



Advisor

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Kamloops, B.C.

Welcome to the start of a new year at UCC.

UCC continues to grow and the Counselling Department is busier than ever. Our student population is up 1% over last year, coming in at a grand total of 5668 on our main campus.

Overall percentage utilization rates in the Academic area for the Fall 1995 is up to 82% from 79% last year. The new Applied Industrial Technology Centre being planned is also generating a lot of excitement this year.

As one of the primary educational resources for secondary school counsellors, we hope that the 'Advisor' and our new publication 'Advisor Updates' will be informative and useful. We look forward to continuing to assist you and your students, and look forward to seeing many of you at our annual Counsellors' Conference on October 26, 1995.

Updates

Campus Tours/Liason Visits — We appreciate as much advance notice as possible, so we can give your group of students the best visit possible.

Time and resources don't allow us to handle every request for a liason visit, but we plan to visit several community colleges around the province, so it might be possible to coordinate visits. If you are interested in a Campus Tour or Liason Visit please call Barbara Berger at 828-5013.

Applications — UCC Applications will be out in November. Students can contact Admissions directly if they want one sent to them (phone 828-5071; fax 371-5513) You will also receive applications for your school with the **Advisor Update** in November. Call Barbara if you have a special request in mind for how many you might need!

UCC Moving Ahead With Independent Degrees

UCC has been offering full degrees in cooperation with UBC, UVic and SFU since 1989. Seven years later, those programs are beginning to evolve into fully independent degrees.

In January 1995 the provincial government formally enacted changes to the College and Institute Act that gave UCC, along with six other institutions, the right to grant degrees in their own name.

The UCC Board has now approved a schedule for the transition of the seven degree programs at UCC, starting this fall with the Bachelor of Business Administration (BBA) degree.

Students accepted in the third year of the BBA Degree for September 1995 will be entering a UCC degree program. The first graduates will be granted their UCC Degree in June 1997.

The schedule for all UCC degrees is as follows:

	Acceptance to 3rd Year	Degree Date
Bachelor of Business Administration	Fall 1995	June 1997
Bachelor of Science	Fall 1996	June 1998
Bachelor of Natural Resource Science	Fall 1996	June 1998
Bachelor of Science, Nursing	Fall 1996	June 1998
Bachelor of Social Work	Fall 1996	June 1998
Bachelor of Education	Fall 1997	June 1999
Bachelor of Arts	Fall 1997	June 1999

By the time the process is completed in 1999, UCC will have been involved in degree program delivery for a full decade. With the degrees having been built on the foundations of UBC, UVic and SFU degrees, the quality and credibility are already well established.

Electronics

With an employment rate of 81% of former graduates (1989 – 1994), the Electronics program at UCC is well above the provincial average of 70% for all occupational programs—it's no wonder that UCC Electronics students feel confident about their future job prospects.

The two-year Electronics program prepares students for employment in technician-level jobs in installation, commissioning, maintenance, and repair. Installing, adjusting, testing and trouble-shooting for complicated circuitry is by no means a routine chore. Technicians must be alert, applying their theoretical knowledge of the laws of physics and electronic circuitry. Tracing an error or malfunction in a complicated piece of equipment can be a challenging intellectual exercise. Extensive knowledge and use of test equipment, system design and troubleshooting skills are required.

UCC students spend the first year of the program in Core Electronics as a prerequisite to continuing in one of the three electronic specialties: Computer Automated Systems Technician (CAST), Computer Systems Technician (CTEC), and Telecommunications Technician (TCOM). Since a thorough understanding of electronic theory and practice and some of its most frequent applications is required, Core Electronics gives students a foundation year of theory and lab courses in electricity, AC and DC circuits, semiconductor circuits, linear and digital electronics, basic microprocessors and an introduction to PC's. Practical applications of knowledge and troubleshooting skills are stressed in all courses.

In year two students devote full time to their specialty area.

CAST is the most industrial of the specialties. Because much of industry is now controlled by automation, training for the design and implementation of automated equipment and process control is taught. Students also gain understanding of the handling of solids to fluids and special manufacturing applications. With a strong knowledge of industrial processes and programmable logic controllers, graduates are finding work in the forest industry, in mills and for companies that manufacture equipment for mills and system integrators.

