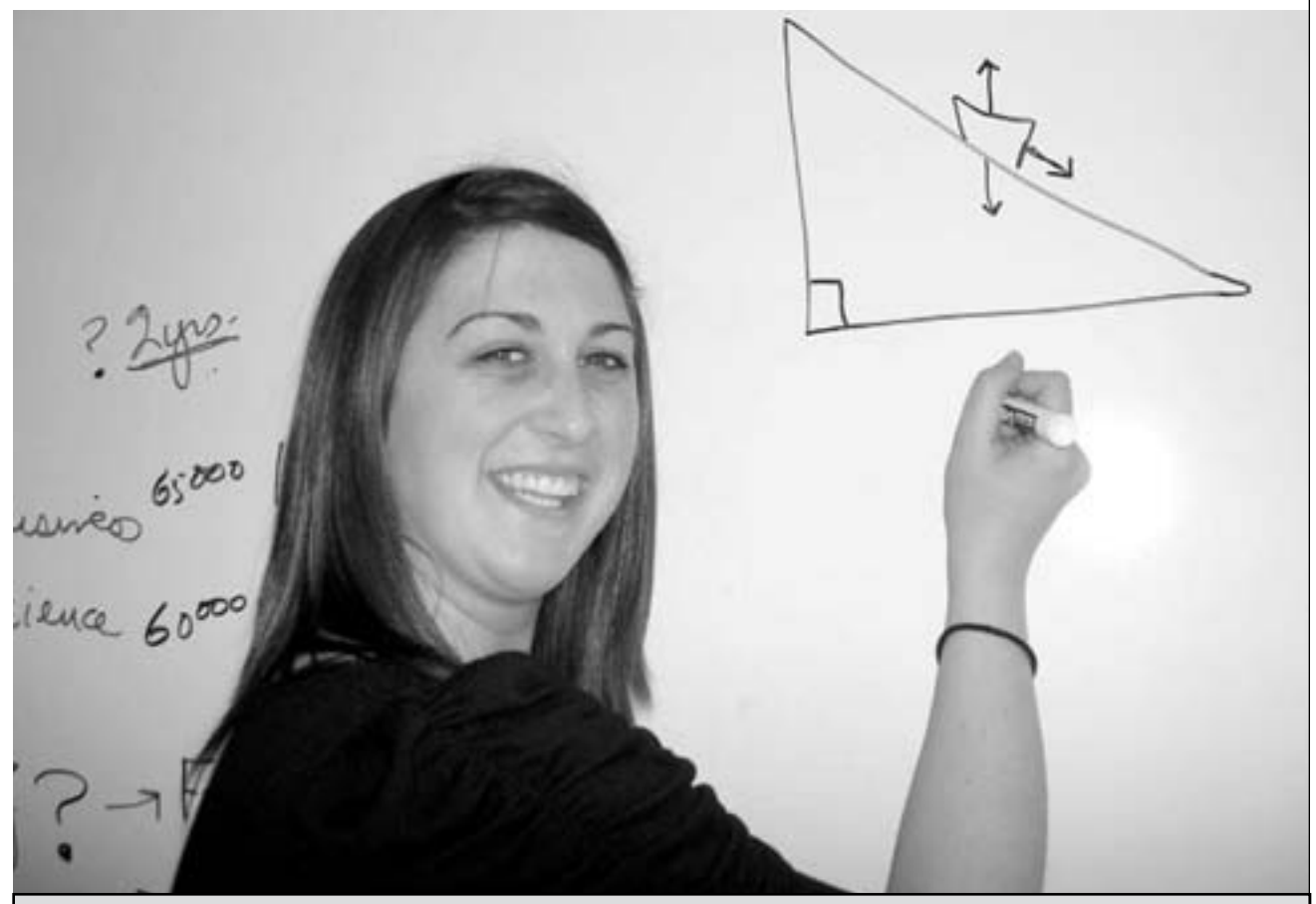
The Physics Co-op program was established in 2003. To find work terms relevant to their field of study, many Physics co-op students leave the Island, and upon graduation have to leave PEI to find jobs. "Opportunities to do work terms at the Canadian Space Agency, the Hertzberg Institute of Astrophysics, Satlantic, the Bedford Institute of Oceanography, and TRIUMF have provided valuable work experience for these students," says Heather.

"Now more work is starting to become available on PEI for people with a physics background. Work opportunities can sometimes be found at the Wind Energy Institute of Canada, the UPEI Physics Department, Maritime Electric, and government departments."

This year, there may be more opportunities for work terms with PEI employers especially in the growing IT sector thanks to a government-funded wage subsidy through the Department of Innovation and Advanced Learning. A wage subsidy for UPEI Science co-op students is available to private sector businesses in the priority areas of Bioscience, IT, Renewable Energy, and Aerospace.

"This wage subsidy is especially important during these shifting economic times," says Heather. "At present, 10 work term positions are confirmed in the IT sector. In many cases, employers who would normally take one student are taking more than one. Companies have an incentive to hire students who could potentially be great future employees.

"Many research positions for the Physics co-op students did not qualify for this subsidy. I do hope that future support for areas on PEI involving Physics co-op students will become available."



Physics co-op student Annie Ladéroute has gained valuable work experience while doing a Physics Major at UPEI. Annie entered UPEI with plans to become a veterinarian. While taking Physics classes, her professors encouraged her to consider a Physics Major. "I really liked Physics, and the fact that a Co-op program in Physics was available helped me make up my mind," says Annie.

Annie is one of seven students in the Physics Co-op program. "Co-op adds a fifth year to the time it takes to earn a conventional degree," says Annie. "The extra time is well worth it because I will be earning my degree and getting four or five work term experiences. This looks great on a résumé because it demonstrates that I can handle both academics and a work setting. I think the experience gained in the co-op program gives me a huge advantage over other Physics students to gain relevant employment after graduation."

Her first work term was with the Hertzberg Institute of Astrophysics in BC. "This was a public relations role where I needed to quickly learn more about astrophysics and teach it to others," says Annie. "That first work term opened doors to the next one, where I did research for the Canadian Space Agency in Montreal."

Annie has also worked with Maritime Electric, analyzing data from wind generation to create a new wind forecasting program. During that same work term, she also worked in public relations for the PEI Office of Energy Efficiency.

She is doing her fourth work term on the Island this summer. She will be working in the UPEI Physics Department with Dr. William Whelan, who is conducting research using optoacoustic imaging. This is a method of detecting cancers without the use of x-rays. A research grant provided the funding to hire Annie through ACOA's Atlantic Innovation fund.

"With each work term, I have built my knowledge and my confidence," says Annie. "It has helped narrow down my career choices. I want to work in an area of physics where I can solve difficult problems and use my skills to help people."

"I highly recommend that Physics students gain some experience off Island at other institutions. And it's great that more work terms for physics students are becoming available on PEI. This will help students realize that they don't have to leave PEI to work in their field."

For more information, contact **Heather MacMillan**, UPEI Science Co-op Coordinator at **628-4315**. Visit the website at **www.upei.ca/co-op**