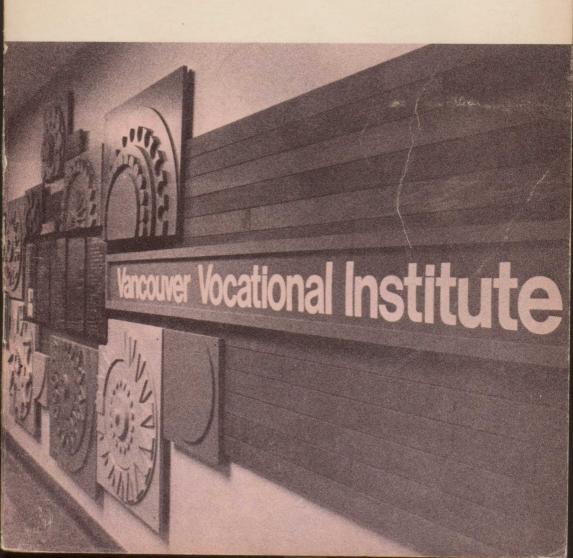


# Vancouver Community College

VANCOUVER VOCATIONAL INSTITUTE

1976/77



# The Good Old Days?

### LANCASHIRE LABOUR LAWS 1852

The following "Rules and Conditions" appeared on the office notice board of a Burnley cotton mill in 1852.

- 1 Godliness, cleanliness and punctuality are the necessities of a good business.
- 2 This firm has reduced the hours of work, and the clerical staff will now only have to be present between the hours of 7 am and 6 pm on weekdays.
- 3 Daily prayers will be held each morning in the main office. The clerical staff will be present.
- 4 Clothing must be of a sober nature. The clerical staff will not disport themselves in raiment of bright colours, nor will they wear hose, unless in good repair.
- 5 Overshoes and top-coats may not be worn in the office, but neck scarves and headwear may be worn in inclement weather.
- 6 A stove is provided for the benefit of the clerical staff. Coal and wood must be kept in the locker. It is recommended that each member of the clerical staff bring 4 pounds of coal each day during cold weather.
- 7 No member of the clerical staff may leave the room without permission from Mr. Rogers. The calls of nature are permitted and clerical staff may use the garden below the second gate. This area must be kept in good order.
- 8 No talking is allowed during business hours.
- 9 The craving of tobacco, wines or spirits is a human weakness and, as such, is forbidden to all members of the clerical staff.
- 10 Now that the hours of business have been drastically reduced, the partaking of food is allowed between 11.30 am and noon, but work will not, on any account, cease.
- 11 Members of the clerical staff will provide their own pens. A new sharpener is available, on application to Mr. Rogers.
- 12 Mr. Rogers will nominate a senior clerk to be responsible for the cleanliness of the main office and the private office, and all boys and juniors will report to him 40 minutes before prayers, and will remain after closing hours for similar work. Brushes, brooms, scrubbers and soap are provided by the owners.
- 13 The new increased weekly wages are as hereunder detailed: Junior boys (up to 11 years) 1s 4d. Boys (to 14 years) 2s 1d. Juniors 4s 8d, Junior clerks 8s 7d, Clerks 10s 9d, Senior clerks (after 15 years with owners) 21s.

The owners recognise the generosity of the new Labour Laws, but will expect a great rise in output of work to compensate for these near Utopian conditions.



# Vancouver Community College

VANCOUVER VOCATIONAL INSTITUTE

#### MAIN CAMPUS

250 West Pender Street, Vancouver, B.C., V6B 1S9 Telephone (604) 681-8111 Telex: 04-54566

### MARINE CENTRE

2019 Dundas Street V5L 1J5 Telephone (604) 681-8111

CALENDAR 1976/77

| DENTAL TECHNICIAN-MECHANIC  FACIALS AND MANICURING  FOOD TRADES DEPARTMENT  Baking Industrial  Baking Upgrading and Option  Cook Training — Pre-Employment  Cooking, Short Order  Waiter/Waitress  POWER SEWING (AM)  7 | 65<br>67<br>69<br>70<br>71<br>72<br>73<br>75<br>79 |
|---|--|
| SHOE REPAIR 8   |  |
| BUSINESS AND HEALTH PROGRAMS DIVISION   |  |
| BUSINESS CAREERS PROGRAMS 8: DENTAL ASSISTANT 8: PRACTICAL NURSING 9:   | 7  |



# FACULTY, SERVICE AND SUPPORT STAFF

\*Department Head: Coordinator

Administration

J. L. McInnis - Principal

H. W. Rerup — Dean of Administration and Student Services

R. J. Leduc - Dean of Instruction

G. W. Lidster - Administrative Assistant

Division Chairmen

J. A. Mitchell - Business & Health

B. A. Wood — Service Programs

A.W. Griffiths - Technical Programs - Marine Programs

Counsellors

J. T. Moore\*

D. H. Kremer

Miss A. A. Winskill

Miss J. H. Williams - Student Service Assistant

Automotive Body

R. B. McCarthy\*

Automotive Mechanical Repair

R. J. Bryant\* W. H. Olsen

N. Kelkey

D. Bennie - Program Assistant

Barbering

J. L. Condy\*

**Building Construction** 

E. A. Rinta\* J. H. Ehwalt

I. Nowak

**Business Office Education** 

Mrs. M. Kowin\*

Miss R. Agostinis Miss E. Bartoshewski

F. M. Bolton

A. Bownick

Mrs. C. Callard

Mrs. E. V. Davis

Mrs. K. Elliott D. Franklin

Mrs. J. E. Gowler

Mrs. D. Hicock

Mrs. K. A. Hodkins

Mrs. V. M. Jones

J. S. Knox

Mrs. J. Latta D. McLeod

R. H. Maitland

Miss M. Marshall

Mrs. B. M. Mitchell

J. B. Punak

Miss S. F. Seddon

R. G. Strachan Mrs. S. Tolway

Miss K. C. Curtis

- Program Assistant

Dental Assistant

Mrs. S. Collin\*

Miss J. Budd

Mrs. D. Cowan

Mrs. E. Lindsay

Miss L. Rogers Miss D. C. Rogers

- Program Assistant

Dental Technician

L. Holoboff\*

Diesel Engineering

J. A. Sanders\*

R. N. Brady T. C. Scott

A. Iapalucci — Program Assistant

Drafting

J. D. Taylor\*
R. A. Atkinson
D. J. Klobchar
W. N. Marshall
K. D. Urquhart
R. J. Wren

Electricity

E. A. Frost\* A. Barnard E. D. Tuley

Electronics

H. M. Sharp\*
M. S. Bishop
S. J. Greenwood
K. T. Gregg
J. J. Kamm
J. H. Kirby
E. F. Klaus
A. E. Lawton
T. E. O'Donnell
M. A. Somerville

Food Trades

J. J. Nowacki\* A. D. Bingley H. Ghislieri\* J. A. Gnos\* R. Jolicoeur\*

C. A. Kilchenmann

D. Kok
R. Mills
F. Naso\*
A. Sauer
H. Vander Linden

B. Grey — Program Assistant G. Rudolph — Program Assistant

Food ServicesManager

Graphic Arts
F. E. Frandsen'
N. A. MacLeod
B. D. Pinkerton
G. Smith

Hairdressing

Miss Ruth Nichols\*
(Mrs. E. Abramson)
K. C. Campbell
Mrs. M. T. Cole

Mrs. M. Donn H. L. Giles R. L. LaRocque Mrs. A. Stradiotti

Instrumentation

E. R. Stanfield J. W. Snell

Machine Shop
J. B. Lock\*
C. A. Bisset
A. Iapalucci — Program
Assistant

Marine Engineering P. A. Dale

G. H. Greggor F. J. Fenlon B. H. Jackson

Nautical Training
R. E. S. Armstrong\*
N. S. Bradbury
J. Hurt
J. T. Marsh

Power Engineering N. B. Reid\*

N. B. Reid\*
J. Beaman
N. C. Coen
M. Defeyter
W. L. Edwards
F. Hajer
A. L. Lees
P. G. Miles
A. Smith
A. M. Wong-Hen-

Power Sewing Mrs. L. Friesen\* Mrs. K. Buchanan Practical Nursing
Miss C. G. Thomas\*
Miss L. Beaudoing
Mrs. M. Clarkson
Mrs. D. Fanson
Mrs. A. Grunenberg
Mrs. V. Hawkins
Mrs. M. Kerr
Mrs. R. Mercer
Miss D. Schultz
Mrs. M. Shellington
Mrs. S. Simms
Miss K. Wilde

Miss K. Wilde Miss E. Fairholm — Program Assistant

Shoe Repair
J. Pearson\*

Trained Homemaker Mrs. I. Harvey\*

Welding
E. M. Sukkel\*
N. Anderson
W. T. Berry
D. McGowan
G. E. Martin

A. Iapalucci — Program Assistant

Manager Office Services

T. R. McComb N. Jamal (Assistant)

Office Services Staff

Miss M. Sinclair Miss S. Woycenko Miss S. Amrolia Mrs. S. Anderson Mrs. O. Bayliss Miss K. Berti Miss D. M. Fister
Miss B. Gibbins
Mrs. F. E. Gontier
Mrs. B. E. Hansen
Miss E. Henson
Mrs. D. Housego
J. Krasikow
Mrs. F. MacGregor
Mrs. L. Miller
Mrs. C. Milligan
Miss M. Rinta
Miss D. Ross
Mrs. C. Schofield
Mrs. E. Stewart
Mrs. L. Taverner

Audio Visual Services Miss P. Jiwani L. P. Stanchuk

Computer Programmer D. G. Schwenning

First Aid Co-ordinator F. Dalling

R. M. Henderson Mrs. J. Farrish Mrs. C. Cooper

Engineer — Custodial F. Lowe

Receiving
L. Clyne
R. Holwin
C. M. Ching



What I advise is that each contentedly practice the trade he understands.



- HORACE, Epistles, Book I

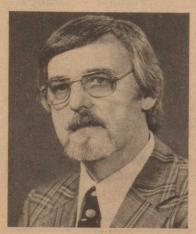
# A MESSAGE FROM THE PRINCIPAL

The Vancouver Vocational Institute is dedicated to graduating Students of the highest calibre, and the fact that our Graduate Students are extensively sought out by both Business and Industry is an indication of our considerable achievement with respect to this goal. The gainful employment enjoyed by our Graduate Students speaks highly of the degree to which they have acquired the appropriate knowledge, skills, and attitudes that are necessary to facilitate the attainment of their goal of making a meaningful contribution in this age of rapidly changing technology.

One of the reasons the V.V.I. has enjoyed and continues to enjoy, such an excellent reputation is the exceptional expertise and dedication exhibited by our Faculty and Staff. Indeed, the continuing commitment of our Faculty and Staff assure our Students and ultimately our Community that our training needs of both the present and the future will be realized.

The Vancouver Community College endorses the principle of providing the best possible career opportunities in keeping with the diversified needs of our community. We at the V.V.I. are proud of our role within the College which allows us to provide you, our Students, with the ways and means of broadening your horizons by pursuing meaningful training programs.

Please join us . . . accept The Challenge . . . Train Today for Tomorrow.



J. L. McINNIS Principal

# VANCOUVER COMMUNITY COLLEGE

Vancouver Community College officially came under the authority of the Vancouver Community College Council on December 3, 1970. It consists of five divisions, each specializing in a different area of instruction: Vancouver School of Art for Art Programs; Vancouver Vocational Institute for Technical and Career Programs; the King Edward Campus for upgrading and academic subjects; the Langara Campus for Academic and Career Courses and the Community Education Services Division for all other adult programs.

This is the second largest post-secondary operation in British Columbia, with an enrolment in excess of 13,000 students. Its offerings are many and varied, including a four-year program in Art, diploma and certificate programs in a wide variety of trades and services, numerous upgrade courses in many fields, personal development courses, as well as a wide range of University Transfer Programs. By virtue of this multiplicity of offerings, Vancouver Community College can truly call itself a Comprehensive Community College.

#### Vancouver Vocational Institute

In response to a growing awareness of the need for realistic technical and vocational training, the Vancouver Vocational Institute was opened by the Vancouver School Board on November 8th, 1949. From a very small beginning the Institute has grown and changed to meet public demand until, at the present time, it comprises 35 departments and 90 identifiable courses. On April 1, 1971 the Vancouver School Board officially ceased to administer the Vancouver Vocational Institute when it was incorporated into Vancouver Community College as the division specializing in the preparation of students to enter careers in business, industry and service occupations.

Closure of the College During Potential Emergencies such as Snowstorms, Strikes and Power Failures

The College will remain open during normal operating hours unless the College Principal makes a specific announcement to the contrary through the news media.



We see that a carpenter becomes a carpenter by learning certain things: that a pilot by learning certain things becomes a pilot. Possibly also in the present case the mere desire to be wise and good is not enough. It is necessary to learn certain things. This is the object of our search.

Epictetus, 'Golden Savings'.'



# CAREER ADVISORS, COUNSELLING, ADMISSIONS AND GENERAL INFORMATION

#### Citizenship Requirements

Applicants must be Canadian Citizens; or have landed immigrant status; or must have made application for landed immigrant status and such application must have been accepted for consideration by the Department of Manpower and Immigration. Definition of immigrant status is subject to the regulations of the Department of Manpower and Immigration.

#### English Language Assessment

Applicants from other countries who are required to write a placement test prior to registration will be so informed. These tests are administered at the College's King Edward Campus. The Schedule is available in the Student Services Centre. Results of the testing may affect the student's placement in courses.

#### How to Apply

Applications can be obtained from the Centre in person or by mail or telephone.

An applicant completes the application according to the instructions on the application. The applicant states the date when he/she prefers to begin career training.

- a) Applicants attending secondary schools, should provide a copy of Grade 11 and 12 marks to date, or latest secondary school marks.
- b) Applicants out of school or attending a post-secondary institution should provide official transcript of senior secondary school marks and any other educational marks or certificates.

Medical clearances and pre-entry tests are required for many career programs.

When the application is received by the college centre, the application will be acknowledged and placed on the career program list. If the calendar prerequisites for the career program are not met the applicant will be so advised.

The application should be completed and mailed well in advance of career program commencement dates. Applications which have been placed on the class list will be carried forward to the subsequent class list. In a number of career programs, the applicants are interviewed to ensure that he/she has the necessary course prerequisites and defined his/her career goals to be able to complete the career program successfully.

#### Mature Student Status or Educational Equivalent

Where the records from High School indicate a lack of sufficient formal education to meet the specific course requirements the following alternatives will apply.

- a. Mature student status —age minimum 19 years, with one year out of school, with appropriate background experience as evaluated by the College Counselling Services. Such students may be asked to take additional prerequisite courses if required.
  - or b. —Basic Training for Skill Development courses at Level 3 or 4.
  - or c. —G.E.D. plus additional courses if and as required.

#### Career Programs

The basic qualifications for entry to each program vary with the course and are explained in detail. Please consult the index for the appropriate page.

#### Counselling

Counsellors at the VCC-Vancouver Vocational Institute provide the following service to students, potential students and the general public:

- Assist people in making decisions on educational goals and career training.
- Provide personal counselling to students to assist them in making personal decisions regarding their life styles.
- Provide a referral service to outside community services and medical assistance.
- Provide referral service to other educational centres within the Vancouver Community College and other post-secondary educational institutions



Library/Resource Centre

Located in Room 220, the Library houses a comprehensive selection of books, magazines and audio-visual materials supporting the curriculum of V.V.I. The library staff is available at all times to assist students and faculty. Computer Aided Instruction is also available.

