

Job Ready Graduates!

Kwantlen College's Trades and Technology programs lead to challenging and successful careers

We live in a complex and rapidly changing world. These rapid developments create major decision-making challenges for today's secondary school students, as well as people considering retraining or a new career. Which career direction do I choose? Am I making the right choice? Where will it take me?

People working in the trades and technologies have a good future. At Kwantlen College we contribute to that future by offering innovative, flexible and practical training. Our focus is to provide graduates of our trades and technology programs with a broad range of expertise, knowledge and skills.

There are great opportunities in trades and technologies – for women and men. The existing pool of skilled workers is aging, with as many as one-quarter currently over the age of fifty. Further, economic indicators show that trades and high technology industries in B.C. will experience a high growth rate over the next ten years. The combination of these two factors greatly increases employment opportunities for people entering these areas.

The trades and technologies are excellent areas for people who are looking for recession-proof jobs. These areas can be very high paying with steady employment. Many opportunities exist for graduates – from working for a leading company to owning and running their own business. Skilled tradespeople and technologists have worldwide employment opportunities that provide freedom and flexibility.

Despite the many exciting possibilities in these fields, trades and technologies are often misunderstood. "A strong demand for skilled tradespeople exists, but there's an image problem attached to work in trades," explains Geoff Dean, Director of Trades programs. "It's a matter of overcoming existing attitudes about the myths and realities of the trades."

One of the most prevalent myths is that the trades are dull and boring. "Nothing could be further from the truth. The trades can be very creative, especially when people develop more experience and become true craftspeople. There's a tremendous amount of hands-on satisfaction."

Another misconception is that trades are for people who can't handle academic work. "In fact," says Dean, "good mechanics and electronics specialists must understand a high level of math and science. With new

technical developments and hands-on applications, today's mechanic needs to understand computers and electronics as well as basic mechanical skills."

The notion that tradespeople must be superhuman is another myth. "You don't have to be a man or have a lot of strength to work in trades," Dean says. "Sure, there's a degree of physical activity that women and men can both handle, but what's required are people who have

definite skills and knowledge, who can solve problems and take pride in building, repairing or perhaps inventing something."

A career in technology is also a good choice for many students. "Our technology graduates are hired very quickly by the industry," says Dr. John Levin, Director of Science, Applied Science & Technology. "With our personal attention, and emphasis on problem solving and individual initiative, students receive a superior education

and graduate as very competent individuals."

While some Kwantlen technology graduates go directly into jobs in the high technology industries, others go on to university engineering programs. "We want people to come and see the technology education can give them," adds Levin.

At Kwantlen College, we're excited about what we have to offer. Our trades and technology programs put graduates to work. Kwantlen College can make you job ready. Read on and see how other people like you are making the trades and technologies a part of their future.



Millwright Apprentice Muni Sami (see story page 2)

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A summary of exciting career options in Trades and Technology!

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Mary Hayden, Assistant Service Manager at MSA Ford

Automotive Opportunities

According to Mary Hayden, she was a go-getter from childhood, working from age 10 and saving to buy her first car when she was 13. "I couldn't drive it, so I just had to learn how to fix it up," she says.

A graduate of Semiahmoo Secondary School in White Rock, she always enjoyed woodwork, shop and technical subjects: "It was just so natural to me." After high school she went to Kwantlen College and gained her certificate in Auto Parts and Light Warehousing in 1981.

Like many young people who go straight into trades after high school, she took a variety of jobs in auto servicing to widen her experience and "find the right direction." In 1982, she took her Auto Mechanics certificate.

For the past five years she has worked in the service department of M.S.A. Ford in Abbotsford — "a great company to employees and customers." As Assistant Service Manager, Hayden is responsible for the work of technicians as well as overseeing the operations of the service department.

Kwantlen Auto Parts and Light Warehousing instructor, Glen Williams, says the program attracts people of all ages, since students receive excellent 'hands-on' experience operating a fully-equipped college stockroom which supplies auto parts for 10 college programs.

"Career potential is good, since people always need cars and cars always need parts," explains Williams. "And, although entry level pay is not high, an experienced inventory controller, manager or outside salesperson can earn a very comfortable living." As with other skilled trades, adds Williams, it's up to the individual to supply the career energy and drive.

