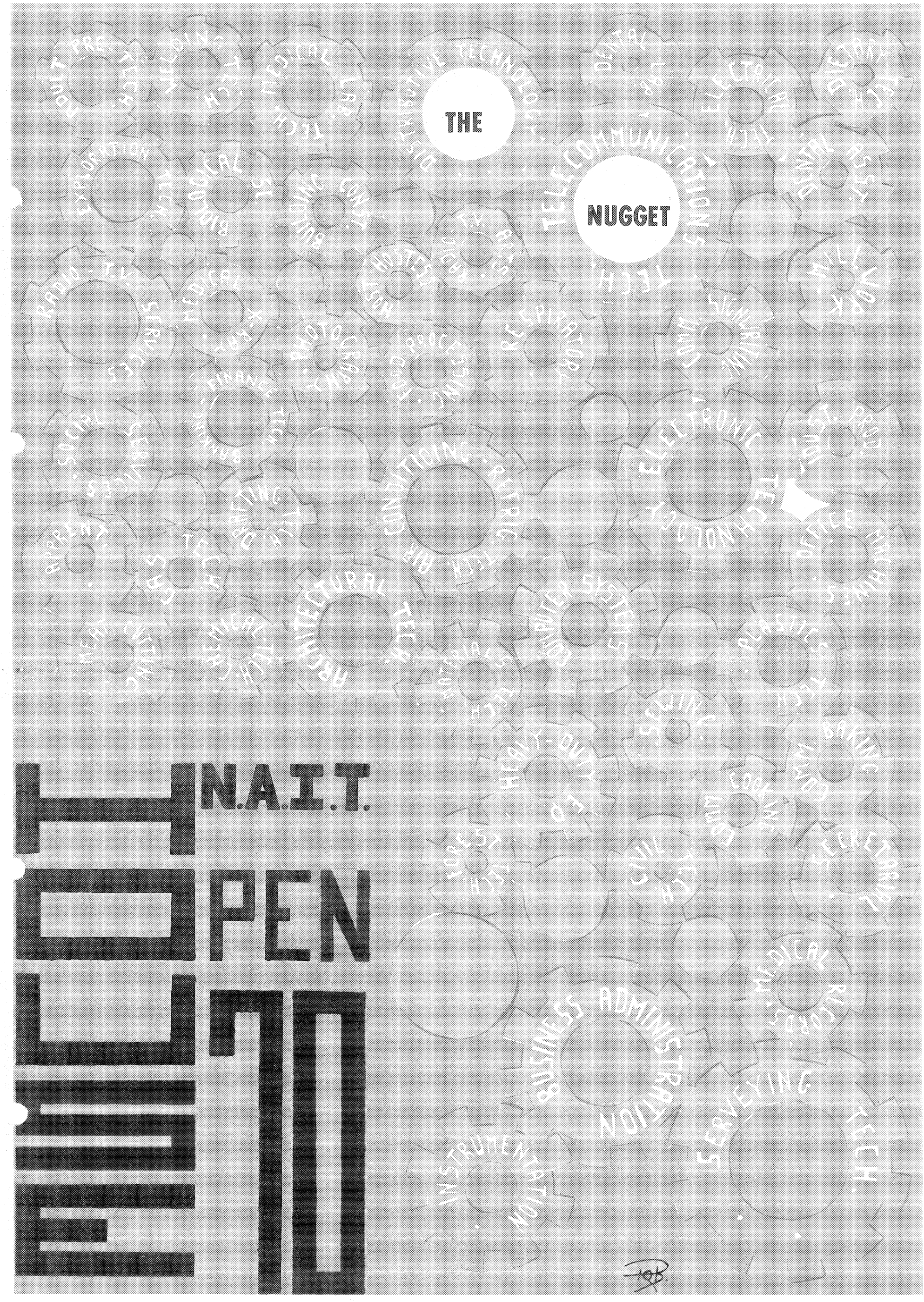