Hours of operation

Mon. - Thurs.: 8:30 a.m. to 8 p.m.

Fri.: 8:30 a.m. to 5 p.m.

Sat. & Sun.: Closed

Financial Aid

A. FINANCIAL AID THROUGH CANADA STUDENT LOANS AND B.C. GRANTS-IN-AID

- 1. Students enrolled in courses of six or more months duration are eligible to apply for assistance through a combination of Canada Student Loan and B.C. Grant-in-Aid. The Canada Student Loan is repayable by installments at nominal interest commencing six months after completion of training. The B.C. Grant-in-Aid which is paid in conjunction with the loan, is non-repayable.
- 2. Students enrolled in courses of five months or less are eligible to apply for "Special Assistance" to defray cost of fees, books, supplies and transportation. This assistance is in the form of a non-repayable B.C. Grant-in-Aid.
- 3. Eligibility for Government Financial Assistance is based on Residence requirements and Assessment of Financial need. Further information and assistance may be obtained through the Student Services area.

# B. AWARDS, BURSARIES AND SCHOLARSHIPS

Various awards, bursaries and scholarships are donated by Industry, Unions, Trade Associations, Community Organizations and Individuals, which are available to students upon application. Please direct all enquiries to the Financial Aid Officer.

1. VANCOUVER MUNICIPAL AND REGIONAL EMPLOYEES' UNION: An annual bursary in the amount of \$200.00 is open to members of the Vancouver Municipal and Regional Employees' Union, their immediate families and legal dependents, who, at the time the award is made have held membership in the Union for at least two years. Candidates must be enrolled in a full program leading to an advanced Diploma, Technical Certificate or Degree at University. Basis of the award is financial need and progress in their chosen career program. Enquiries should be directed to the Financial Aid Officer.

2. BUILDING CONSTRUCTION — AMALGAMATED CONSTRUCTION ASSOCIATION OF B.C. Donates an annual amount of \$125.00 to be offered as bursaries to students in the Building Construction program.

3. DRAFTING — STEEL DESIGN RETAILING — CANADIAN INSTITUTE OF STEEL CONSTRUCTION: Offers two — \$150.00 bursaries only to students enrolled in

Steel Design Detailing.

4. DENTAL ASSISTANT AWARDS ARE OFFERED AS LISTED:

| a) Theory<br>Award   | \$30.00 (One-<br>time) | Vancouver Dental<br>Assistants Association |
|----------------------|------------------------|--|
| b) Clinical<br>Award | \$50.00 (One-<br>time  | Vancouver Dental<br>Assistants Association |
| c) Practical         | \$25.00                | Vancouver &                                |
| Training             | (Annual)               | District Society                           |
| Award                |                        |  |
| d) Dental            | \$25.00                | Dentsply Canada Ltd.                       |
| Materials<br>Award   | (Annual)               |  |
| e) Iain McLeod       | \$25.00                | Dentists of Metro-                         |
| Memorial<br>Trophy   | (Annual)               | politan Health                             |
| f) Radiography       | \$25.00                | Drs. Nacht, Margolese                      |
| Award                | (Annual)               | & Krasnoff                                 |
| g) Nutrition         | \$10.00                | Dr. J. Sandbrand                           |
| Award                | (Annual)               |  |
| h) VCC-VVI           | \$10.00                | Vancouver Community                        |
| Student              | (Annual)               | College — Vancouver                        |
| Progress             |                        | Vocational Institute                       |
| Award                |                        |  |

- 5. ELECTRICITY INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS and THE BOARD OF ELECTRICAL CONTRACTORS award three \$50.00 bursaries annually to the top student in each graduating class on the Electricity program.
- 6. ELECTRONICS XEROX OF CANADA LIMITED FELLOWSHIP AWARDS: Two awards of \$125.00 each are provided annually by Xerox of Canada Ltd. to graduate students in the field of Electronics. The awards will be made to students on the basis of over-all performance. Information is available through the Financial Aid Officer.

7. FOOD TRADES — B.C. CHEF'S ASSOCIATION: Offers bursaries of \$100.00 annually to assist a deserving student in the Food Trade Programs.

EATONS: Offers bursaries of \$100.00 annually to assist a

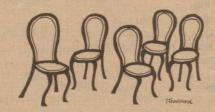
deserving student in the Food Trade Programs.

8. GRAPHIC ARTS — THE MARGARET ANDERSON AWARD FROM PRINTING HOUSE AUXILIARY: Offers a \$75.00 annual award to a Graphic Arts student.

THE VANCOUVER CLUB OF PRINTING HOUSE CRAFTSMEN: Offers a \$75.00 annual scholarship to a promising Graphic Arts student.

9. MEDICAL OFFICE ASSISTANTS — MEDICAL OFFICE ASSISTANTS ASSOCIATION OF B.C. (Vancouver Chapter): Offers an annual Proficiency award of \$50.00 to a student enrolled in the Medical Office Assistant Program.

10. METAL TRADES — AMERICAN SOCIETY FOR METALS: Offers an annual award of \$75.00 to a promising student enrolled in either the Machine Shop or Welding program.



- 11. JOHN HENDERSON SCHOLARSHIP of \$100.00 is provided annually by the Vancouver Parent-Teacher Council to a student graduating from a secondary school, who will be enrolling for full-time post-secondary studies at any centre of the Vancouver Community College. Applications are obtainable from Vancouver secondary school Principals.
- 12. SOROPTIMIST CLUB OF VANCOUVER provides a \$200.00 award to the woman chosen to represent the Club in the Western Canada Region Finals. This award is available upon application.

# Manpower Sponsored Students — Christmas/New Year Period

Students sponsored by Canada Manpower enrolled in courses spanning the Christmas/New Year period may lose their wage-replacement allowance for up to four days because of closure of the College. Students so affected should check with the on-site Canada Manpower office.

# Canada Manpower

For government sponsored training, make application at your local Canada Manpower Centre.

#### College Health Service

The aim of the College Health Service is to provide continuing health care in the broadest sense of students and staff while at the college.

Hours: Monday to Friday

9 a.m. - 12 p.m.; 1 p.m. - 4:30 p.m.

Place: Room 250, West Building

#### Confidential Services of:

Public Health Nurse Psychiatrist Psychologist

- Emergency treatment

- Treatment of minor medical and surgical conditions

Brief Therapy (Psychiatrist, Psychologist)
Health Education for groups or individuals

- Health Counselling

- B.C. Medical Plan Information

- Student Accident Insurance information

- Workers' Compensation coverage information

- Referral Services

#### **Apprenticeships**

The Apprenticeship Act of British Columbia requires that a person who is to work in a designated trade must indenture as an apprentice with his employer. These apprenticeships are mandatory, but graduates of our pre-apprentice programs receive credits for completion of the applicable courses.

# Schedule of Fees

TUITION FEES:

\$30.00 per month — PAID QUARTERLY IN ADVANCE. The first day of the Quarters starts — January, April, July and October.

TUITION SPECIAL SERVICES:

\$1.50 per day. The cost of supplies and materials is additional.

SPECIAL PROJECTS:

The College periodically offers special courses requested by business, industry and organizations. The cost of special project courses is determined by the College and in such cases the normal schedule of fees is not applicable.

#### Student Services Fee

A Student Services fee of \$1.50 is payable at the time of registration. The fee provides funds for accident insurance coverage, incidental costs of graduation ceremonies, participation in athletic events and a limited number of student loans or grants.

Student services fees are payable only once per calendar year. Students are not required to pay an additional fee if the Course completion date extends into the following year.

In some areas specialized course fees are charged; this applies to Power Engineering, Nautical and Marine Engineering. Tool and uniform deposits are required in a number of courses.

#### Refund of Fees

A schedule of charges for processing refunds is applied in each College centre.

#### Student Hours

Classes operate on a six-hour, five day week and a 12 month year. In response to the heavy demand for training, some courses are operated on two or three complete shifts. In addition, individual, technical and career courses are offered between the hours of 6:00 p.m. and 11:00 p.m. Normal school hours are 8:00 a.m. to 4:00 p.m.

Vancouver Community College reserves the right to alter class hours, schedules, fees and duty assignments for staff as required to best serve the training needs of the Community.

# College Co-ordinated Diploma Programs

In general, a program year of eight or more months duration at the Vancouver Vocational Institute will constitute 30 credits or one-half of the requirements for a college diploma. When these 30 credits are used in conjunction with a full program year completed at any any other recognized post-secondary institution in British Columbia or, where applicable, from other provinces, the combined credits may be used to qualify for a college diploma. Please provide full transcripts and records of marks if you wish to be enrolled on a co-ordinated program for a college diploma.

#### Board and Room

Students are responsible for their own arrangements for board and lodging. No dormitory or other facilities are available through the Institute. The approximate minimum cost of board and lodging in Vancouver is approximately \$150 per month at the present time. A list of names and addresses of persons who have board and lodging available in the Greater Vancouver area is maintained. Please check with Student Services.

#### Textbooks and Supplies

Most required textbooks and supplies can be purchased at cost from the College Student Service Centre.

NOTE: No free textbooks or supplies are provided by the College for either sponsored or feepaying students.

#### Student Responsibilities

All students and applicants are advised of the need for full compliance with all safety rules, regulations and requirements during the training period. A reasonable standard of health, dress and grooming must be maintained as stipulated by the Accident Prevention Regulations of the Workers' Compensation Board. Students (Vocational-Technical) are covered by Workers' Compensation and by a Student Accident Insurance Policy during all authorized training periods conducted under the supervision of an Instructor. For safety or health reasons, it may be necessary to contain hair in nets or to trim beards to avoid unnecessary hazards.

#### This information is subject to change without notice.

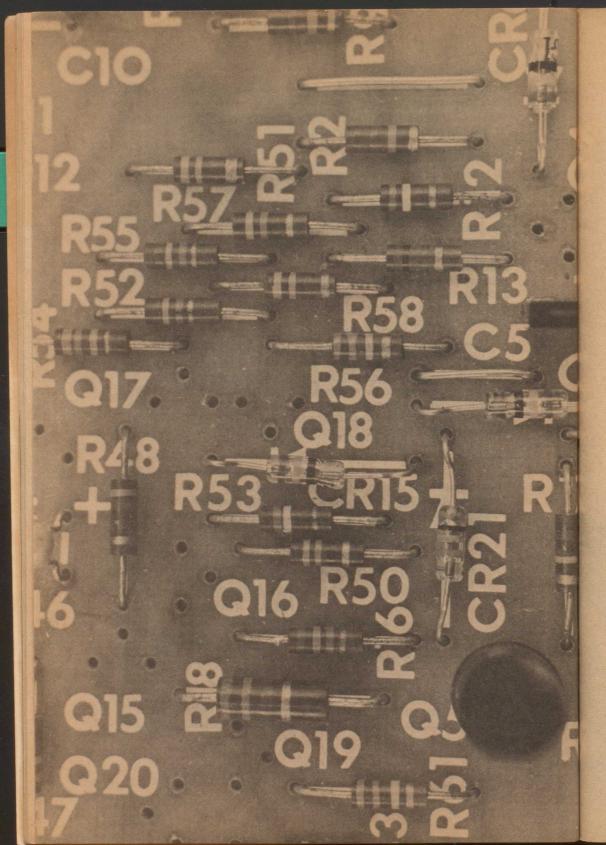
Please Note — Vancouver Community College, Vancouver Vocational Institute offers many specialized courses within several study areas at regular intervals in addition to those listed. Additional detailed information through Student Services — Phone 681-8111. Applications should be made well in advance of Career Program commencements.



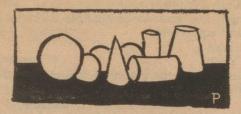
We don't consider manual work as a curse, or a bitter necessity, not even as a means of making a living. We consider it as a high human function, as a basis of human life, the most dignified thing in the life of the human being, and which ought to be free, creative. Men ought to be proud of it.



- DAVID BEN-GURION



# TECHNICAL PROGRAMS DIVISION



# **AUTOMOTIVE BODY REPAIRS**

The successful Automotive Body graduate is one who effectively combines a thorough knowledge of metals, plastics, putties, paints and fillers with an eye for line and contour to restore damaged vehicles to their original condition. In employing this knowledge and skill, one uses a variety of pneumatic, hydraulic, electrical and hand tools. Applicants for this training should be physically fit, enjoy working with their hands, should be self-starters and capable of working with a minimum of supervision.

Automotive Body Repair is a designated trade with a four-year apprenticeship leading to Journeyman status. Successful graduates of the Vancouver Vocational Institute program undertake this apprenticeship following training and are normally granted one-year credit. While they are completing the remaining three years, they will be required to attend night school courses each year to improve their knowledge and skills and keep abreast of the changing techniques of the trade.

Employment opportunities in the field for qualified graduates are good throughout the province. It is a field in which there is opportunity for promotion to shop foreman or for independent shop operation.

#### Course Content

General Shop practices Welding Fender and Body Repair Painting — Colour Matching Finishing and Assembly

# Training Procedure

The application of theory covered in lectures and extensive practical work on various late-model cars.

# **Entrance Requirements**

Age: 18 years of age minimum.

Education: Minimum Grade 10 or BTSD Level III, or G.E.D.

#### Specific

Good manual dexterity

Good hand-eye co-ordination.

Good mechanical aptitude.

Physical strength and stamina compatible with the handling of heavy parts and equipment.

Valid driver's license. Good colour vision.

Length of Course: 6 months. Hours: 8:00 a.m. to 2:45 p.m.; 3:00

p.m. to 10:00 p.m.

Course Cost: \*Tool Deposit: \$50.00 [refundable].

\*Payment for this should be made the first day of attendance.

Dress: Coveralls supplied and laundered.

# AUTOMOTIVE MECHANICAL REPAIR

Applicants for training in this field should be in good physical condition and have aptitudes suited to success in this area. The graduates of this nine-month program at the VVI normally will receive at least nine months' credit towards the four-year apprenticeship program. On completion of the apprenticeship, the graduate will become a qualified Journeyman and will be accorded inter-provincial auto mechanic transferability.

The Journeyman Auto Mechanic has a wide range of employment opportunities throughout the automotive industry. They can become specialty mechanics, service salespersons, service managers or can start their own business. Successful graduates may also enter one of the related fields, such as automotive insurance adjuster, tool equipment factory representative or parts and accessories representative.

Applicants for training who have extensive qualifying time in the trade already, may write their Tradesmen's Qualification Examinations upon completion of the training program without further requirements in the apprenticeship field.

#### Course Content

General Shop Practice Automotive Fundamentals Engines

Clutches and Transmissions

Rear axles assemblies and Front Suspension Systems Brake, Steering, Ignition, Starting, Charging and Fuel Systems.

Training Procedure

This course is divided into two modules. The first module, three months in length, is spent on the theory of operation and the construction, maintenance, repair, and adjustment of the various components that make up the typical automobile. The second module, six months in length, is spent doing practical work on selected customers' cars in our fully equipped Automobile Shop. Working conditions throughout the course are typical of automotive service procedures.

#### **Entrance Requirements**

Age: 18 years of age minimum.

Education: Consideration will be given to applicants with one of the following backgrounds:

- a) Grade 12 graduation, Mathematics II plus either shop mechanic courses or related work experience.
- b) Grade 12 graduation with at least C+ standing in Mechanics 12A and 12B or B.T.S.D. level 4.
- c) Grade 10, 11 or equivalent G.E.D. plus considerable work experience in the field.