Kwantlen's program recognizes high school shop training, and has been organized to allow students to work at their own pace according to their specific needs.

Course content includes stock handling, office procedures and communications. Hayden describes the program as one that offers "plenty of practical computer training." Also covered are standard stock and materials, mechanical parts identification, support systems (both mechanical and electrical), frames and chassis, catalogue and applications, and power trains and transmissions.

Trades Technology

Trades/Technology: a tabloid supplement highlighting the Trades and Technology offerings at Kwantlen College.

Produced by the Kwantlen College Marketing and Public Relations Division, March 1991.

Photography: James Loewen

Kwantlen College is the local community college for the 500,000 residents of the south Fraser region, serving the communities of Surrey, Delta, Langley, Richmond and White Rock. Kwantlen offers a comprehensive range of programs, including Trades and Vocational training, Technologies, Academic/University Transfer, Career programs, College preparatory and Continuing Education.

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Millwrights enjoy steady and varied job prospects

"The career preparation I received for these jobs at Kwantlen couldn't have been better"

Pride and enjoyment shine forth when former Kwantlen student, Muni Sami, talks about his work as a Millwright Apprentice.

Since receiving his certification of completion in the Millwright program at Newton Campus in 1989, Sami has been in steady employment through the Millwright Union Local 2736, and seen quite a bit of British Columbia in the process. Sami's need for non-repetitious work and breadth of experience while doing a well-paid job is seen in a review of his past two years.

He has just completed the maintenance during shut-down of a pulp mill in Cranbrook. Before that, he installed conveyors in a grain elevator by the Second Narrows Bridge. In 1989 it was a pulp mill in Gold River, and in 1990, a chemical plant in Prince George; then working on equipment for a pulp mill in Howe Sound.

Sami speaks highly of his training: "The career preparation I received for these jobs at Kwantlen couldn't have been better." He has some basis for comparison, having worked as a logger, a fisherman and unskilled worker in a sheet metal shop, prior to taking the Millwright program at age 23, as a mature student.

A son of Fijian immigrants, Sami took his Grade



Welding courses are part of Sami's Millwright Apprenticeship

12 at Port Hardy Secondary and went to Kwantlen after his family moved to Surrey in 1987. He liked Kwantlen's flexibility, allowing him to go out on jobs for a week or two at a time while the course was running and helping him find a job when he was through the course.

Kwantlen's 10-12 month pre-employment training program is equivalent to first-year apprenticeship in the Millwright (Industrial Mechanic) trade in the construction, pulp-paper and mining industries. It is offered year-round, with entry at any time, space permitting.

Basic admission requirements are minimum Grade 10 reading and math skills, physical ability to complete the program work, interview with an instructor, and completion of the Common Core program, or a recognized secondary-school Career Preparation program or two years' work experience in the trade. There are also two-to-three month and two-to-six week intensive upgrading programs, plus other options available at specific times.

Straight Talk On Trades

MYTH • AND • REALITY

- | | |
|--|---|
| Trades mean heavy work | Trades today mean working with computers and high tech equipment |
| Only men are Tradespeople | Women are entering the Trades in record numbers — and succeeding |
| Trades are boring | Training in the Trades can lead to self-employment, teaching and management |
| Trades work is dirty work | With modern equipment and experience, tradespeople don't have to get dirty |
| There's no money in the Trades | Many tradespeople earn over \$40,000 a year |
| Trades require size and strength ... | If you're 120 lbs., you can be a tradesperson |
| Trades are all work and no glamour | Trades today mean creativity, hands-on innovation and high technology |

Computer Sparks Electronics Interest

Dayle-Ann Geddes is "30-something", a single parent of three adolescent children, and excited about the bright future she sees ahead in computer electronics.

Currently half-way through the Computer Electronics Specialist program at Kwantlen's Newton Campus, Geddes completed her Grade 12 courses in Physics, Algebra and Communications at Queen Elizabeth Secondary School.

"My grandfather was an electrician and I was always watching him, interested in fixing things. I remember at an early age liking the buzz in the telephone wires", she says. At age 17, Geddes dropped out of high-school and into family life before she could graduate. She credits Kwantlen's instructor, Linda Coyle, for encouraging her to work towards achieving her potential in a 1985 *Employment Alternatives for Women* course she took.