CTEC is the most businesslike of the three programs in the sense that technicians often deal with the public. Employment is found in computer sales, repair outlets, forestry and school districts. The Kamloops School District currently employs a number of UCC CTEC graduates. Opportunities for employment also exist in businesses like London Drugs, Future Shop, Xerox, the Lotto Corporation, and specialty companies where graduates interface a computer for special applications such as control of traffic lights. Upon graduation, students have acquired a strong knowledge of computers, network systems, software and micro processors.

TCOM provides a range of tasks installing, repairing, maintaining, and occasionally designing telephone, voice data and radio systems, with problem-solving the major component of the work. Graduates find work with telephone companies, mobile and cellular radio, satellite receiving systems, radio, TV and security alarm systems.

Should students want to, they can take first year CORE electronics at UCC, and then transfer elsewhere for their second year specialty. They may decide, for instance, to pursue avionics at BCIT or Consumer Electronics at Vancouver Community College. The reverse is also true. Many students complete their core year at BCIT in one of several other

colleges where it's offered, then transfer to UCC for one of these specialties. The program often acts as a catalyst for students—they discover learning is fun, become excited about the field of electronics, and may even go on to engineering.

UCC actively works with industrial partners to ensure the best educational and employment possibilities for students. A recent collaboration with various BC industries in the design of problem-specific technologies, provided students with an opportunity to design original technological applications. The following projects were recently demonstrated in the UCC Robotics Lab: an automated detection system designed in collaboration with MolyCopy Industries of Kamloops; a retrofit of a wood finisher for secondary wood processing for Canwood Furniture Manufacturing of Penticton; a programmable parts positioner for a robot welder to be used by Nicola Machine Works of Merritt; the design of a system to scan and position printed media to a tolerance of 2/1000" for CompTec International of Surrey; and a robotic work cell, recently demonstrated at the Kamloops International Air Show as part of the Science Council of BC's Technology Hall Display.

For dedicated students, there are limited numbers of cooperative education placements. Students have two four-month Co-op terms of paid employment (Work Terms) alternating with periods of study (Academic Semesters). A minimum grade of B- and completion of a 12 week Co-op Working To Learn course are required to apply for Co-op. The course shows students how to write winning resumes, give tips for interviewing and techniques for finding success in the work place.

CAST and CTEC Co-op Time Patterns

- a) Commencement Date: September 5, 1995
- b) Graduation Date; August 22, 1997

	Sept-Dec	Jan-Apr	May-Aug
Year 1 (CORE)	Academic Semester 1	Academic Semester 2	Work Term 1
Year 2	Academic Semester 3	Work Term 2	Academic Semester 4

TCOM Co-op Time Patterns

- a) Commencement Date: January 2, 1996
- b) Graduation Date; December 19, 1997

	Jan-Apr	May-Aug	Sept-Dec
Year 1 (CORE)	Academic Semester 1	Academic Semester 2	Work Term 1
Year 2	Academic Semester 3	Work Term 2	Academic Semester 4

Education Requirements for Admission to Electronics:

- BC Grade 12 or equivalent
- Math 11 or equivalent
- Physics 11 or equivalent
- Math 12 or Physics 12, Chemistry 11 or Electronics 12 are strongly recommended

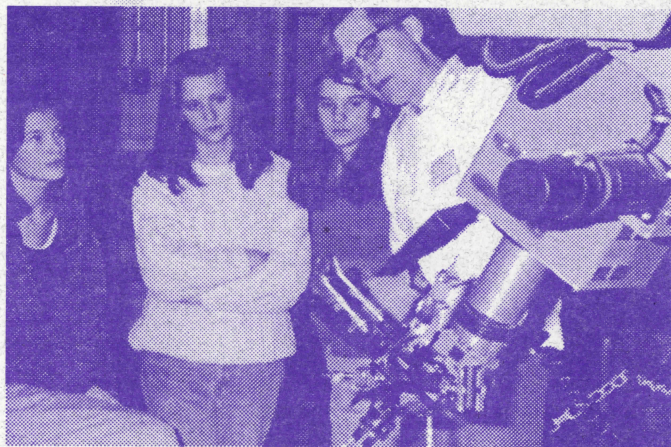
All applicants are required to write a CAT 19.

What Students Are Saying:

Donnah Johnston is a second-year TCOM student. She got turned on to the Electronics program after hearing one of the Electronics instructors make a presentation, and taking a tour of the Electronics lab. After completing upgrading in Math, Physics and Chemistry, she moved on to the TCOM program.