#### General

Effectiveness in both written and oral English. Normal eyesight and hearing.

#### Specific

Good mechanical aptitude. Physically fit with good manual dexterity. Valid driver's licence



# **BUILDING CONSTRUCTION**

Building Construction is basically a pre-apprentice program leading to an apprenticeship in carpentry. It is presented on a modular instruction format. This 12 month on-going program is composed of 3 separate modules — one of 4 months and the next two — 3 months each. For entry into the first module the pre-requisites are as indicated under "Entrance Requirements".

For entry into the 2nd and 3rd modules, the following is the procedure. During the fourth month of module 1 there will be individual progress assessments to establish whether the student has the necessary background and qualifications to proceed to the second module of 3 months. During the seventh month there will be a second individual progress assessment provided.

Should any applicant wish to challenge direct entry into the second or third module an assessment procedure is:

a) An objective challenge examination.

b) An assessment interview based on the job experience-motivation and verbal/written command of the English Language.



#### Course Content:

Construction mathematics
Builder levels
Blueprint reading and specifications
Detailing
Materials, codes, safety
House Framing
Rafters
Stairs
Quantity take-off
Concrete form detailing
Concrete form building
Transit-construction layout
Scheduling

#### Training Procedure:

Theory, demonstrations and sketching in the classroom. Practical construction work performed in the shop.

#### **Entrance Requirements:**

Age; 18 years of age minimum.

Education: Grade 12 or one of the following programs:

—Academic-Technical with elective courses in construction, drafting and related subjects and "C" standing in Math 11.

Industrial or the Construction specialty with "C+" standing in Construction 11, 12A and 12B, General Mathematics 11, and Drafting 11.

The applicant must pass an aptitude test and an eligibility examination.

General: Effective written and oral English.

# Specific:

Physical fitness, strength and stamina suitable for the demands of this trade.

Good eyesight and the ability to work at heights.

Ability to produce effectively with a minimum of direct super-vision.

Ability to work under all types of conditions, as well as readiness to adapt to changing and sometimes adverse conditions.

Length of Course: Varies.

Starting Date: September

Course Costs: Textbooks \$40.00 (approximately).

Examinations: Continuous evaluation throughout program.

# DIESEL ENGINEERING

The 12-month Diesel Engineering course leads to employment as an apprentice or improver in the field of heavy duty mechanics, marine engineering or in training programs with one of the larger industrial heavy equipment companies. A developing area for a number of graduates is placement in fuel-injection firms where the mechanic learns the precise work related to fuel-injection systems.

The course emphasizes the theory, maintenance and operations of various heavy duty diesel engines and their fuel-injection systems. The course consists of three modules with approximately 50% theory and 50% practical work in each module.

The potential student should have a high degree of mechanical aptitude, together with a sound working knowledge of mathematics and electricity. In seeking employment in the heavy-duty mechanic field, the students should ensure that they have sufficient physical strength and stamina to handle the heavy work load. In many instances, workers find that they are working in teams and therefore must have the ability to maintain good working relationships with their fellow-workers and supervisors.

Students are required to maintain at least a 60% or better average in both theory and practical work throughout the course.

On graduating, where an apprenticeship is followed, one year's credit is usually granted on the four-year apprenticeship program. In the marine field, the graduate is allowed 12 months' sea-time toward his 4th Class Marine Engineers' Certificate by the Ministry of Transport, Marine Regulations Branch.

#### Course Content:

Basic Trade Skills Engine Construction Cooling and Starting Systems Electrical Systems for Truck and High Speed Marine Diesels Overhaul Procedure Components Engines Fuel Oils, Lubricating Oils and Lubricating Systems Truck Transmissions and Marine Gears Hydraulics Operation and Servicing of Injection Systems Theory of Combustion and its Application Operation of Truck, Marine and Stationary Diesels Power Generation — Electrical Overhaul Procedure Advanced Air Brakes

#### Training Procedure:

Classroom theory and demonstration coupled with extensive practical work in Diesel Shops.

Entrance Requirements: Age: 18 years of age minimum

#### Education:

- a) Grade 12 graduation with at least "C" standing in Mathematics 11 and with appropriate shop courses as electives. Physics 11 desirable.
- b) Grade 12 graduation with at least "C+" standing in Mechanics 12A and 12B, Industrial Science 12 and General Mathematics 11.
- c) Grade 12 equivalent B.T.S.D. Level 4, or G.E.D. with Mathematics 11.

#### General:

Willingness to work under all types of conditions. Physical maturity.

Ability to maintain close attention to minute detail.

#### Specific:

Good mechanical aptitude — both practical and theoretical. Physical fitness, strength and stamina to meet the demands in handling the parts and equipment associated with this trade. Good colour vision if anticipating work in operational areas. Ability to work effectively as a member of a team, and at times with a minimum of supervision.

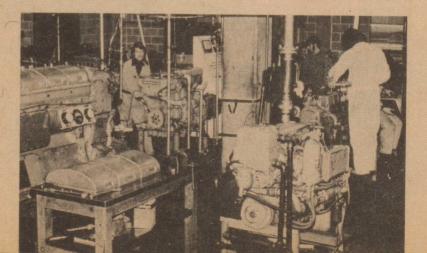
Good visual imagery and hand-eye co-ordination.

Length of Course: 12 months. Dress: Coveralls supplied.

Hours: 8:30 a.m. - 4:00 p.m., Monday to Friday.

#### **Examinations:**

Periodically. Practical work is evaluated progressively. 60% or better average required.



# DRAFTING DEPARTMENT

The draftsman/woman is a vital member of the engineering or architectural team, sharing fully in the creative process, with all its satisfactions. They link the creative world of the engineer and architect. The graduate, starting as a Junior, will follow successive stages, and after approximately five years may become a Senior. In ensuing years, they may progress through successive stages to become a group leader, designer, and on up to Chief. Many graduates will spend most of their careers at a drawing board, but others will move to administrative positions in the engineering departments of large firms or will go into technical sales.

The Drafting Department of the Vancouver Vocational Institute maintains close and cordial relations with industry, not merely to ensure that the course is kept aware of technical developments, but also to assist qualified graduates in finding employment.

#### **Entrance Requirements:**

Age: 18 years of age minimum.

#### Education:

a) Grade 12 graduation with at least a "C" lettergrade in Mathematics 11. (Physics 11 an asset)

b) Grade 12 graduation with at least "C+" standing in General Mathematics 11, Drafting 11 (Drafting 12 and Industrial Science 12 desirable), Industrial Power 11.

c) Grade 12 equivalent — B.T.S.D. Level or G.E.D. with Mathematics 11.

#### General:

Systematic and careful work habits. Ability to work well with others as a member of a technical team. Be able to communicate effectively in both written and oral English.

#### Specific:

Good eyesight and hand-eye co-ordination.
Good manual dexterity.
Good mechanical comprehension.
The ability to work under pressure to meet project deadlines.
The ability to visualize an object from a drawing.
Ability in mathematical and logical reasoning.

Length of Course: 10 months.

Course Costs: Supplies: \$30; Textbooks: \$30

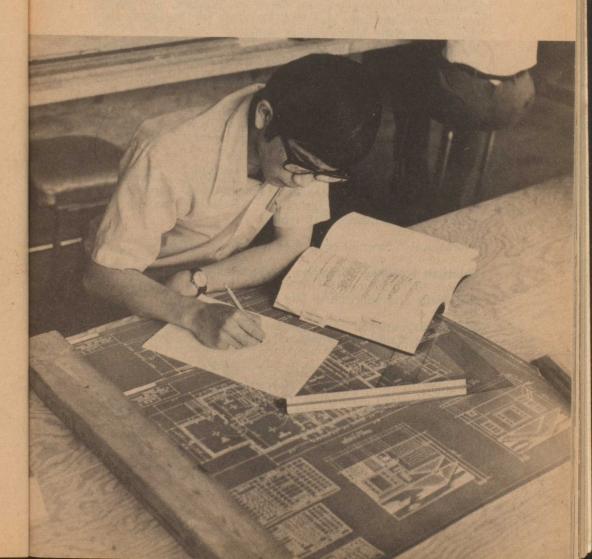
Tool Deposit: \$15 (refundable)

Payment for these should be made the first day of attendance.

Examinations: Periodically. Projects individually evaluated.

#### Training Procedure:

Classroom theory is applied to the development of working drawings, utilizing representative Architectural or Engineering design information. The objective is to develop graduates with sound technical knowledge and techniques to work in the Architectural or Engineering fields.



# DRAFTING — ARCHITECTURAL AND MECHANICAL

The Architectural Mechanical graduates will become members of an engineering team which is involved in the designing of a variety of industrial projects. Successful graduates may find employment in the drafting departments of one of the following industries: Pulp and Paper, Forest Products Manufacturing, Chemical, Petrochemical, Process Piping and Materials Handling, to name a few.

In Mechanical, as in other types of drafting, they must have an appreciation of the life-size situation in order to design the installation, and to allow sufficient room for modifications and maintenance of equipment. Given a number of specific requirements, and using their ability to think for themselves, they must produce the appropriate drawings.

Many graduates continue their professional development through courses in Design Detailing offered in various continuing education programs.

#### Course Content:

Basic: Orthographic Projection, Auxiliary Views, Sections, Dimensioning, Drafting Techniques, Inking Techniques, Pictorial Representation, Intersections and Developments, Detail and Assemble Drawings. (10 weeks)

Architectural: Light Construction Methods, Materials of Construction, Building Standards and By-Laws, Services, Architectural Symbols and Techniques, Residential Planning, Perspectives and Rendering. (10 weeks)

Mechanical: Sawmill equipment layout and detail.

Materials Handling: Transfers, Rollcases conveyors, chutes.

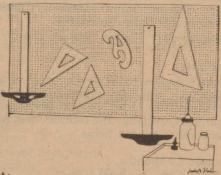
Site Plan: Introduction to Site Preparation.

Piping Layout and Arrangement: Flow diagrams, Process Equipment, Valves and Fittings and Isometric Piping Drawings. (20 weeks)



# DRAFTING — ARCHITECTURAL AND STRUCTURAL

The graduates of this program will find opportunities for employment in any of a wide variety of firms within the fields of architecture, structural or civil engineering, as well as with private, municipal, provincial or federal organizations. A keen interest in all aspects of the engineering, architectural and construction world (together with an appreciation of the practical and aesthetic needs of people) is essential to the effective designing of bridges, roads, buildings and industrial plants with which they will be involved. After completing the basic and architectural parts of the course, the student will concentrate for the final 5-1/2 months on the 'Structural' subjects listed below. Graduates are encouraged to take advantage of the many courses offered such as: Reinforced Concrete Design, Structural Steel Design, Structural Timber Design, or Practical Surveying, which are offered in the evenings by various continuing education programs.



Course Content:

Basic: Orthographic Projection, Auxiliary Views, Sections, Dimensioning, Drafting Techniques, Inking Techniques, Pictorial Representation, Intersections and Developments, Detail and Assembly Drawings. (10 weeks)

Architectural: Light Construction Methods, Materials of Construction, Building Standards and By-Laws, Services, Architectural Symbols and Techniques, Residential Planning, Perspectives and Rendering. (10 weeks)

Structural: Industrial Site Development, Railways, Roads, Floor Plans, Foundations, Slabs, Columns, Beams, Concrete Structures (Cast-in-place, Precast), Steel Structures (Trusses, Plate Girders), Timber Structures (Sawn, Glued-Laminated), Masonry Construction, Details for Highway Bridges, Quantity Estimating. (20 weeks)

# DRAFTING - STEEL DESIGN DETAILER

The steel design detailer plays a vital role in the steel building process. The graduate of this program may seek employment locally or anywhere in North America.

Along with the drafting skills, the program provides the student with a sound knowledge of design and the mathematical competence necessary to assure successful and continued employment in the steel fabricating industry.

Upon graduation a student will usually be employed in a junior capacity and become part of a "team" working to the requirements of architects, engineers, shop and field personnel.

Other areas where the successful graduates could be employed are estimating, industrial engineering, sales, etc.

#### Course Content:

Basic: Techniques of Drafting, Mathematical Tables, Steel and Mechanical Manuals and Engineering Codes.

Structural Steel: Shop Detail Drawing and Design including Beams, Columns, Bracing, Stairs, Handrail, Connections (bolted and welded), Shop and Field Procedures.

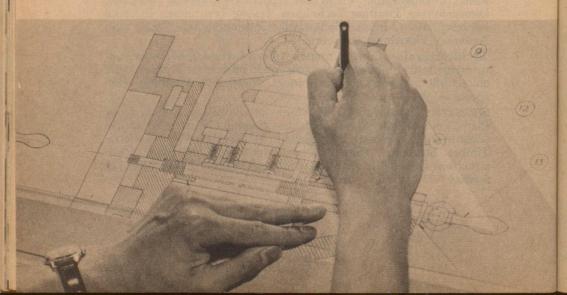
Boiler and Tank Work: Chutes, Storage Bins.

#### Training Procedure:

Classroom theory is applied to the development of design and shop fabrication-drawings, utilizing representative structural and mechanical drawings. The objective is to develop design detailers with sound technical knowledge and techniques in steel fabrication, construction and other related fields.

Length of Course: 10 months.

Shift Hours: 8:00 a.m. — 3:00 p.m. Shift Hours: 3:00 p.m. — 10:00 p.m.



# ELECTRICITY AND INDUSTRIAL ELECTRONICS

Electricians are in demand in most industries throughout British Columbia. They may be employed with a construction firm, chemical plant, airline, public utility or industrial installation company handling elevators, heavy lift equipment, or may find employment as a representative in sales with a wholesale electrical supply firm. Graduates may commence an apprenticeship program after receiving time and money credits for the time spent in the VVI training program. Journeyman status is obtained by completing a total of 8,000 hours (4 years) in the field and passing the interprovincial examination which permits the Journeyman to work anywhere in Canada without further apprenticeship requirements. The potential student for this training should have a background in Mathematics and Physics or extensive courses with accompanying good marks in Electricity, Electronics, Industrial Science and Mathematics. This course is a combination of theory in lectures, followed by extensive laboratory work where the theory is applied. The students under the direction of an instructor, learn to work effectively on projects both as an individual and as a member of a team. They should be prepared to spend a considerable number of hours each week in home study.

#### Course Content

Fundamentals of Alternating and Direct Current Circuitry Magnetism and Electro-Magnetism Motor Rewinding Analysis of AC and DC Circuits Instruments and Test Equipment Three-Phase Circuitry Solid State Devices Industrial Electronics Programming of Automatic Control Systems Industrial Wiring

# Training Procedure

Classroom lectures followed by shop demonstrations with practical work done on selected projects in fully equipped shops.

Entrance Requirements Age: 18 years of age minimum.

#### Education

- a) Grade 12 graduation, with at least "C" standing in Physics 11.
- b) Grade 12 graduation with at least "C+" or better in Electricity 11 and 12, Electronics 12, Industrial Power 11, Industrial Science 12 and Mathematics 11.

c) Grade 12 equivalent: B.T.S.D. Level 4, or G.E.D. with Mathematics 11 and Physics 11.

#### General

Able to work effectively as a member of a crew.

Specifics

Able to communicate effectively in verbal and written English. Physical strength, health and stamina to handle all equipment and materials used in this trade.

Ability to work at heights.

Good eyesight and colour vision.

Good mechanical aptitude and manual dexterity.

Good visual imagery and ability to conceptualize abstract functions.