The Computer Electronics Specialist program includes Basic Computer Electronics, Computer Hardware, Process Controls and Introduction to Mini-computers. Geddes found the adjustment to studying, "a bit

of a stretch, but fun too." She feels this course is specialized enough to prepare her for a wide variety of work in a high demand industry. "And I like the people at Kwantlen — they make me feel like a person."

Course instructor, Al Witun, has a number of mature students in his program.

"They've had a chance to work and realize what they want to do." Witun sees younger students benefitting from older students. "They see how the mature students handle the work and realize the self-discipline involved — it's good general training for the business world."

"Highschools should steer students towards electronics courses and school counselors should encourage them to see the potential in vocational programs and skilled trades. In Switzerland, 75% of all apprenticeships start in grade school," Witun says.

The 10 month full-time course meets 30 hours

weekly. Wherever possible, practicums with local companies expose students to current industry developments. A Certificate in Computer Electronics is awarded upon each student's successful completion of the program.



Student Dayle-Anne Geddes connects with computer circuitry

Top-notch training for Auto Mechanics

If you're in awe, not just of your mechanic's ability to fix a wide variety of cars, but the articulate way he or she talks about them, a look at Kwantlen's entry level Automotive Mechanics program might explain why auto mechanics are so well-educated. As course instructor, Doug Boyer, puts it, "The day the public thought of auto mechanics as akin to blacksmiths has long gone."

Dale Wirsz, a second year apprentice in auto mechanics, talks with enthusiasm about the course. A high-school graduate who "always did mechanics" at North Delta Secondary School, Wirsz has spent two years working in a general purpose garage/repair shop in Langley. He also freelances — restoring old Dodge cars.

This allowed him to fast-track through Kwantlen's Newton Campus program. Its flexibility and individualized development of shop skills let Dale move through the program according to his own level of experience, needs and abilities. Boyer says students come in at all levels, but share a common attribute, a sense of vocation. "Many young people find the trade fascinating because it involves all the sciences — maths, physics, chemistry and electronics."

Boyer sees a return to training for trades and skilled employment. With the current shortage of qualified auto mechanics: "It sure beats a general Bachelor of Arts degree for finding good jobs these days," he says. Firms post jobs with the College for which students apply and are often hired.

"...young people find the trade fascinating because it involves all the sciences - maths, physics, chemistry, electronics ..."

Kwantlen's 10-12 month pre-employment training program is equivalent to first year apprenticeship in the automotive mechanics field. It is offered year-round, with entry at any time, space permitting.

Admission requires reading and math skills at a Grade 10 level, physical ability to do the program work, and completion of the Common Core program or a recognized secondary-school Career Preparation program or two years' work experience in the trade. There are criteria for entry as a Special Admission student.

Trades at Kwantlen . . . everything you need to know

Learning a trade at Kwantlen College translates into career potential that includes self-employment, apprenticeship training and management. Kwantlen offers entry-level Trades programs ranging in length from 5 to 11 months. Entry requirements are designed to assess the skills of each student to ensure their success.

Program	Program Length	Career Potential	Earning Potential
Appliance Servicing	9 months	1,360 new jobs created by 1995	\$39,000
Automotive Mechanics *	7-9 months	4,330 new jobs created by 1995	\$31,000
Automotive Parts & Light Warehousing *	6-8 months	continuing demand for qualified graduates	\$27,000
Automotive Upholstery	5 months	250 new jobs created by 1995	\$30,000
Building Construction/Carpentry	6-8 months	5,970 new jobs created by 1995	\$30,000
Drafting and Design (CAD)	9-11 months	1,120 new jobs created by 1995	\$38,000
Computer Electronics Specialist	10 months	540 new jobs created by 1995	\$35,000
Farrier Training	9 months	continuing self-employment and industry opportunities	\$30,000
Furniture Upholstery	5 months	250 new jobs created by 1995	\$30,000
Masonry *	6-8 months	710 new jobs created by 1995	\$27,000
Millwright/Industrial Mechanic *	9-11 months	3,410 new jobs created by 1995	\$45,000
Welding (C Level)	6-8 months	1,820 new jobs created by 1995	\$39,000

* Apprenticeship training in these and other Trades is available at Kwantlen

Environmental program unique to B.C.