Although she initially felt intimidated because the males in the class had greater familiarity with the terminology and tools, with some basic tinkering and a lot of encouragement from her instructors, Donnah was soon confident. As Donnah says, the drill and the hand-mixer are basically the same, the only difference is you get paid a lot more for using a drill!

She thinks the instructors in the program really encourage women to succeed in Electronics. Donnah feels that slowly as more women enter the trades, female stereotyping will become a thing of the past. Her advice to all students entering the program is to acquire good organization skills, to be dedicated students and keep on top of homework assignments.



Stephen Brown is a mature student with an interest in Electronics and a desire to find employment away from the Lower Mainland. He plans to find employment in a mill, taking care of automated equipment.

He's enjoying his second year of the CAST program. Although the workload is heavy, he cites the thoroughness and detail of the instruction as one of the benefits of the program.

Stephen says good time-management skills are critical if students want to be successful. Additionally, students need to be up on their math and physics skills, and any type of computer programming course prior to going into the program will be of immense help.

It was actually Bev Kokot's brother-in-law who convinced her to try the CTEC program. He was enrolled in the program himself, and felt that Bev, who had an affinity for computers, would do well in CTEC. Bev wasn't sure at first, but after attending a Career Information Night and hearing there was a demand for women in the field, she decided to give it a try.

She says understanding the circuitry involved was a major challenge. Instructors provided lots of support for Bev, who didn't have a background in electronics.

Bev enrolled for the Co-op Work Term and found herself working for Nova in Calgary, where she learned operating command systems and worked as a computer operator. It was a great learning experience.

Career Trends

Most industries need electronic technicians. Employment projections for well-trained technicians is expected to grow at a faster than average rate. Rapid technological advances and expansion of computer and electronics systems in all resource, manufacturing, and trade industries as well as most offices means that electronics technicians are now employed in many sectors of the economy. Predominant employment areas are in electronics products manufacturing, construction, communications sectors, business services and government. Wages range between \$22,000 and \$55,000 per year.

Work as an electronic technician is stimulating because new problems are continuously being presented for

solution. In general, working conditions are good, especially in modern facilities where most electronic equipment is manufactured or housed.

Electronic technicians must be prepared to continually keep up on technical developments by studying new textbooks, magazines and journals. Advancement in the field will depend upon current knowledge and understanding of new applications of electronics, an ability and initiative. One of the quickest and best ways to become a technician is to attend college on completion of secondary school. Programs in a wide variety of specialties are generally two to three years in duration.

Grade 11 and 12 students need

courses in mathematics - particularly electricity, magnetism, light and sound, physics, chemistry and computing science. It helps if students have an aptitude for tinkering and a curiosity about how and why things work.

Students can also be encouraged to conduct experiments in electricity, to do amateur radio work, to read science magazines and explore computer interests. Finding a summer job relevant to their career goals is also good experience. Asking someone in the field is still one of the best ways to find out about a particular career. Students can then relate the information they receive to their objectives and expectations.