Good analytical ability, able to transfer theoretical concepts to practical solutions.

Length of Course: 10 months.

Course Costs: Textbooks: \$25.00. Tools: \$15.00.

Payment for these should be made the first day of attendance.

Dress: Coveralls supplied and laundered.



# ELECTRICAL JOURNEYMAN UPGRADING

A series of programmed learning packages supported by audio visual presentations and shop facilities are being developed for Electrical Journeymen.

Package Courses to be offered:

Electrical Estimating
Dynamic Control
Transformer Connections
High Voltage Relaying

Fire Alarm Systems Static Control Rigging Safety Motor Winding

Illumination Metering and Measurement

and others for which there is a trade-determined need.

All Course Packages are intended to expand upon the knowledge and skill requirements of the Electrical Journeyman on the job. Students progress on a self-paced learning basis governed mainly by their experience in the trade and individual ability. The courses are offered under the direction of one or more instructors along with the capabilities and expertise of the Electrical Department as a whole.

#### **Entrance Requirements**

Journeyman in the Electrical Construction or Maintenance Field.

#### Length of Course Packages

\*1-4 weeks depending upon subject.

#### Attendance

Minimum period \*1 week.

A maximum of four months continuous attendance is possible when circumstances require the completion of a number of Electrical Journeymen Upgrading Courses.

# Starting Dates

Continuous — to suit the needs and availability of students. Contact the Admissions Office at the Vancouver Vocational Institute or your local Canada Manpower Centre.

#### Dress

Student to provide coveralls and small hand tools.

#### Examinations

Continuous evaluation of student progress.

\*Full time, 6 hour instructional day.

# ELECTRONICS — ELECTRO-MECHANICS

The Electro-Mechanic installs and maintains a wide variety of industrial business equipment. Employers may be in such fields as business machines, elevators, telephones, intercoms, burglar and fire alarms, etc. Shift work and overtime is common. Most of the jobs are in maintaining and installing electro-mechanical equipment where knowledge of electronics is a requirement. A number of employers have indicated a preference for such applicants having a complete Grade 12 or equivalent such as G.E.D. or B.T.S.D. Level 4.

The Electro-Mechanic requires an analytical mind in order to be competent in diagnosing faults by observing symptoms and making measurements with test equipment. Graduates in industry may on occasion find working conditions unglamorous. A good deal of maturity is required, as supervision may be limited and responsibility great. Furthermore, patience and perseverence in order to maintain a methodical and logical approach to work is necessary. The course covers a large amount of theory and laboratory work, requiring constant attention and effort.

Course Content

Electricity and Magnetism
Basic Electronics
Controls, Switching and Timing
Reading Schematic Diagrams
Test Equipment
Trouble-Shooting Techniques
Record-keeping, Customer Relations.

Training Requirements

Age: Minimum age 18 years.

#### Education

- a) Grade 12 graduation with effectiveness in Mathematics and Physics.
- b) Grade 12 graduation with courses in Electricity or Electronics. Effectiveness needed in the areas of Mathematics (ratios, proportions, square roots and simple algebra) and Physics (sound and light).
- c) Grade 12 equivalent: B.T.S.D. Level 4, or G.E.D.

#### General

Effective in the use of English, both written and oral. Ability to give close attention to detail for sustained periods of time.

#### Specifics

Good mechanical aptitude. Good eyesight and colour vision. Manual dexterity sufficient to handle sub-miniature components. Good hearing.

Length of Course: 5 months.

Course Costs: Textbooks and Supplies approximately \$35.00.

Examinations: Periodically.



# TV-RADIO TECHNICIAN

The Home Entertainment Equipment Technician will diagnose and repair a wide variety of Electronic equipment such as:

Radios, Stereo Systems, Tape Recorders, B/W TV, Color TV, Video Tape Equipment, etc.

Service Technicians must constantly sell themselves and their services. Frequently this is done in the customer's home, where it is necessary to create a favourable impression both by appearance and actions.

In addition to technical expertise, the technician will require a valid driver's licence, a knowledge of record-keeping and basic business

This is a designated trade and as such the pre-employment training course may be followed by an additional three-year apprenticeship.

# **Entrance Requirements**

Age: 18 years minimum.

#### Education

a) Grade 12 graduation with at least a "C" standing in Mathematics 11 and Physics 11.

b) Grade 12 graduation with at least a "C+" or better standing in Electricity and Electronics, Industrial Science 12 and General Mathematics 11.

c) Grade 12 equivalent: B.T.S.D. Level 4, or G.E.D. with Mathematics 11 and Physics 11.

#### General

Ability to organize and work without supervision. Ability to concentrate on small details for extended periods. Normal hearing, eyesight and good colour vision. Valid driver's licence (prior to graduation).

Length of Course: 12 months.

Course Costs: Textbooks: \$35.00 (approximately). Handtools: \$25.00 to \$50.00.

Examinations: Periodically.

Course Content

Operation and testing of components Analysis of all basic circuits Operation and maintenance of test equipment Stereo equipment, AM and FM radios Tape recorders B/W television Colour television Video tape systems Record-keeping and stock control Mechanical repairs Replacing components Adjustments and alignment Fault-finding techniques Parts substitution Extensive benchwork on modern chassis



# **ELECTRONICS TECHNICIAN**

The Electronics Technician installs, maintains and modifies industrial, medical, business and telecommunications equipment. Employers may be public utilities such as telephone companies, railroads, electric companies or airlines, manufacturing organizations, sales agencies, government or educational institutions. An Electronics Technician may work in highly industrialized urban centres, smaller residential areas, or scattered rural areas. The work often includes some manual labour and at times may require considerable travel, shift work and overtime.

This work is basically in the installation, maintenance and repair of complex electronic and electro-mechanical equipment. Most of the work will be performed in the field using test equipment rather than in the design office with the aid of a slide rule. The Electronics Technician requires an analytical approach in order to be effective in the immediate and accurate diagnosis of faults in complex electronic equipment.

#### Course Content

Solid State Circuit Theory
Switching and Control Systems
Test Equipment Circuitry and Applications
Telephone, Teletype and Multiplex Systems
FM and SSB Radio Communications
Digital and Pulse Techniques
Microwave Systems

# Training Procedure

Classroom theory with extensive individual laboratory work. This program produces highly knowledgeable installation and maintenance technicians, primarily for the industrial and communications field.

# **Entrance Requirements**

Age: 18 years minimum.

#### Education

- a) Grade 12 graduation with at least "C" standing in Mathematics 11 and Physics 11.
- b) Grade 12 graduation with letter grades of "C+" or better on the Electricity and Electronics courses, Industrial Science 12 and General Mathematics 11.
- c) Grade 12 equivalent: B.T.S.D. Level 4, or G.E.D. plus Mathematics 11 and Physics 11.

NOTE: Effectiveness needed in mathematics covering ratios, proportions, square roots and simple algebra and in physics in the areas of sound and light.

#### General

Good eyesight and colour vision Good hearing Proficiency in both written and verbal English. Report writing

#### Specifics

Manual dexterity and hand-eye co-ordination sufficient to handle sub-miniature components.

Ability to give close attention to detail for sustained periods of time.

Ability to accept and deal with the challenge of unexpected complex problems.

Length of Course: 12 months.

Course Costs: Textbooks and Supplies: \$50.00.

Examinations: Periodically.



# POWER ENGINEERING DEPARTMENT

The Engineering Department offers comprehensive training programs for all grades of Power Engineer's Certificates, a two-year Power and Process Engineering Program, Pre-employment Power Engineering Program, Engineering Instrumentation and in addition, courses such as Industrial Retrigeration, and Mathematics Upgrading. The Department may also offer remedial courses, as required, by special arrangement with employers, organizations or individuals.

Courses for all certificates are offered in tutorial form supplemented by regularly scheduled lectures and laboratory observation of operating equipment under test conditions. Organized courses intended for persons planning to write the Provincial Government examinations for a Certificate of Competency are available from Boiler Operator to First-Class Engineer level.

#### Power and Process Engineering

A two-year program with the purpose of introducing the student to a wide range of engineering subjects providing both theoretical and practical training. Many graduates have reached higher levels of Power Engineer certification in a shortened time while others are assisting to fill the need for Engineering Technicians. Graduates of the Program have proven to be readily employable within several major industries of the Province. A special brochure describing the Power and Process Engineering Program is available upon request.

# Pre-Employment Program: Power Engineering

A pre-employment program intended to prepare students for a career in Power Plant operation and maintenance.

The course will include, among other things, maintenance of power-house equipment, instrumentation, electricity, engineering sciences and water conditioning. While emphasis will be upon the practical application of the basic principles, sufficient theory will be covered to prepare students to write the Fourth Class Power Engineer's Examinations. Engineering Program is available upon request.

#### **Engineering Instrumentation**

Practical instruction is given in the operation, performance and fundamentals of instrumentation and process control as applied to the stationary and marine engineering fields, utilities and industrial process control plants. Electrical, electronic, hydraulic, mechanical and pneumatic instrumentation and control systems are covered during these instructional periods. Instruction is by lectures, demonstrations, laboratory sessions and trouble location testing practice.

# Employment Referral Services [For Power Engineers]

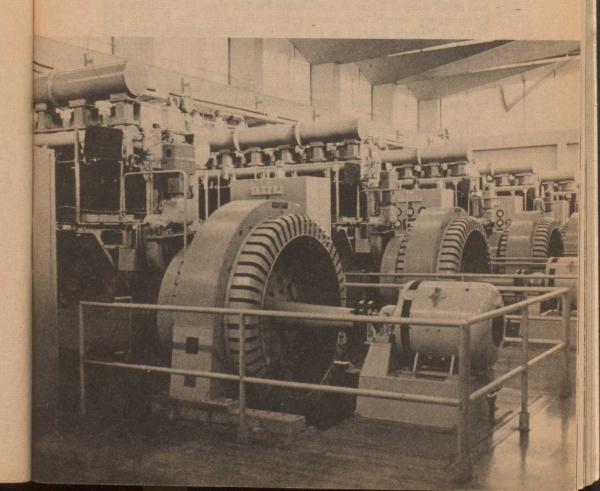
The Engineering Department has established an excellent relationship with many employers and as a result can often refer students to employment leading to higher certification following completion of training.

#### Pre-Enrolment Counselling

Due to the complexities of Provincial and Inter-Provincial legislation governing acceptable qualifying time served in industry, prospective students may wish to discuss their acceptability for certification prior to enrolment. The Engineering Department staff offer their assistance to students seeking advice regarding the prerequisites for compliance with legislation and mandatory regulations.

#### College Certificate

A College Certificate is awarded to students who have completed the program to Engineering Department standards of achievement.



# POWER ENGINEERING

Certificates of Competency

FIRST-CLASS ENGINEER

SECOND-CLASS ENGINEER

THIRD-CLASS ENGINEER

FOURTH-CLASS ENGINEER

BOILER OPERATOR CLASS A

BOILER OPERATOR CLASS B (High Pressure)

BOILER OPERATOR CLASS B (Low Pressure)

Courses are available for students having completed the qualifying service required by Part VI of the Regulations respecting Stationary Engineers. A copy of the regulations may be obtained from Boiler Inspection Department offices in various centres throughout the Province or from the Queen's Printer, Parliament Buildings, Victoria, British Columbia.

#### Course Content

Engineering knowledge, engineering science, mathematics, drafting and other subject areas as applicable for the class of Certificate of Competency sought following examinations by the Boilers and Pressure Vessels Branch of the British Columbia Department of Public Works.

#### Training Procedure

Classroom theory and demonstration, lectures, assignments and tutorials augmented by laboratory work along with field trips.

# **Entrance Requirements**

Before enrolling, applicants should have their credentials checked by the Boiler Inspection Department in their home community or at the Department's Vancouver offices located at 501 West 12th Avenue, Vancouver, B.C.

Application for enrolment may be made prior to completion of qualifying time providing there is able assurance of its completion during the training period.

# Length of Courses (approximate)

The length of time required for completion of the course to Engineering Department standards depends largely upon the ability, experience, application and attendance of the candidate. The following may be used as a general guide.

| T' CI D . A         |        |         |
|---------------------|--------|---------|
| First-Class Part A  | 10 - 2 | 0 weeks |
| Second-Class Part A | 8 - 1  | 6 weeks |
| Third-Class         | 8 - 1  | 6 weeks |
| Fourth-Class        | 6-     | 8 weeks |

| First-Class Part B  | 10 - 20 weeks |
|---------------------|---------------|
| Second-Class Part B | 8 - 16 weeks  |
| Boiler Operators    | 3 - 6 weeks   |

(depending upon class of certificate)
Attendance is possible on a full or part time basis during class hours of 8:00 a.m. - 3:15 p.m. Monday through Friday, year round. Classes are also held on Tuesdays and Thursdays from 6:00 - 9:00

o.m.

#### Credit in Lieu of Plant Service

Successful completion of Power Engineer's course provides a sixmonth credit in lieu of steam plant service with the exception of Boiler Operators where only three months' credit is allowed.

#### \*Fees

|                  | First-Class | Second-<br>Class | Third-<br>Class | Fourth-<br>Class | Blr. Op.  | Blr. Op. |
|------------------|-------------|------------------|-----------------|------------------|-----------|----------|
| Part A<br>Part B | \$ 90<br>90 | \$ 60            |                 |                  |           |          |
| Full Course      | \$180       | \$120            | \$75            | \$75             | \$30      | \$30     |
|                  |             | *Subject         | to chang        | e without        | prior not | ice      |

#### Industrial Refrigeration

A course in Industrial Refrigeration is offered under much the same conditions as those for Power Engineers. The course is primarily intended for Power Engineers employed in plants where refrigeration is a part of the process.

A school certificate is awarded for satisfactory completion of the program.

Fee: \$45. Length of course: 6 - 8 weeks.

#### Other Courses of Interest

The Community Education Services Division of Vancouver Community College offers a wide range of courses at several locations and times. Several courses of interest for Power Engineers are: Welding, Mathematics, Instrumentation, Heating and Ventilating, Refrigeration, Motor Controls and Relays. Drafting and others too numerous to list are available. Call the Vancouver Community College, Community Education Services Office (688-1111).



# POWER ENGINEERING: Pre-Employment Program

A 10 month Technical Career Program.

Power Engineering is a field of employment in which promotion is governed by the grade of the certificate. In other words, your initiative and study will determine the level at which you work.

Program Description

This program is offered to fill a need for entrants into the Power Engineering Field at the Fourth Class Level. The course has been structured to provide the graduate with the practical and theoretical knowledge required for him to fulfill, with confidence, the duties of a Fourth Class Power Engineer.

Length of Course

10 months starting in August. Completion in May.

**Entrance Requirements** 

Age: 18 years of age minimum.

a) For the recent high school graduate, several of the following courses are desirable:

General Math II

Drafting II

Electricity II Industrial Science II Industrial Power II Mechanics 11, 12A & B

with at least a C+ average

b) For the young adult not having high school but who has completed Basic Training for Skill Development Level IV with at least a C letter grade or G.E.D.

or:

c) For the mature person with considerable work experience in a related field.

#### General

Good command of communicative English, written and oral; good health, eyesight and hearing; good mechanical aptitude.

#### Course Content

- 1. Power Engineering 4th (Certificate Program)
- 2. Mathematics
- 3. Applied Science 4. Instrumentation
- 5. Workshop

- 6. Drafting & Blueprint Reading
- 7. Steamplant Training8. Boiler Operation
- 9. Electricity
- 10. Report Writing

#### Government Certification

Upon the successful completion of this program, the graduate is qualified and prepared to write the examination for a Fourth Class Power Engineer's Certificate.

