

AC 2007-1660: CO-OP AND INTERNSHIP OPPORTUNITIES FOR THE DEPARTMENT OF ELECTRONICS, COMPUTER & INFORMATION TECHNOLOGY

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Co-op and Internship Opportunities for the Department of Electronics, Computer and Information Technology

Introduction

Cooperative Education (Co-op) is a structured method of combining academic education with practical work experience. It is an optional, counseling-centered program that offers students the opportunity to alternate periods of academic study with periods of work that is closely related to their field of study. The combination of academic study and work produces an overall learning experience that gives greater meaning to students' studies and more direction to career development.

Our department, Electronics, Computer and Information Technology, encourage our students to participate in cooperative education. It is the aim of the department to increase the number of available co-op/internship positions for its students. There is a great demand by companies now for co-op and internship positions. In an attempt to increase additional co-op/internship positions the department will develop a Career Resource Center. The purpose of the Career Resource Center will be to assist students in online application for co-op and internship jobs. The idea is that the more students we get to complete online applications, the better chance they will have to acquire co-op/internship positions.

What are the Benefits to Students from Participating in Co-op/Internship?

- **Personally** – it can boost the student's self-confidence; improve their human relations skills; prepare for life after graduation; integrate their faith and values with work. In addition, they can enjoy a greater clarity about career decisions.
- **Academically** – It integrates classroom theory with real-life experiences; helps them to understand the relevance of their coursework; increases the motivation to learn. In addition, they can utilize resources that are not available on campus.
- **Professionally** – Students can explore a potential career field; develop career-related skills and abilities, including effective job search, resume writing and interviewing techniques; establish a work history; observe professional people and behavior; build a network of professional contacts, and develop potential mentoring relationships; gain a competitive edge for employment.

What are the Advantages of Co-op/Internships?

We are in a time when co-op and internships are very much in demand. Many companies are hiring co-op/interns early in the fall for the summer and following fall semesters. For many companies, co-op/internships are becoming the initial hiring methods. More than 98% of employers recruit through their co-op/internship programs first.¹ Research shows that 86% of

students that intern or co-op will work for that same company.² Graduating students with co-op or internship experience typically receive more and better job offers.

Increasing Co-op/Internship Opportunities

The Department of Electronics, Computer and Information Technology (ECIT) is seeking support of our efforts to provide co-op and internship positions for our students. The number of co-op/internship placements for our department peaked in years 2001-2002 at 23 students placed in positions. Students were placed with companies such as Nortel Networks at Research Triangle Park, North Carolina, Rockwell-Collins, Cedar Rapids, Iowa, to Texas Instruments in Dallas, Texas. Our goal is to at least equal this number, and, hopefully, to surpass it in the future. The average number of students placed in co-op/internship positions in the years 2003-2006 was about 8. This is an unacceptable figure for the number of students in our Department. We currently have approximately 490 students enrolled in the ECIT department. Of the total, 151 are freshmen who would not be included in the number designated for co-op/internships. The remaining 339 students-- sophomores, juniors and seniors are the number available for co-op/internship. Of that group, 50 have expressed an interest in co-op/internship. This is about 14% of the available group. We believe that this number can be increased dramatically with the proper career development programs or services.

Developing a Career Resource Center

The current status of the Department's co-op/internship program suggests a need to increase the number of available positions. This can be accomplished by the development of a Career Resource Center within the Department of Electronics, Computer and Information Technology. This Resource Center would be designed to aid students in their application of co-op/internship positions. All major companies require online application to co-op/internship positions. Not all students have a computer, and some may not have Internet access. Even though some students may have their own computer, there are some who will not take the time to go online to complete the application process. Of the students I have talked with and assisted with completing their applications, almost all have expressed a desire to have assistance with the application process. They articulated that either they did not have the time to complete the application or that there were too many forms. They also indicated needing help with composing narrative parts of certain forms.