The quality of our environment is an issue for communities that recognize the need to conserve our resources and stop pollution. Responding to the need to promote proper environmental management, Kwantlen College offers the Environmental Waste Management Technology program through co-operative education. Environmental Waste Management provides a foundation in various aspects of environmental protection, including air, water, sewage, industrial waste effluents, soil and groundwater. Graduates will have a comprehensive knowledge of waste management, treatment methods and environmental regulations and issues.

"The demand for improved environmental protection in the 1990s creates employment prospects for graduates that are better than average in B.C."

"I see a good career and a future for myself in this area," says Craig Archibald, a 1990 graduate of Princess Margaret Secondary School in Surrey, currently in the program. "I chose the two year technol-

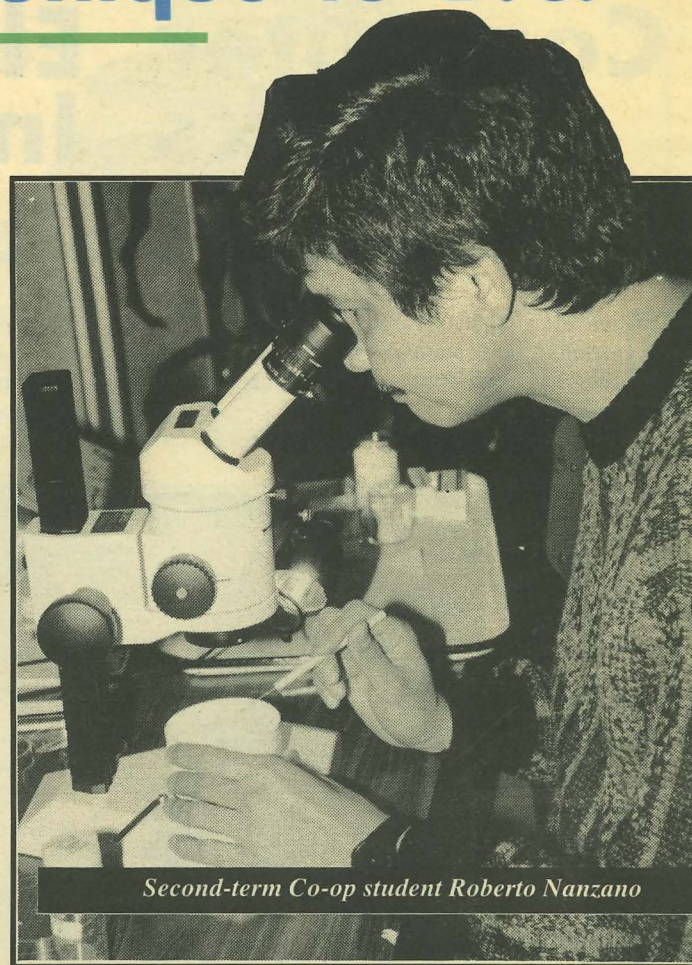
ogy program at Kwantlen because it puts me in a job sooner. Companies look for a person with a broad background, and the opportunities in this field give me a wide range to choose from. The co-op part of the program helps me gain confidence and experience applying what I learn."

Program instructor Craig Runyan agrees: "The Environmental Waste Management co-op program is unique in B.C. because it offers students experience in all areas of environmental protection. The demand for improved environmental protection in the 1990s creates employment prospects for graduates that are better than average in B.C." Employment opportunities include work with the G.V.R.D., government, chemical, mining and forestry industries, as well as environmental consulting.

The program in Environmental Waste Management Technology began September 1990 at Kwantlen's Richmond campus. It's a two year program admitting 20 students into the first year. Co-op education is a learning strategy that lets students combine on-the-job work experience with classroom study.

"Co-operative education is extremely popular because it gives graduates an important competitive edge experience," says Runyan. "There are aspects of every profession which cannot be taught in the classroom."