# POWER AND PROCESS ENGINEERING

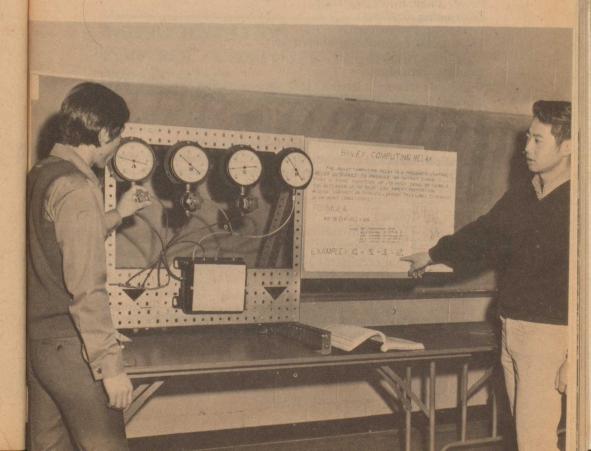
# A Two-Year Technical Career Program

A broadly based technical program which introduces the student to a wide range of engineering subjects. The program provides both theoretical and practical training, along with in-plant training leading to employment in the Power Engineering field or in other technical occupations.

Completion of the first year of the program, in addition to regular curriculum requirements, may result in obtaining Fourth-Class Engineer's Certificate. First-year students in possession of a Fourth-Class Engineer's Certificate are referred to employment for the summer months by Engineering Department staff.

Graduation from the second year and four months of applicable plant experience allows the student to write the Third-Class Engineer's Certificate examinations. A College Diploma is awarded to graduates of the full program.

The program provides the graduate with (in addition to entry to the Power Engineering field as outlined above) a wide variety of engineering subjects essential to future progression towards becoming a First-Class Engineer.



Course Content

1st Year [September - June]

Mathematics
Physics
Chemistry
Basic Electricity
Basic Electronics
Power Plant Instrumentation
Workshop Projects
Engineering Drafting
Steam Plant Training in local plants
Students may write Examination at Boiler Inspection Department for Fourth Class Engineer's Certificates in June.

2nd Year [September - June]
Engineering Mechanics
Strength of Materials
Thermal Engineering
Elementary Metallurgy
Refrigeration
Technical Communications
Fluid Mechanics
Electrical Machines
Power Plant Instrumentation
Engineering Drafting
Workshop Projects
Third Class Engineering Knowledge

#### Training Procedure

Classroom theory, lecture and demonstration augmented by laboratory work and on the job training in industry.

# **Entrance Requirements**

Age: 18 years minimum.

Education: Grade 12 with at least "C" lettergrade and Mathematics 11, Mathematics 12. Physics 11 and Chemistry 11 required. Physics 12 is desirable.

# Length of Courses

1st Year — 10 months full time attendance. 2nd Year — 10 months full time attendance. Applications for enrollment regularly accepted for class starting date in September each year.

#### General

Good command of communicative English both written and oral. Good physical health, eyesight and hearing.

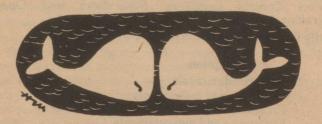
#### Specific

Good mechanical aptitude and hand-eye co-ordination. Analytical ability and capacity for ready transfer of technical knowledge to practical work situations.

Course Costs: Texts and supplies \$70.00 per year (approximately). Dress: Coveralls supplied and laundered.

#### **Examinations**

Internal to Engineering Department standards — PERIODICALLY. External examination for Fourth Class Engineer's Certificate — June following completion of First Year Program.



# INSTRUMENTATION AND PROCESS CONTROL / COMPUTER TECHNOLOGY DEPARTMENT

The Instrumentation, Process Control, and Computer Technology Department offer comprehensive training programs in Instrumentation, Process Control and Digital Logic Systems. These programs are designed for those individuals involved in installation, operation and/or maintenance of mechanical-electrical-electronic equipment used in industrial processes, plants and commercial enterprises. This includes simple control equipment to Digital computers.

Courses are offered regularly for upgrading the knowledge of experienced personnel who are being outpaced by advancing technology. Also, courses are available for introducing inexperienced personnel to these fields. Employers and organizations may request and make arrangements to obtain special courses tailored to their specific needs. All courses offered are in tutorial form, supplemented by lectures, and assignments with hands-on laboratory experience. Emphasis will be on the practical application of the designated material covered.

#### COURSES

Engineering-Instrumentation and Process Control Computer Technology

The course varies from one week to ten months depending on which course attended. (Semester Period, Upgrading, or specialized)

- Power Engineering Semester Programs. 1st and 2nd year.
   Pre-Employment Power Engineering Semester Program.
- —Special Power Engineering Upgrading courses: 4th, 3rd, 2nd, and 1st class.
- Electrical Journeymen and maintenance Electricians Upgrading.
   Instrumentation Technicians, technologists and mechanics upgrading.
- Process Control Engineers, Supervisors and Operators Upgrading.

Basically the program consists of eight levels as follows:

| Level | Description                                  |
|-------|--|
| 1     | Basic Fundamentals                           |
| 2     | Calibration of Instruments                   |
| 3     | Process Control Basics                       |
| 4     | Electronics and measurements                 |
| 5     | Process Control Systems                      |
| 6     | Control Logic and Computers                  |
| 7     | Process Control Digital Computer Systems     |
| 8     | Process Control Digital Computer Maintenance |

# Training Facilities

Facilities available for providing hands-on experience in the above courses are as follows:

- 1. A complete flow laboratory with everything from sensors to control valves.
- 2. A simulated large scale power boiler with complete instrumentation. This is a working model of one of the units in a B.C. industry.
- 3. A complete process control computer with all necessary hardware (Digital-in-out, A/D Converters, D/A Converts.

# Digital Logic Systems Course

This course is primarily for plant personnel concerned and involved in the installation, operation and maintenance of Digital Logic Systems. This covers from the simple hardwired package to the micro-processor-minicomputer. The basic emphasis of the course will be on the latest solid state techniques used today. The intent of the course is to give plant personnel practical training as well as hands-on experience in the use of special test equipment

required to install, operate and maintain digital systems. Special attention in the course is paid to maintenance philosophy, approach, and techniques.

The course is presently set up in four, two-week modules. An individual may take one to four modules concurrently depending on his own requirements.

The modules are as follows:

| Session | Description  |
|---------|--|
| I       | Introduction to Digital Theory and Computer Theory |
| II      | Introduction to Basic Computer Maintenance         |
| III     | Maintenance of Mini-Computer Central Processors    |
| IV      | Maintenance of Computer Peripherals                |

#### Training Facilities

The following equipment will be used in the above course:

- a) two large minicomputer systems complete with disc memory, A/D converters, digital contact interfaces, process control interfaces as well as communications interfaces.
- b) assorted computer peripherals teletype, video screen, etc.
- c) maintenance equipment consisting of oscilloscopes, Logic probes, pulsers, X-OR tester, DVM's.
- d) digital logic trainers.

# Entrance Requirements Age: 18 years of age minimum.

Secondary school graduation preferred for students entering any of the programs of courses without considerable practical or trade experience.

Mature student from industry with extensive practical or trade experience as qualified electrical journeymen, instrument mechanics, technicians or technologists, power and/or marine engineers or plant process or maintenance personnel are invited to apply for any/all courses offered by the department.

#### Fees

As stipulated for each particular course.

# Special Courses

Companies who wish either special training programs and/or inplant on-site courses are invited to consult the Institute staff regarding their special needs.



# MARINE SERVICES DIVISION



# Marine Engineer and Nautical Programs Prerequisites

Admission to courses leading to Certificates of Competency as deck and engineer officer issued by the Federal Ministry of Transport is possible only with M.O.T. approved qualifying service.

Deck officer candidates should obtain a copy of The Examination of Masters and Mates (EXN. 1) and engineer officer candidates a copy of the "Regulations relating to the examination of Engineers." Both publications may be obtained from:

INFORMATION CANADA 800 Granville Street Vancouver, B.C. V6Z 1K4

Public libraries throughout the country usually have copies available. Potential applicants should first present their credentials to the Ministry of Transport for approval. In B.C. they should apply to:

THE EXAMINER
MARINE REGULATIONS
Ministry of Transport
P.O. Box 10060
Pacific Centre Ltd.
700 West Georgia Street
Vancouver, B.C. V7Y 1E1
Telephone 666-3636

Deck officer candidates will undergo eyesight test at the Examiner's Office.

# MARINE ENGINEERING

Classes for all Certificates of Competency as a Marine Engineer are offered regularly by scheduled lecture courses and in tutorial form. Available for students having completed the qualifying service required and who satisfy the provisions of the regulations.

#### Course Content

Engineering knowledge, applied mechanics, thermodynamics, drafting, electrotechnology, naval architecture and other subject areas as applicable for the Certificate sought, to the level required by the Ministry of Transport regulations.

#### Training Procedures

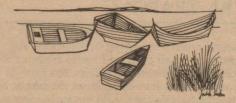
Regularly scheduled lecture courses are offered throughout each year to cover all certificate grades. Students are advised to arrange to attend the lecture courses as they have proved to be the most effective way to prepare for the M.O.T. examinations. Schedules are available on application. For those unable to attend the lecture courses, a tutorial class is operated for all grades of certificates.

#### Fees

Effective - January 1, 1976

NOTE: All Fees to be valid for a fixed number of consecutive months from date of enrolment as follows:

| months from date of emountere do fonow, |   |        |          |
|---|---|--------|----------|
| 4th Class & Fishing Vessel Engineers    | 2 | months | \$60.00  |
| 3rd Class (A)                           | 2 | months | \$60.00  |
| 3rd Class (B)                           | 2 | months | \$60.00  |
| 2nd Class (A)                           | 6 | months | \$180.00 |
| 2nd Class (B)                           | 6 | months | \$180.00 |
| 1st Class (A)                           | 6 | months | \$180.00 |
| 1st Class (B)                           | 6 | months | \$180.00 |
| Endorsements                            |   |        |          |
| 4th Class                               | 1 | month  | \$30.00  |
| 3rd Class                               | 1 | month  | \$30.00  |
| 2nd Class                               | 2 | months | \$60.00  |
| 1st Class                               | 2 | months | \$60.00  |
| Marine Fire Fighting                    |   | 5 days | \$40.00  |
|   |   |        |          |



#### **Entrance Requirements**

Application for enrolment may be made prior to completion of qualifying time, providing, there is reasonable assurance of its completion during the training period.

Length of Courses (approximate)

The length of the regular lecture courses varies from one to six months' duration depending upon the grade Certificate or endorsement. The length of the tutorial courses depends largely upon the ability, experience, application and attendance of the candidate. Attendance is possible on a full or part-time basis during class hours of — 8:30 - 4:00 p.m. Monday through Friday. Extension classes from 4:00 - 7:00 p.m. are held Monday through Thursday when applicable.

#### Credit Time

The Marine Engineering Department is recognized by the Ministry of Transport as a "Technical School" in accordance with the Regulations relating to the Examination of Engineers. Such recognition permits three months' attendance in this department to be accepted as one month of sea service (up to a maximum of three months' sea service).

#### OTHER REGULAR COURSES

#### Marine Fire Fighting Course

A five-day Marine fire fighting course is offered regularly. The course is officially approved by Ministry of Transport for the Marine Emergency Duties (M.E.D.) Certificate, Part B, Fire Fighting. This course is mandatory for certain grades of deck certificates.

#### Mathematics

An intensive two-week course to bridge the gap between the Third and Second Class Mathematics. Also of interest for Power Engineers and those planning to commence studies for higher grades of Deck Certificates.

# NAUTICAL TRAINING

Nautical Training covers sea-going occupations such as deckhand, mate, and master of small craft and home trade as well as foreign-going certification. In all cases previous sea time is required. The range covers occupations on vessels from towboats, fishing vessels, and ferries through to freighters, tankers and passenger liners.

#### Training Procedure

The material of this course is covered by lecture, demonstration and individual tutorial service in accordance with individual needs of each student.

# **Entrance Requirements**

Age: 18 years minimum.

#### Length of Course

Courses vary in length according to the different grades of certificates for which students wish to qualify.

#### Starting Dates

Nautical Level IV — August and January. Nautical Level V — September and January.

Contact the School re specific dates for above courses. Radar Simulator and Radar Observer — Offered periodically. Contact the School re opening dates (Probable waiting list).



| NAUTICAL LEVEL III                  | Proven<br>Sea Time | Course<br>Length | Fee Cost |
|-------------------------------------|--------------------|------------------|----------|
| Master Minor Waters Master 350 Tons | 36 Months          | 14 weeks         | \$95.00  |
| NAUTICAL LEVEL IV                   |                    |                  |          |
| Mate Home Trade                     | 36 Months          | 20 Weeks         | \$135.00 |
| Second Mate                         |                    |                  |          |
| Foreign Going                       | 48 Months          | 20 Weeks         | \$135.00 |
| NAUTICAL LEVEL V                    |                    |                  |          |
| First Mate                          |                    |                  |          |
| Foreign Going                       |                    | 20 Weeks         | \$135.00 |
| MASTER FOREIGN                      |                    | Tutorial         | \$150.00 |
|                                     |                    |                  |          |

#### Radar Courses

Radar Observer — courses are part of the 1st Mate H.T. and 2nd Mate F.G.

Radar Simulator — is part of all Master's courses.

# GRAPHIC ARTS

The Graphic Arts Industry in British Columbia is continually expanding and employs almost 3,000 persons in greater Vancouver along with several hundred more scattered throughout the rest of the province. Graduates of this two-year program will find job satisfaction through the many opportunities for creative self-expression available in this field. Successful graduates may add further qualifications in marketing, administration or management provided in other divisions of Vancouver Community College. Relations with employers are fostered by student field trips to local printing establishments, by presentation of guest lecturers from industry and by Student Placement Visitations.

Successful graduates of this two-year course will receive a Vancouver Community College Diploma in "Graphic Arts Technology".

#### Course Content

Copy Preparation and Proofreading Typographic English Typographic Composition Phototypesetting Job Planning and Intercommunication Lithographic Preparation Graphic Arts Camera Operation Letterpress Press Technology Offset Press Technology Bindery and Finishing Techniques Chemistry of Photo-Lithography Fine Papermaking Technology Typographic Layout and Design Proofs and Platemaking Printing Ink Technology Photographic Optics Printing Production Control Quality Control Instrumentation Mathematics of Costing and Estimating for Printing Printing Sales and Promotion

With the above course outline, the potential students must be prepared to put in the required hours of study, which includes homework involving written reports and assigned reading. This will also mean they will develop an ability to gather, assimilate and communicate a great amount of visual and verbal detail.

#### Training Procedure

A modern shop is provided for practical work and theory. Students will be given full opportunity to gain sound technical knowledge and experience required in the commercial printing industry and allied trades. This training is also suitable for those persons seeking entry into the graphic arts field as Trade Technicians, Craft Apprentices, or Junior Management and Sales Personnel.

#### **Entrance Requirements**

Age: 18 years minimum.

#### Education

- a) Grade 12 graduation with at least "C" lettergrade in English 12 and with related shop and/or art courses.
- b) Grade 12 graduation with Industrial course with "C+" or better average in Graphics 11 or 12, or Art 11 or 12, and English 12, General Mathematics 11 and Industrial Science 12.
- c) Grade 12 Equivalent B.T.S.D. Level 4.