The objective is to get more students to complete the co-op/internship applications on line. Out of the 50 students who signed up for co-op and internship positions in the department's Experiential Coordinator's office, only approximately 20 students came back for application information. The goal is to get all of the students who are interested in having co-op and internship positions to at least submit applications packets. Although the Campus Career Services Office is and has been successful in getting students to register with them for co-op and internships, the concept of having a Career Resource Center within the department will be more beneficial. We will also continue to work closely with the Campus Career Services Office in an attempt to attract co-op and internship positions for our technology students.

The proposed Center will have three computers set up with available information for students to submit their applications directly. These same computers will also be used by them to go on line to do job searches, learn about career fairs and recruiting sessions by companies, find recruiting tips, research companies, etc. To ensure that every student that expressed an interest returns to submit an application, we would have mandatory sessions each week for the first twelve weeks of each semester.

During these sessions, students would be required to peruse all available information, choose the best suited positions for them, and then submit their application. Also, there would be trained student personnel there at all times to assist the students with their application process. This would ensure that every student submits a clear, concise and correct application, thereby giving them a better chance at being chosen for an interview by the company. Certain application packets can be more than two or three pages, causing some students to become reluctant in completing the process. It would be the duty of the Center personnel to see that this procedure is completed.

The personnel can assist students with the following suggestions:

1. Make a list of the companies or organizations you are interested in (determine which contacts to follow up).
2. Stay positive and focused on your job search –sometimes timing is the key.
3. Continue networking (learn more about the company and their opportunities).

We have an Experiential Coordinator in the department and it would be the duty of this person to oversee the Career Resource Center and all of the student assistants. This person would also be responsible for training the assistants to give support to co-op/internship applicants with their application process.

Additionally, with our undergraduate and graduate programs, the Electronics, Computer and Information Department are continually growing. As stated, we have approximately 490 students in the ECIT department. By the end of year 2008, we are projected to have more than 500 students in the ECIT Department. This growth will also increase the need for job placement for our students, thus increasing the need for co-op/internships.

Because ECIT students are not sought after during the university's annual career fair as much as engineering students, this Center should give our students more advantage at future career fairs. With more co-op/internship placements of our students, the industry recruitment representatives will become more familiar with our program.

In the ECIT Department, co-op/internship is an integral party of the curriculum. We have in the past two years added several classes to our curriculum as strategy to address our co-op/internship requirements. We now have five levels of co-op classes. These classes are at the undergraduate and graduate level. As one of the many co-op/internship programs in the country, our working students gain insight that would be impossible to convey in a classroom setting. In addition to

this valuable on-the-job experience, our co-op/internship students earn thousands of dollars in the process.

Conclusion

It is our aim to make the Career Resource Center an unmatched clearinghouse of job search information, where students can receive expert advice and guidance. Personnel there can help students to search for co-op and internships as well as to explore other career options, create resumes, develop career fair strategies, prepare for interviews, identify experiential education assignments, and assess full-time job offers.

As previously stated, the Cooperative Education Program provides an invaluable career development tool. As part of their academic careers, the co-op/internship students will alternate their classroom time with on-the-job experiences that are directly related to their academic majors in industry, business or government organizations. For this, they are eligible to receive credit pending the approval of the academic department.

The co-op/internship program is based on the philosophy that gainful experience in the student's chosen field before graduation affords a number of opportunities that are not available otherwise. They are--to apply methods and principles learned in the classroom to actual work situations and problems, to enhance academic motivation, to assist in career selection and accelerate professional maturity, to help defray the cost of education, and to develop better opportunity for employment upon graduation.

The program described here will help provide these benefits to a larger proportion of our department's students. In today's trend, we are seeing a large shift from direct hires to co-op/internship experienced offers. This is a good trend-- for it is our goal to give all of our students who are interested in co-op/internship access to it.

References

1. Bruce Phillips, "Top Supporters of Historically Black Colleges and Universities," *US Black Engineer & Information Technology*, (June 2006), Vol. 30, No. 2.
2. Bruce Phillips, "Top Supporters of Historically Black Colleges and Universities," *US Black Engineer & Information Technology*, (June 2006), Vol. 30, No. 2.