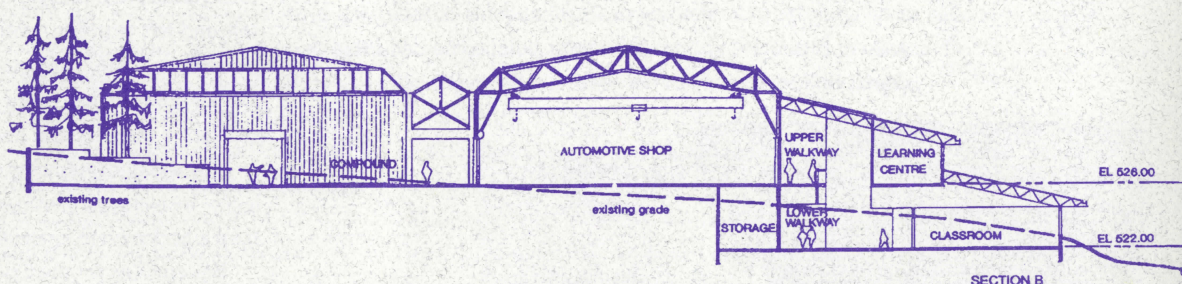
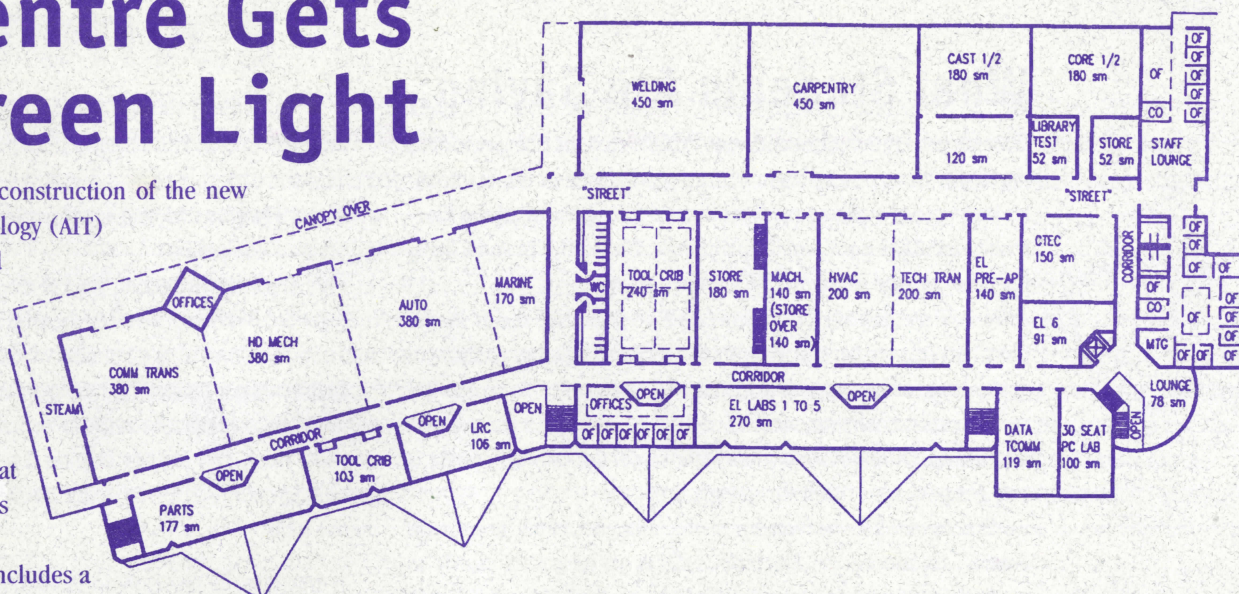
AIT Centre Gets the Green Light

It's official! Funding for construction of the new Applied Industrial Technology (AIT) Centre has been approved and the dirt should be flying by early November.

Art Charbonneau, Kamloops MLA and Minister of Education, made the announcement at Homecoming celebrations last month.

The two-level facility includes a large number of multipurpose classrooms, dedicated labs and training areas for various AIT programs, like Electronics, and modern 'shop' space for various mechanical, electrical, construction and piping trades.

The AIT Centre should be open by January 1997—look for progress reports in future issues of **Advisor Updates**.



Updates (continued)

Plumbing — UCC will be the first post-secondary institution outside of greater Vancouver to offer training in the Plumbing trade. The six-month Plumbing Trade Entry program begins November 1995. Those interested in the program should contact the Applied Industrial Technology (AIT) division office at 828-5133.

The Plumbing Trade Entry program is just the beginning of a number of other specialties UCC is developing and intends to offer. Gas Fitting and Sprinkler Fitting are two such possibilities. It is expected that Heating, Ventilation & Air Conditioning may be offered by September, 1996.

Carpentry - New training opportunities in the AIT Division at UCC are being developed at the same time as a new multimillion dollar AIT Training Centre. the Carpentry Program expects to announce a level 1 apprenticeship training program in Williams Lake for early next year. It would be done in partnership with Columneetza High School and include space for high school apprenticeship students.

Physics — Effective immediately the Physics Department will accept the following equivalents for the next three years:

Principles of Technology I (Applied Physics I) = Physics Gr. 11

Principles of Technology I & II (Applied Physics I & II) = Physics Gr. 12

Office Administration — New to the Business Secretary Program at UCC, is a course called **The Canadian Office—Language and Culture: The Multicultural and International Workplace** which is designed to help students understand the nature of the workplace and embrace the growing diversity and multiculturalism they will find there.

The new course will provide Canadian students and increasing numbers of international students enrolled in the Business Secretary Program, an opportunity to recognize and value differences. Activities are designed to give students practise in developing effective communication skills in a changing, more international workplace.



Founded in 1970 as Cariboo College, the University College of the Cariboo (UCC) is now a quarter century old.

Advisor

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