#### General

Good command of the English language both written and oral. Good Mathematics Comprehension of fractions, percentages, decimals and ratios. Good physical health, eyesight and hearing.

#### Specific

Demonstrated mechanical aptitude
Good numerical and verbal aptitude
Good visual acuity and colour vision
Physical fitness, strength and stamina suitable for the demands of
the industry. Ability to produce effectively with a minimum of
direct supervision.

Length of Course: 2 - 10 months.

NOTE: Course revisions may result in the offering of a one year program, with the second year available on an optional basis.

Course Costs: \*Tools approximately \$75.00. (Students to purchase). Textbooks \$50.00 first year, \$20.00 second year (approximately).

Dress: Apron supplied.

Examination: Periodically.



For you know, dear, I may, without vanity, hint, Though an angel should write, Still 'tis DEVILS must print.



THOMAS MOORE
 'The Fudges in England, letter'

# **MACHINIST**

The Machine Shop course prepares the graduate for a variety of employment opportunities in the following areas: industrial plants engaged in the manufacture, repair and maintenance of all types of machinery associated with shipyards, pulpmills, sawmills, mining, etc., located throughout the province. The course is a pre-employment program and on completion the graduate enters industry to complete an apprenticeship. The course is recognized by both Industry and the Department of Labour and may become a portion of the four-year apprenticeship.

The potential student should have an educational background including secondary school shop courses in metal work, mechanics and drafting. Students should have demonstrated mechanical ability and be able to make detailed calculations using logical thought processes and be able, with a minimum of direction, to transfer theory to actual projects.

#### Course Content

Bench Work
Basic Machine Tool Operation — Lathe, Shaper, Planer, Drilling Machines.
Special Machine Tool Set-Up and Operation
(Lathes, Gear-Cutters, Milling Machines, etc.)
Grinding
Use of Precision Measuring Equipment
Basic Metallurgy
Heat Treatment
Welding

#### Training Procedure

A modern shop is provided for practical work and theory. Applicants will be given a full opportunity to gain sound technical knowledge and experience required for employment careers in machine shops and other related industries. Students progress according to their ability.

#### **Entrance Requirements**

Age: 18 years minimum.

#### Education

- a) Grade 12 graduation with at least "C" lettergrade and Mathematics 11, Physics 11 desirable.
- b) Grade 12 graduation with Industrial course with "C+" or better marks in: Mechanics 11, Mechanics 12A, Mechanics 12B, General Mathematics 11, and Industrial Science 12.
- c) Grade 12 Equivalent, B.T.S.D. Level 4 or G.E.D. with Math. 11.

#### General

Good physical health, stamina and eyesight. Patience to carry to completion exacting and detailed work. Effectiveness in written and spoken English.

#### Specifics

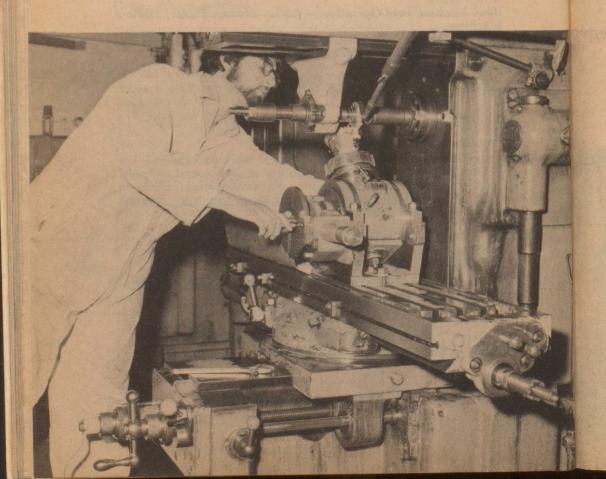
A high degree of mechanical aptitude and hand-eye co-ordination. Effectiveness in the use of mathematics and mathematical concepts. Ability to visualize mechanical problems and to make effective transfer to practical solutions.

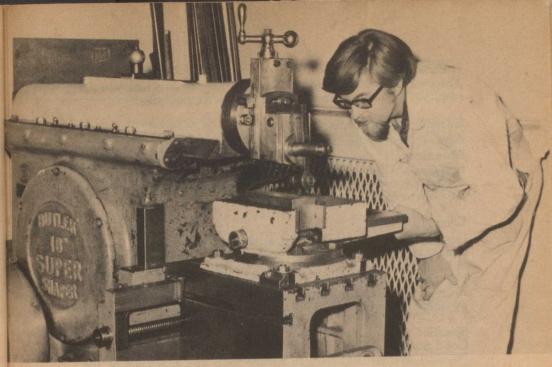
Length of Course: 10 months.

Course Costs: Textbooks: \$30.00. Goggles and Supplies: approximately \$50.00. Tool Deposit: \$10.00.

Dress: Coveralls are supplied and laundered.

**Examinations:** Continuous evaluation of classroom work and shop projects.





# MACHINE OPERATOR UPGRADING

The course is intended to expand Machine Shop skills and enables graduates to compete in the local employment market. Students progress according to their individual ability. Lectures accompany practical demonstrations to assist students in fully understanding machine operation.

Machines to be operated include: Engine lathes, Shaper, Planer, Horizontal Boring Mill, Milling Machines, Hobbing Machines, Grinders, Drilling Machines, etc.

**Entrance Requirements** 

Potential students must have experience in the Machine Shop trade and be proficient in at least one area of the trade; also sufficient education to calculate shop problems mathematically and with trade logic. Students must be able to converse in English and take written notes.

Length of Course: Maximum of 6 months.

Dress: Coveralls supplied and laundered.

Examinations: Continuous evaluation of classroom and shop progress.

Training Procedure

Theory and practical work throughout the course. There is more emphasis on theory examinations in the last four months.

#### **Entrance Requirements**

Age: 18 years minimum.

Education: No specific educational standing required. Grade 10 or equivalent B.T.S.D. Level 3 or G.E.D. desirable. A knowledge of mathematics relating to fractions, decimals, and basic geometry is also desirable.

#### General

General good health and physical stamina to be able to endure tedious repetitive tasks in order to reach levels of required competence. Some work experience desirable before entering training. High degree of interest in the welding field.

Normal vision and hearing.

Reasonably conversant in both spoken/written English.

Specific: Good hand-eye co-ordination.

Good manual dexterity.

Physical strength sufficient to handle tools and materials of the trade.

No respiratory ailments.

Length of Course: 10 months

Hours: Acetylene Welding — 3 months, 7:00 - 1:00 p.m. Arc Welding — 3 months, 7:00 a.m. - 1:00 p.m. Last 4 months 12:00 noon - 6:30 p.m.

Dress: Coveralls and work boots are required.

Course Costs: Textbooks, goggles, gloves and helmet — approximately \$50.00.

NOTE: The Department operates around the clock on a three-shift basis.



It is the Age of Machinery, in every outward and inward sense of that word.

THOMAS CARLYLE
 'Critical & Miscellaneous Essays'



# WELDING

The metal trades industry provides employment for a large number of our graduates, with the majority finding employment in metal fabricating plants, factories, general shops etc. in the lower mainland area. Industry is seeking welders who can weld, supported by a knowledge of blue-print reading and ability to do fitting. Some employers hire graduates of our program on a "permit" basis, while others are hired directly through Union Hiring Halls.

All successful graduates of the ten-month program, in addition to doing four months' preparatory work in the oxy-acetylene welding field will be eligible to take the Department of Public Works examination to obtain their D.P.W. 3 Ticket.

After completing stated periods of time on-the-job, or vocational training plus time on-the-job, a welder continues to upgrade to meet the requirements of the Boiler Inspectors of the Safety Engineering Division of the Department of Public Works to obtain his D.P.W. 2 and then D.P.W. 1 tickets.

Course Content

Acetylene Welding — three months; includes:
Plate Welding — all positions
Pipe Fabrication
Toban Bronze
Non Ferrous Metals and Sheet Metal Welding
Arc Welding — seven months; includes:
Plate Welding — all positions (all types of electrodes)
Cast Iron, Aluminum (with inert gas)
Pipe Welding — basic
Metallic Inert Gas, Tungsten Inert Gas Welding



# WELDING UPGRADE

The Welding Upgrading program is offered on a continuous intake basis for welders presently or recently employed in the welding field.

The program is specifically designed to evaluation tests, upgrading, updating and biennial testing of the Department of Public Works Number 1-5 tickets and C.S.A. W-47 Welding Code Tests.

Evaluation tests and upgrading time requirements are evaluated and determined by the Instructor.

Trade related safety practice and theory are taught as required to meet individual student or examinee needs as assessed by the Instructor.

Updating will be given in Gas Metal Arc, Flux Core Arc and Gas Tungsten Arc Welding when facilities are available.

#### Prerequisites

- a) In possession of one or more letters of reference attesting to approximately 1200 hours of welding experience and ability from a previous employer(s).
- b) Already possessing a D.P.W. Certificate.
- c) Holder of a C.W.B. Certificate.
- d) Holding a Department of Labour Certificate from other provinces.
- e) Holder of a manufacturers procedure test result ticket, such as from: Becktol, U.S. Navy, Dominion Bridge, B.C. Hydro, Combustion Engineering, etc.
- f) Confirmation and/or authorization from a manufacturer or contractor for C.W.B. test.
- g) Reasonably conversant in both spoken and written English.

# Length of Course

Continuous intake, maximum 14 weeks for upgraders.

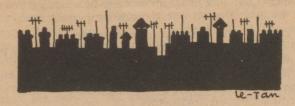
Daily Instruction Period: 5:30 p.m. to 12:00 midnight.

Dress: Work clothes, work boots, gauntlet gloves, welding jacket, welding helmet, cutting goggles.

Tools: Striker, chipping hammer, scratch brush.

Please make sure that you bring the above items on the first evening of instruction.

# SERVICE PROGRAMS DIVISION



# BARBERING

The requirements of the successful barber of today are different from those of ten or even five years ago. Current styles have created a demand for a barber who is not only proficient in the skills of hair-cutting, shaving, and massage, but who also has the perception and creativity to custom his work to meet the personal grooming needs and desires of a wide variety of clients. These skills are developed by an intensive period of instruction and practice followed by experience. The Barbering Course at the Vancouver Vocational Institute is designed to equip the student with the necessary skills and knowledge to enter into the 9 month mandatory apprenticeship. The graduate of this program who has perfected these skills and who has the social manner can anticipate good employment opportunities with the possibility of self-employment.

#### Course Content

Hair Cutting
Shaving
Scalp Treatments
Facials and Massage
Hairstyling
Anatomy
Scalp Diseases
Hygiene and Sanitation
Provincial Health Requirements
Shop Management

#### TRAINING Procedure

Practical work is performed on customers in our Barber Shop.

# Entrance Requirements

Age: 18 years minimum.

Education: No specific educational requirements.

#### General

A warm and outgoing personality. Inter-personal communicative skills. No physical problems in fingers, hands, arms or back. A sincere interest in administering personal service.

#### Specific

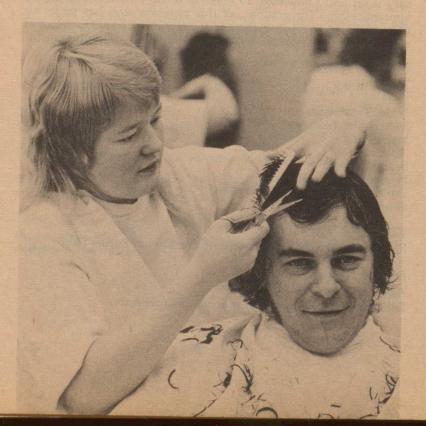
Effective eyesight and hand-eye-co-ordination.
Ability to tolerate repititious work under periods of steady pressure and at times to endure slack periods.
Able to work for extended periods in standing position.
Medical certificate required prior to admission.

Length of Course: 9 months. Apprenticeship of 9 months follows the training program.

Course Costs: Textbooks: Approximately \$15.00. Tools: Approximately \$200.00 (to be purchased prior to graduation).

Dress: Standard - Barber's Smock.

Examinations: Evaluation periodically throughout the course. B.C. Barbers' Association examination at end of the apprenticeship period. This examination leads to B.C. Barbering Licence. B.C. Barbers' Association Examination cost \$10.00 plus \$10.00 processing fee.



# BEAUTY CULTURE

The expanding scope of the modern woman's life makes her appearance even more important today than it was in previous generations. More than ever before she is dependent upon the beauty culture trade to help her maintain a high standard of personal grooming. At the same time, recent advances in hair colouring and styling have created a need for highly trained personnel — knowledgeable, creative, and flexible to meet the demands of the public. The Beauty Culture program at the Vancouver Vocational Institute is designed to equip students with the basic background in hair-dressing and related skills to enter this growing field.

The prospective Beauty Culture student must enjoy working with people; have patience, tact and the willingness to give the little extra services that will create and hold customers. Students must have a mind open to both people and style; willingness to adapt to individual differences and to accept and master the changing styles with enthusiasm. Hairdressers must be able to use their hands effectively and be willing to spend long hours of practice to gain the skills necessary for quick and creative work. For the student who has these qualities and who is willing to keep on top of new developments, the future is bright.

The Beauty Culture program is 1000 hours (7 months) long and prepares the students to enter a one-year apprenticeship where they will use their skills in a professional salon under the guidance of a qualified hairdresser. At the end of the year the apprentice will return to the school for a one-month review and the government licensing examination.

All Students entering the hairdressing occupation must be aware that they cannot obtain a fully qualified licence from the Hairdressers' Association of British Columbia until:

- a) they have satisfactorily completed an apprenticeship;
- b) they are eighteen (18) years of age;
- c) they have passed the Hairdressing Examination administered by the Hairdressers' Association of British Columbia;
- d) they become a member of the Hairdressers' Association.

An apprentice is not eligible to write the Hairdressers' examination earlier than sixty (60) days before completion of the apprenticeship.

#### Course Content

Shampoo and Rinses Permanent Waving Finger Waving Tinting and Bleaching Hair Cutting Blow Waving and Iron Curling Styling Scalp and Hair Treatments Facials, Packs, Eyebrow Arching Manicuring Training Procedure

Classroom theory combined with practical work on mannikins and customers. Some home study required.

Apprenticeship

1 year following training with final qualifying examination at end of apprenticeship period.

**Entrance Requirements** 

Age: Must be 18 years before receiving fully qualified certificate. Education: Grade 10. Applicants 16 or 17 years of age or with less than a Grade 10 education assessed on an individual basis.

#### General

Good health and the ability to stand for long hours. Sufficient English for good communication and study. Artistic aptitude with the ability to visualize and use hands with speed and efficiency. Outgoing personality, enthusiasm, and good grooming. Recent Chest X-Ray and Medical Statement certifying freedom from infectious diseases required on entry.

Length of Course: 100 hours (7 months).

#### Course Costs

Tool deposit: \$10.00 (refundable). Association Fee: \$2.00. Supplies: \$40.00. Textbook; approximately \$10.00. Payment for these should be made the first day of attendance.

Dress: Options — White top combined with black or navy pants or skirt. Full white uniform. Closed comfortable shoes (white nursing type of oxfords preferred).

**Examinations:** B.C. Hairdressers' Examination on completion of apprenticeship.



# DENTAL TECHNICIAN - MECHANIC

Dental Technology is a combination of science and craftsmanship. Scientific in that it involves the use of metals, plastic, porcelains and many other materials. Craftsmanship, in that it requires an artistic hand and creative ability.