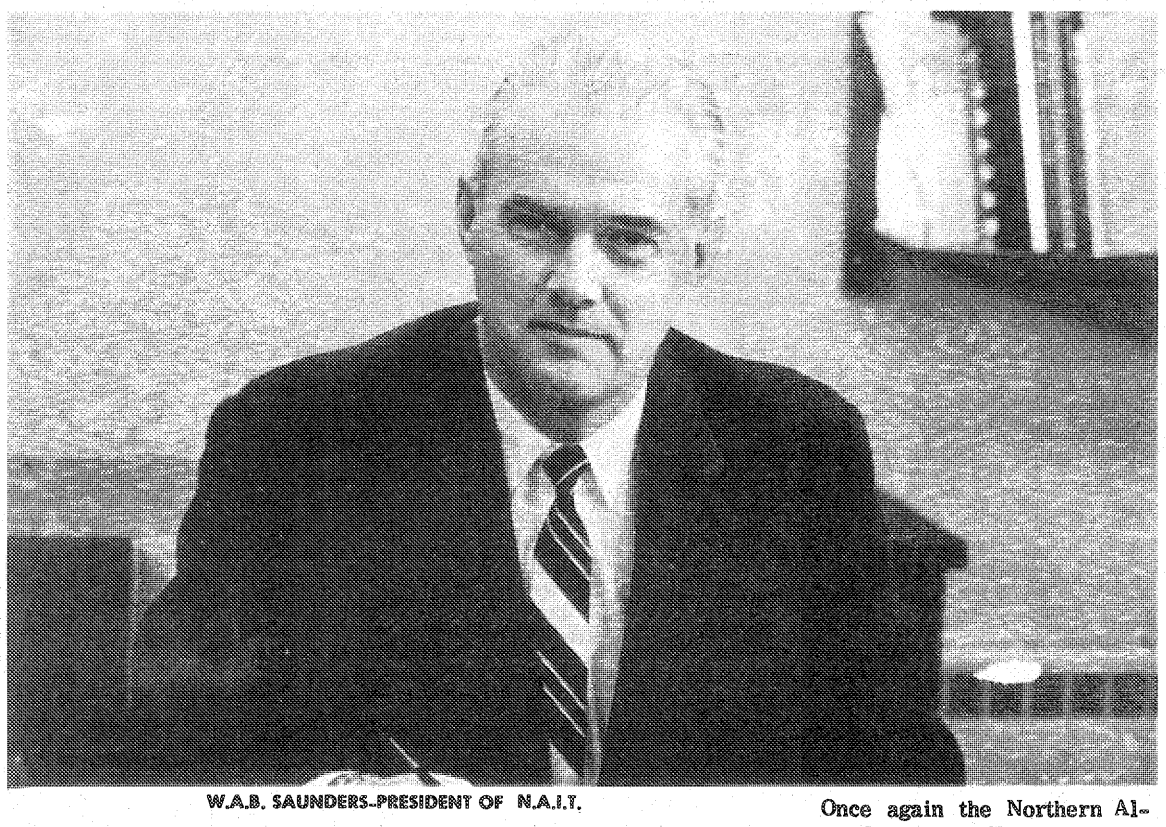