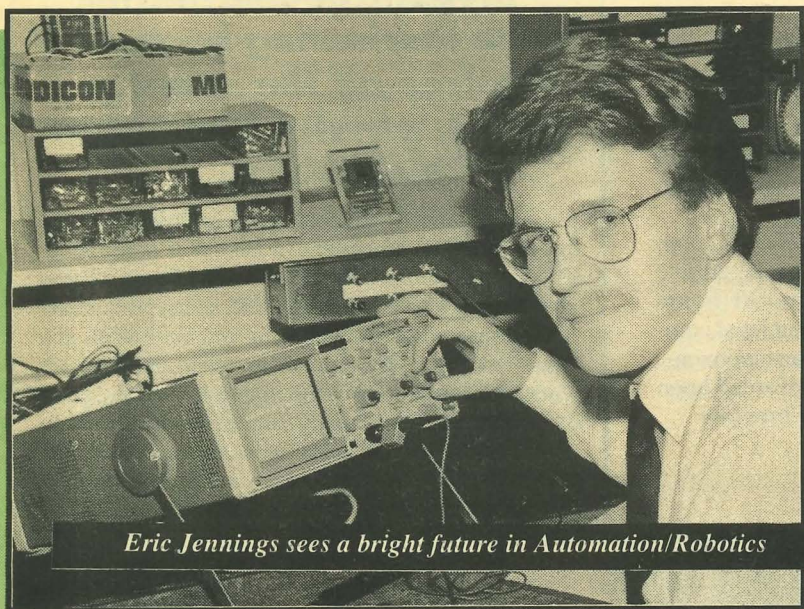
"It's a partnership between students, employers and the College," he adds. "Besides gaining experience, students are also paid for work performed."



Second-term Co-op student Roberto Nanzano

Automation/Robotics Technology

a c a r e e r f o r t h e 2 1 s t c e n t u r y



Eric Jennings sees a bright future in Automation/Robotics

Automation/Robotics Technology isn't a new field, but Kwantlen College graduate Eric Jennings knows it's an industry for the 21st Century. College instructor Darryl Hutcheon calls it "the way all factories are going".

The Automation/Robotics Technology program emphasizes computer control of mechanical systems. Program material includes control systems, programming, hydraulics and pneumatics, mechanics, process control and robot applications.

Jennings, aged 26, dropped out early from Seaquam Secondary School in Delta and subsequently chose to complete his Grade 12 at Queen Elizabeth Secondary School's evening classes while working as a gas station attendant. Since taking the Kwantlen two-year Automation/Robotics diploma program in 1987-89, he has been employed in the field.

A field service representative with Modicon Canada Ltd, a Multinational 'Programmable

Logic Controller' (P.L.C.) company, Jennings believes he is earning an above-average salary. "But I had to work for it," he adds.

Modicon supplies automated electronic control systems to all of B.C.'s major industries. Jennings sees his career future as wide-ranging. "I'm writing more applications and looking at the possibility of university studies in engineering technology sometime in the future," he says.

"Ninety-five per cent of our graduates have found employment in directly related fields," says instructor Hutcheon. "The graduates of this program can do a job no one else can." Hutcheon suggests to prospective students that mathematics is the most important prerequisite. He also notes that mature applicants may have related work experience credited towards admission.

Successful completion of the program includes an option to transfer into a university engineering program.

COFFEE COUPON!



Drop by for coffee with one of our approachable instructors. Present this coupon to discuss the program(s) you're interested in.

Trades: Admissions, Newton Campus

Technologies: 599-2950

For information on other Kwantlen College programs or admission, call us at any one of our three campuses:

• Surrey 599-2100 • Newton 599-2900
• Richmond 599-2500

Technologies at Kwantlen . . . everything you need to know

Technology programs at Kwantlen provide training for a variety of exciting careers, and are well suited to motivated individuals with clear career goals. All Technology programs begin in September.

Program	Program Length	Career Potential	Starting Salary
Automation/Robotics	2 yrs.	95% of graduates of this nationally recognized program find employment	\$26,000
Computer Information Systems	2 yrs.	95% of graduates employed in directly related fields	\$28,000
Electronics Technology	2 yrs.	90% of graduates employed in research, design and testing positions	\$26,000
Environmental/Waste Management	2 yrs.	Employment in industry, government and consulting	\$26,000