The 22 week pre-apprentice course prepares the student for employment in a commercial dental laboratory — dealing with the dental profession; or employment with a dental mechanic — dealing with the public. In the dental laboratory the apprentice may be placed in one of several departments, including dentures, crown and bridge, cast partials, ceramics or orthodontics. The dental mechanic field is restricted to complete dentures only.

Students are taught both theory and practical work in dentures, crown and bridge and cast partials.

On completion of the pre-apprentice course and after finding employment, regulations of the Dental Technician's Act requires the student to attend one month of classes each year for the remaining three years of apprenticeship.

#### Course Content

Dentures — Pouring models, bite rims, trays, repairs, waxing up, processing trimming and polishing.

Crown & Bridge

Pouring models, transfer copings, die making, acrylic jackets, waxing, casting and finishing gold crowns and bridges.

#### Cast Partials

Surveying, designing, blocking out, duplicating, construction of refractory models, investing, casting in chrome — cobalt alloy, trimming and polishing.

Training Procedure

Theory and demonstration carried out on practical models. Dentists, dental technicians and dental mechanics as guest lectures. Facilities include a well equipped dental laboratory-classroom which approximates working conditions within a learning environment.

#### Health

Good health and stability. Students with skin conditions or asthma may have a problem. Good eyesight essential.

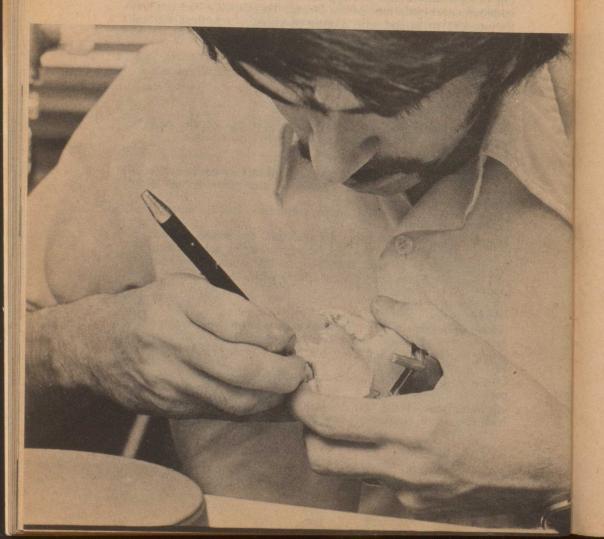
Specific

Excellent hand and eye co-ordination. Neatness in work habits and personal hygiene essential. Artistic talent with ability to work under the pressure of speed and accuracy. Able to communicate with the dental profession and the public.

Length of Course: 22 weeks, 5 days per week — 8:00 a.m. - 3:00 p.m. For admission requirements and starting dates, contact the Apprenticeship Branch of the Department of Labour, 4211 Kingsway, Burnaby, B.C. V5G 3Y6, Canada Manpower Offices or the counselling offices at the Vancouver Vocational Institute.

Course Costs: Textbooks: \$40.00. Tool Deposit: \$10.00. Sponsored by the Apprenticeship Branch and Canada Manpower.

Entrance Requirements: 18 years of age minimum. Education — Grade 12 or equivalent.





# FACIALS AND MANICURING

Increasing numbers of beauty salons are recognizing the need for persons trained in the art of giving manicures and facials to supplement the service the hairdressing staff is able to offer to customers. Since they will be working in the same environment and serving the same clients, the qualities which will produce a good hairdresser will also be required for a student training to work in facials and manicuring.

#### Course Costs:

Textbooks and Supplies: \$25.00 approximately.

Association Fee: \$2.00.

B.C. Hairdressers' Association Examination Fee: \$15.00. Payment for these should be made the first day of attendance.

#### Training Procedure

Classroom theory plus practical work on customers in our Beauty Salon.

# **Entrance Requirements**

Age: Must be 18 tears of age by graduation.

Education: Grade 10 preferred.

#### General

Good general health (X-ray and medical clearance for infectious diseases required on entry).

Ability to communicate freely with customers.

Good appearance, grooming and personal hygiene.

Length of Course: 500 hours (3 months approximately).

Dress: Same as hairdressing.

**Examinations:** B.C. Hairdressers' Association Examination on completion of course.



# FOOD TRADES DEPARTMENT

Food is a vital part of Canadian culture. As that culture becomes more sophisticated, so does its demands for a total hospitality service. Present-day emphasis on leisure-time activities and participation in new experiences have resulted in food service to the public becoming the second largest industry in North America.

One has only to compare the wealth of food outlets in Vancouver today with the limited number ten years ago to realize the demand for well trained personnel that has been created. Individual establishments are no longer capable of conducting adequate onthe-job training and are turning to the educational system to produce personnel with the wide range of skills to meet current standards.

The Canadian Hospitality Industry is working constantly to improve the level of food service in Canada. In the near future, all indications point to employment within the food industry being controlled by a system of apprenticeship certification. It will then be mandatory for the person who wishes a career in foods to successfully complete a training program at a recognized school. In response to this growing demand, the Vancouver Vocational Institute has developed individual programs within the Food Trades Department to meet the needs for entry into the varied positions within the industry.

# BAKING — INDUSTRIAL

Commercial baking, an integral part of the entire food and hospitality industry, is growing and expanding at a rate comparable to the other areas. Today's graduates do not need to limit themselves to a neighbourhood bake shop although some can and do open their own small businesses with considerable success. Others, however, will find excellent employment opportunities as apprentices in industrial bakeries or in the larger hotels and restaurants. The fully qualified baker, trained in all aspects of the trade from basic breads to elaborate confections, is in demand wherever good food is served.

#### Course Content

Basic yeast doughs, breads, rolls and buns. Quick breads, muffins and doughnuts. Basic short pastes, puff pastries, pies, tarts, and cookies. Cake baking, icing, decorating, French pastries and Petit Fours.

#### Training Procedure

Theory of baking, demonstrations, practical experience and skill development carried out in an operational bakeshop.

Entrance Requirements: 18 years of age minimum.

Education: Grade 10 or higher preferred.

Health: A recent health certificate and Chest X-ray report required on admission. Physical condition and stamina to meet the demands of the Food Service Industry.

#### General

Previous experience in the Food Industry would be an asset. Oral and written English sufficient for effective communication. Artistic ability desirable.

#### Specific

Good hand-eve co-ordination.

A standard of personal hygiene, grooming and appearance compatible with employment in a public food service situation.

Length of Course: 10 months Hours: 7:30 a.m. - 2:30 p.m. Starting Date: As space permits.

Course Costs: Textbooks \$10.00. Tool Kit \$25.00. Payment for these should be made on the first day of attendance.

Dress: Uniform supplied — \$10.00. Deposit required (refundable). Comfortable closed leather shoes required. Sandals and runners are not acceptable.

Examination: Continuous evaluation throughout the program.

# BAKING — UPGRADING AND OPTIONS

#### Course Content Modules:

- 1. identify ingredients. Know functions and use of ingredients. Classify bakery products.
- 2. prepare proof and bake. Bread and rolls. French, fruit, whole wheat, white and rye bread; soft and crusty rolls.
- 3. prepare and bake quick breads, shortcakes, muffins, baking powder biscuits.
- 4. prepare and bake: pastries short, sweet, choux, puff; cakes, icings, decorations; basic cookies.

#### Training Procedure

Theory of baking, demonstrations, and practical experience carried out in an operational bakeshop.

## Entrance Requirements: Related experience.

Health: A recent health certificate and Chest X-ray report required on admission. Physical condition and stamina to meet the demands of the Food Industry.

#### General

Oral and written English sufficient for effective communication. Artistic ability desirable.

#### Specific

Good hand-eye co-ordination. A high standard of personal hygiene, grooming and appearance compatible with employment in the food industry.

Length of Courses: Minimum 4 weeks to 15 weeks.

Hours: 2:30 p.m. to 9:30 p.m. Starting Dates: As space permits.

# Course Requirements

Textbooks: Baker's Manual, approximately \$9.00. Baker's Tool Kit: approximately \$25.00. Payment for these should be made the first day of attendance.

#### Dress

Uniform — supplied (\$10.00 deposit, refundable). Comfortable closed leather shoes required — sandals, runners and clogs are not acceptable.

Examinations: Continuous evaluation throughout program.

# COOK TRAINING - PRE EMPLOYMENT

The Cook Training Program at the Vancouver Vocational Institute provides students with a broad basic background in the fundamentals of classical food preparation. In this context, the word "classical" means total preparation from basic ingredients to completion of the finished product. It is not anticipated that all graduates will have the personal qualities to enable them to become masters in the field but they will find excellent employment opportunities at all levels. Those with a high degree of aptitude and ambition, while they will not graduate as Chefs, can combine this training with the extensive practical experience necessary to earn that title.

Applicants for this course should have the stability to cope with rapidly changing pressure situations, and the flexibility to accept hours of work based on public demand for service. They should consider this training as only a beginning of their education and be prepared to monitor the advances in the industry by means of apprenticeship courses, reading and participation in trade organizations.

#### Course Content

The program is divided into 6 main blocks, each having a duration of two months.

MODULE I Laboratory - The theory of catering.

MODULE II - Pantry Work, Appetizers, Salads and Buffet.

MODULE III — Vegetable preparation and cookery, deep fry cooking, Pasta, Desserts, Baking.

MODULE IV — Stocks, Soups, Sauces, Roasting, Grilling, Entrees.

MODULE V - Larder: Fish, Poultry and Meat Cutting.

MODULE VI - Advanced Cookery (A la carte)

# Training Procedure

Lessons, demonstrations and practical experience in an operational Cafeteria, Dining Room facilities. The program covers all basic fundamentals of cookery and is designed to prepare potential future cooks to enter into the Hospitality Industry.

# **Entrance Requirements**

Applicants will be assessed individually as to suitability for employment in this field.

Education: Grade 10 or higher preferred.

**Health:** A recent health certificate and Chest X-ray report required on admission. Physical condition and stamina to meet the demands of the Food Service Industry.

#### General

Previous experience in the Food Industry would be an asset. Oral and written English sufficient for effective communication. Artistic ability desirable.

#### Specific

Good hand-eye co-ordination. A standard of personal hygiene, grooming and appearance compatible with employment in a public food service situation.

Length of Course: 12 months.

Hours: Vary according to schedule.

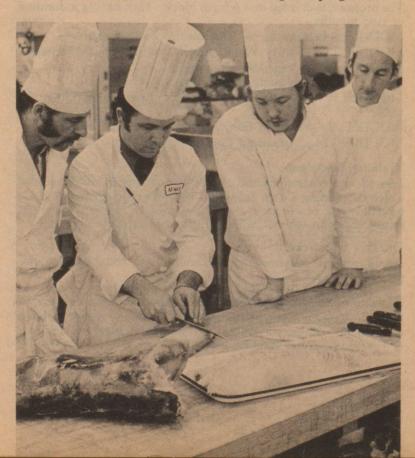
Starting Dates: January, March, May, July, September, November, or as space permits.

#### Course Costs

Textbooks: \$30.00 approximately. Tools: \$65.00 approximately. Uniform: supplied (\$10 deposit — refundable). Payment for these should be made the first day of attendance.

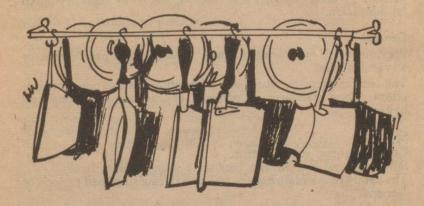
Dress: Comfortable closed leather shoes required — sandals, runners and clogs are not permitted.

Examinations: Continuous evaluation throughout program.



# COOKING - SHORT ORDER

The complexity of the food industry needs a great variety of personnel if it is to meet the demands of the public. While large hotels and exclusive restaurants require fully qualified chefs they also have a need for well trained cooks to work under the supervision of the chef. A large number of restaurants, resorts, camps, and marine vessels are utilizing convenience foods such as pre-cut meats and prepared package vegetables in their operations. Where this is the practice, the short order cook, trained specifically in the preparation of these foods, will find excellent employment opportunities. For these positions potential chefs and graduates can anticipate good prospects for advancement as they gain practical experience and continued education.



#### Course Content

Pantry Work, Appetizers, Salads, Vegetable Cookery, Fry Cooking, Simple Desserts, Soups, Roasting and Grilling, and Entrees. (The use of pre-packaged and convenience foods is stressed in all areas of Restaurant Cooking.)

# Training Procedure

Lessons, demonstrations and practical experience in an operational Cafeteria, Dining Room and Banquet facilities. The program covers all basic fundamentals of cooking and is designed to prepare the short order cook to enter the Hospitality Industry.



#### **Entrance Requirements**

Age: 18 years of age minimum.

Education: Grade 10 or higher. Mature students may have satisfactory work experience considered in meeting this requirement.

Health: Students should be able to work and stand for extended periods. Medical clearance and recent Chest X-ray report required on admission.

#### General

Previous work experience in some phase of food preparation or

The temperament to work well with others under pressure situations. Good standards of personal appearance, grooming and hygiene.

# Specific

Good hand-eye co-ordination. Sufficient oral and written English to communicate freely. The ability to maintain high production during sustained periods of demand.

Length of Course: 4 months. Hours: 2:30 p.m. - 9:30 p.m.

#### Course Costs

Textbooks: approximately \$30.00. Tools: approximately \$65.00. Uniform Deposit: \$10.00 (refundable)

Payment for these should be made the first day of attendance.

Dress: Uniforms supplied and laundered. Uniform deposit required: \$10.00 (refundable). Comfortable closed leather shoes required. Sandals or runners are not acceptable.

Examinations: Continuous evaluations throughout program.

# WAITER/WAITRESS TRAINING

Waiters and Waitresses are the ambassadors of the food industry. for it is they who present the product to the public. Sophistication in both preparation and service of food are necessary to maintain the standards of the industry. Individual restaurants and hotels can no longer cope with the task of training personnel, and they are turning to the graduates or recognized schools to meet their needs. Tob opportunities in this area are many, and dining rooms, hotels, restaurants, and coffee shops are all potential employers. The well trained waiter or waitress who is proficient in the trade and enjoys the work can anticipate a steady demand for his or her services, with remuneration and advancement determined by his or her skill and manner.

#### Course Content:

#### MODULE 1. Laboratory Instruction

—Develop personal skills

-Apply safety and accident prevention procedures

-Maintain personal hygiene and apply sanitary food service

-Identification and use of food & beverage equipment

# MODULE 2. Practical and Theory Instruction

-Effective menu use and selling techniques —Customer contact and relation procedures

-Coffee Shop and Dining Room service procedures (Food & Beverage)

# MODULE 3. Advanced Dinner Service

-Russian, French, Silver

-Wine and alcohol beverage service

-Guest check procedures, operation of cash register

# Training Procedures

Classroom lectures and demonstrations with practical experience in an operational dining room.

# **Entrance Requirements**

Age: Applicants will be assessed individually.

Education: Grade 10 preferred.

Health: Medical clearance and recent chest X-Ray report required on admission.

General: Good appearance, grooming and personal hygiene. Ability to communicate effectively with customers and fellow workers.

Specific: Outgoing personality. Ability to work well with others during periods of sustained pressure. Good physical co-ordination to move and work effectively in all types of service areas.

Length of Course: 3 months. Hours: a.m. and p.m. classes.

Starting time to vary in accordance with the needs.

#### Course Costs

Textbooks: Approximately \$8.00

Uniform: Supplied (\$10 deposit - refundable)

Payment of these should be made the first day of attendance.

Dress: Uniform (supplied)

Comfortable closed leather shoes required — Sandals, runners and

clogs are not acceptable.

Male students are required before acceptance, to have a white shirt, black tie, black or dark pants, black shoes.

Grooming - hair off the collar or contained.

Female students are required to have hair off the collar or contained and nurse-type, non-slip shoes.

Examinations: Continuous evaluation throughout program.





# POWER SEWING

The course in power sewing is designed to equip successful graduates with specific skills to gain employment in the needle trades. Vancouver has a growing garment industry, and there is a steady demand for fast reliable personnel to work in a factory-line production capacity.

During the school program approximately 80% of the time is spent on power sewing machines of various types with emphasis on single-needle and serging machines. The course is operated like a small factory with students being taught production-line techniques on work orders from outside sufficient to give a continuous-run operation.

#### Course Content:

Operation of standard power machines used in Needle Trades Industry. It involves the following: Stitching, Finishing and Production Line Techniques.

# Training Procedure:

Instruction and demonstration leading explicitly to practical production work. Course 80% practical work on a variety of machines.

**Entrance Requirements** 

Age: 18 years of age minimum.

Education: No specific educational requirements.

General:

Command of English sufficient to readily understand verbal instructions.

No physical problems in hands, arms, shoulders, or back.

Ability to tolerate highly repetitious work.

Specific:

A high level of physical strength and endurance. Capacity to work in a seated position for long periods.

Good eyesight and hand-eye co-ordination.

Good manual and finger dexterity.

Ability to work quickly and efficiently as wages are often dependent on production.

Length of Course: 4 months. 8:00 a.m. — 3:00 p.m.

Starting Dates:

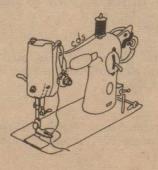
Interested applicants should apply through their local Canada Manpower Office.

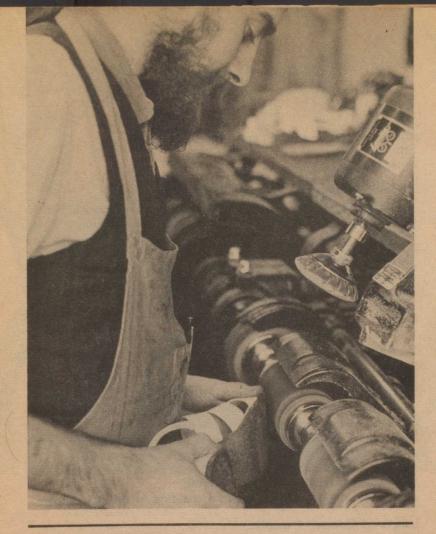
Power Sewing [Production] 3:00 p.m. — 10:00 p.m.

This is a "Speed Intensive Course". Training is concentrated on the Single Needle Machine. The objective of this course is to obtain enough speed to work in a Garment Factory. Applicants must meet the general criteria and be able to speak enough English to understand instruction.

**Examinations:** No formal examinations. Work evaluated step by step.

Length of Course: 8 weeks.





# SHOE REPAIR

This trade has been vital to man down through untold generations. Footwear has been essential to people through the ages for protection, health, comfort and appearance.

Today's repair trade uses a variety of modern power and hand tools to cut, sew, fasten, form and shape all types of leather, rubber and plastic footwear. Students will replace and repair heels, soles, straps, buckles and fasteners on shoes, belts and leather goods.

Care and attention to the personal preferences, needs and comforts of all ages and types of people are essential to success in this trade. Some graduates of this course go into manufacturing, others into operating shoe repair shops as employees or as shop owners.

#### Course Content:

Resoling
Heeling
Nailing
Patching
Use of Basic Hand Tools and Power Machines
Stitchers
Finishers

#### Training Procedure:

Theory and demonstration coupled with extensive practical bench work, repairing shoes provided by the public, all done in our Shoe Repairing Shop.

#### **Entrance Requirements:**

Age: 18 years or older.

Education: No specific educational requirements.

#### General:

Command of English required for effective communication. Personality to meet and deal warmly and effectively with the general public.

#### Specific:

Good hand-eye co-ordination.

Physical strength in the fingers, hands, arms and wrists.

Mechanical aptitude for effectiveness in the use of all types of power and hand tools.

Ability to maintain high production on repetitious and exacting work using a wide variety of materials.

Ability to work for long hours in a standing or sitting positions.

Length of Course: 9 months.

Dress: Standard - Apron of Trade.

Tools: Supplied.

Examinations: Step by step. Practical evaluation of all operations.



Old shoes are best. King James used to call for his old shoes; they were easiest for his feet.



- JOHN SELDON, 'Table Talk', 1892



# **HOMEMAKER**

There is a growing need in the community for the services of understanding, responsible people to go into homes that are troubled and assist the family until the crisis is resolved. They may do this on either a daily or live-in basis. Many homemakers are employed by social agencies, but they can undertake this work on a private basis.

Homemaker services are being used in many new ways and it is possible to work in homes primarily with the elderly, with children or with chronically ill persons.

#### Course Content:

Human Behaviour in Normal and Stress Situations
The Homemaker's Relationship in the Family
Nutrition and Budgeting
Home Management
Home Nursing and Personal Care
Health Supervision of the Family
Care of Infants and Children
Care of Disabled Patients
Care of the Elderly
Community Orientation

#### Training Procedures:

Theory, demonstration and practice in the classroom supplemented by practical experience and by visits to community agencies. Some practical experience in a variety of home situations during training.

#### **Entrance Requirements:**

Age: 25 years of age minimum.

Education: Grade 10 or a satisfactory equivalent in terms of education and experience.

#### General

Understanding, the ability to communicate.

Ability to accept a flexible schedule of working hours.

A general health level compatible with housework and care of children.

Maturity, responsibility and dependability and discretion. Ability to work with other members of Health Team.

Length of Course: 12 weeks.

Starting Dates: Contact Canada Manpower.

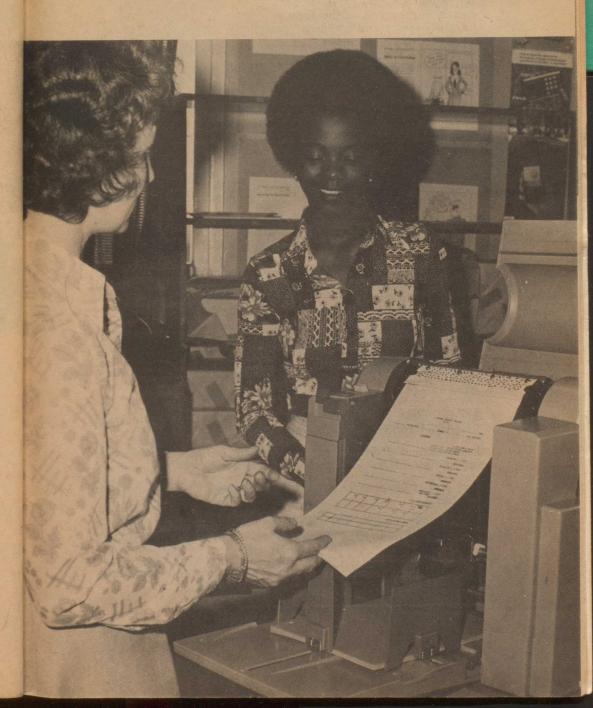
Course Cost: Textbook: \$5.00.

Payment for this item should be made the first day of attendance.

Examinations: Progress evaluated on a day-to-day basis.



# BUSINESS & HEALTH PROGRAMS DIVISION



# **BUSINESS CAREERS PROGRAM**

The Business Careers Program offers the student a variety of OPTIONS which include:

CLERK TYPIST MEDICAL OFFICE ASSISTANT
SECRETARIAL LEGAL STENOGRAPHER
BOOKKEEPING KEYPUNCH OPERATOR
ACCOUNTING UPGRADING

Program OPTIONS are designed to allow for maximum flexibility and freedom of choice on the part of the student.

Each OPTION consists of a combination of the following MODULES:

Typing 1 — Basic Shorthand 1 — Basic Typing 2 — Intermediate Shorthand 2 — Intermediate Typing 3 — Advanced Shorthand 3 — Advanced Business Communication 1 Machine Transcription 1 Business Communication 2 Machine Transcription 2 Filing Receptionist Duties Duplicating Commercial Law Mail Services Mathematics of Finance Adding Machines & Calculators Keypunch Machines Business Arithmetic/ Legal Terminology Mathematics Clinical Procedures Recordkeeping Medical Terminology Bookkeeping to Trial Balance Anatomy and Physiology Bookkeeping to Financial Medical Transcription Statement Preparation First Aid Payroll & Payroll Costing Medical Ethics Accounting Fundamentals Medical Essentials

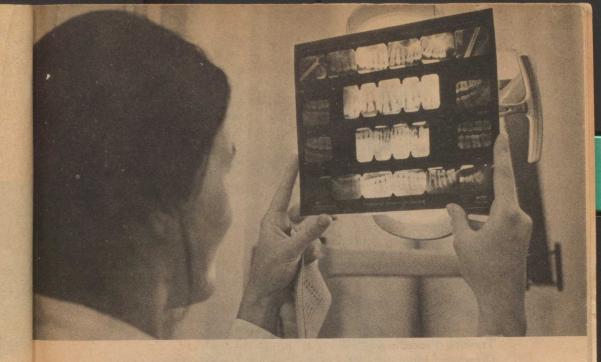
On enrolment, a suitable period of time is allowed for evaluation of individual aptitudes and interests.

Counseling is available to assist students in selecting the most appropriate MODULES to meet their career goals.

Any previous experience is assessed and suitable credit given where justified.

Those students with previous training and/or work experience can select MODULES most suited to an individual UPGRADING OPTION.

Certification in any OPTION requires all students to complete the designated "core" MODULES for that OPTION.



# DENTAL ASSISTANT

Dental Assisting is an expanding field which is rapidly becoming more technical and demanding as the entire dental profession is being re-evaluated. All indications are that the Dental Assistant must be capable of qualifying for licensing and post-graduate study.

Until recently the Dental Assistants worked primarily as an "extra pair of hands" for the dentist at the chairside. Some, however, have had the added responsibility of office management. Recent legislation has expanded the range of duties to include intra-oral procedures which are carried out independently. For this reason they must have the poise, maturity, and stability to manage patients with ease; the ability to work with others; as well as the initiative to perform individually. They must be able to tolerate the sight of blood, be willing to have hands inside mouths which may be infected or neglected; have the manual dexterity to work effectively in the confined area of the mouth. For the applicants who have these qualities, this is a very interesting and rewarding career with excellent employment opportunities and prospects for advancement.

#### Course Content

Basic

Chairside Assisting Manipulative Skills Equipment and Dental Materials Dental Practice Management Dental Specialty Branches Anatomy and Physiology (general and dental) Pathology (general and dental) Patient Counselling Radiography - Exposure Rubber Dam Application Bacteriology Dental Laboratory Procedures Radiology — Processing

#### Advanced

Coronal Cup Polishing and Fluoridation Impression Taking

#### Training Procedure

Classroom laboratory and clinical demonstrations. Clinical field work in private dental offices, hospitals and public health units. Following this course, each student must successfully complete an examination for the B.C. College of Dental Surgeons.

#### **Entrance Requirements**

Age: Minimum 18 years.

#### Education:

- a) Grade 12 graduation. At least a "C" average in Chemistry 11 and/or Biology 11.
- b) G.E.D. with at least a "C" in Chemistry 11 and/or Biology 11. Typing: 35 w.p.m. net.

#### Health

Normal close and distant vision - glasses allowed. Selected applicants advised to have vision checked prior to entry as any defect can impede progress. Health certificate required prior to entry.

#### General

Ability to communicate effectively with people. Good grooming, personal hygiene and appearance. Pleasant, out-going personality. Must be able to work under close direction. Ability to work both as a team member and independently. Previous experience in working with the public is desirable.

#### Specific

Manual dexterity essential.

Selected applicants may be tested prior to entry.

Poise and maturity for effective management of patients.

High degree of responsibility.

Interested applicants are required to spend at least one day of observation in a dental office and a dental assisting program, to gain a true picture of the work of an assistant.



Length of Course: 10 months.

#### Course Costs

Textbooks and supplies: approximately \$50.00

First Aid Course: \$10.00.

Uniforms: Uniform and duty shoes of specified style to be purchased by each student.

#### Examinations

Weekly evaluation given on both theory and practical assignments. Monthly examinations.

# PRACTICAL NURSING

The work of the Practical Nurse of today is personal patient care in a hospital setting. The Practical Nurse is responsible, under the supervision of a registered nurse, for a large part of bedside nursing (with the exception of very technical procedures). For the man or woman who wishes to work with and help others; the personal strength and stability to serve people in stress situations; the ability to work as a team member; to accept direction and to adapt to changing shifts, this is a very rewarding career.



#### Course Content

Interpersonal Relations
Anatomy & Physiology
Basic Pharmacology
First Aid
Extended Care Nursing
Individual and Community Health and Preventive Medicine
Obstetrical Nursing
Medical Surgical Nursing
Pediatrics
Nursing Skills
Psychiatric Aspects of Nursing in General Hospitals
Psychology for Practical Nurses

#### **Entrance Requirements**

Age: 18 years of age minimum.

Education: Grade 12 or equivalent.

Courses in Biology, a definite asset.

Mature students will be assessed on an individual basis.

#### General

A satisfactory medical clearance and current immunizations will be required for acceptance into this program.

Ability to accept responsibility essential.

Good study and work habits to handle intensive theory and practice.

#### Specific

Stamina to cope with the less aesthetic aspects of patient care.

Experience in working with the public and/or previous hospital exposure in some capacity desirable.

Ability to get along with others and readiness to work effectively under supervision in a disciplined setting.

Sufficient finances to complete the program as the intensity and hours of the course will not allow part-time employment. There is no provision for room and board and the students must arrange and finance their own living accommodation and transportation. Each student will receive a bursary of \$150.00 per month for the duration of the 10 month program.

Ability to adapt to new situations as the student may be sent to any hospital in the Greater Vancouver Area and will receive training in several hospitals before graduation. Students must be prepared to accept shifts during training.

# Length of Course: 10 months.

3 months of intensive theory with practice concentrated in the laboratory setting and some integrated clinical experience followed by 7 months of integrated theory and clinical experience in various hospitals under the direction of instructors. The student then returns to the school for 1 week of review, licensing examinations and nursing graduation.

#### **Enrolment Procedure**

Selected students will be required to have a medical examination, chest X-Ray and complete series of immunizations.

Students from outside the lower mainland should apply at the Regional School or College nearest their place of residence. The course is offered in Victoria, Nanaimo, Kelowna, Nelson and Prince George. Good grade hospital shoes will be necessary before entering hospital training. During the hospital training period additional expenses will be incurred for incidental items, transportation costs to the various hospitals etc. — the student should allow for these and board and room.

Dress: Uniforms to be purchased at a later date.

#### Examinations

Frequent examinations throughout the course. Final school and licensing examinations held at end of 10-month training period.

Note: A few weeks prior to graduation, a fee is required for the purchase of cap and nursing pin.



Don't ever dare to take your college as a matter of course — because, like Democracy and Freedom, many people you'll never know anything about have broken their hearts to get it for you.



- ALICE BUER MILLER