THE
NUGGET
N.A.I.T.
OPEN
HOUSE



W.A.B. SAUNDERS–PRESIDENT OF N.A.I.T.

N.A.I.T. CAMPUS

The Northern Alberta Institute of Technology is located on a thirty-one acre campus adjacent to the Industrial Airport 2 miles from downtown Edmonton. It is one of the largest and best equipped Technical Institutes in Canada. The original group of buildings was completed in 1963. Since then additional buildings were completed in 1965 and 1968. Further buildings are now in the planning stage to meet the ever-increasing need for technical and vocational education in Alberta.

The Institute has a floor area of 865,000 sq. ft. or 20 acres of floor space in 8 buildings most of which are interconnected and essentially under one roof. The facilities include 170 shops and laboratories and 110 classrooms providing accommodation for a maximum of 4,800 students at any one time.

A self-service cafeteria provides reasonably priced meals for students and staff in a dining areas that seats 900 persons at one time. In additional banks of vending machines have been installed in student areas at several locations to serve hot and cold drinks, soup, sandwiches, etc.

The McNally Library with 30,000 technical books and 300 periodicals has a seating capacity of 250. The Institute Book Store, operated by the School Books Branch, handles all student requirements for tex books and supplies and handles up to 90,000 texts per year at reasonable cost.

Facilities for physical education and extra curricular activities include a large gymnasium, games room, bowling lanes, auditorium, little theatre, offices of the students' executive, newspaper and yearbook. There is also an athletic field which has a 1/4 mile track and facilities for football, baseball and track and field.

The Institute has parking space for 2,000 cars. Reserved parking is not available to students.

While the Institute can accommodate up to 4,800 students at any one time, it is estimated that it will serve up to 16,000 students during the 1969-70 academic year. This includes 4,000 full-time day students, 5,000 apprentices and 7,000 evening students in the Extension Division.

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Once again the Northern Alberta Institute of Technology opens its doors to the public for our annual Open House. Every year the students and staff take this opportunity to show the citizens of Alberta how their Institute has progressed during the year. Open House also provides High School students with a good chance to see for themselves what a Technical Institute is like and what they might expect if they were to attend.

Over-acceptance can sometimes lead to lack of awareness with the passage of time and changing conditions. This can be disastrous. We hope this won't happen at NAIT, we feel that there is so much to see, so many young ideas being generated, and so many changes necessary to keep up in this rapidly changing world that NAIT cannot, and will not, become a static entity. This viability, this accent on youth channelled towards change is a most interesting phenomena to witness. We are sure this atmosphere can't help but impress you, not matter how many times you come to NAIT.

We cordially invite you to share an uplifting, encouraging experience with us. Be sure to ask the students about their work as you tour the buildings, they have worked many long, hard hours to present their displays and it usually takes more than casual glance to appreciate the things they have accomplished. You may also be sure they are eager and willing to explain to you, you need only ask.

We know from past experience that many of our 40,000 expected guests will have made several visits to NAIT in the past. This is fine, we know it is difficult to see it all in one visit, we therefore encourage you to return again this year.

Our enrolments this year are just about our maximum. We have 4,400 on the Campus at one time during the day and we will have over 7,000 evening or extension students. Overall we expect to give some type of training to 16,000 this year.

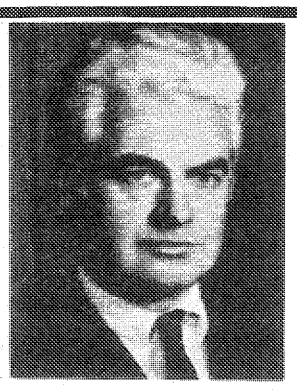
For the coming year we have already oversubscribed nine courses, however, we are still accepting registrations in forty courses. We hope our visitors will ask all about our courses.

W.A.B. SAUNDERS, P. Eng.
President

THE NUGGET STAFF EXTENDS A MOST SINCERE WELCOME TO ALL VISITORS OF OUR OPEN HOUSE, 1970 WE HOPE YOU ENJOY OUR EIGHTH AND BEST OPEN HOUSE AND WE LOOK FORWARD TO SEEING YOU AGAIN.

THE EDITORS

MAURICE MABILLARD LARRY BUSH



CONGRATULATIONS AND BEST WISHES

It gives us great pleasure, on behalf of the City of Edmonton, to extend to the students and staff of the Northern Alberta Institute of Technology our congratulations and best wishes on this your eighth year of a vital service to the City of Edmonton and Northern Alberta.

The educational facilities and courses offered by NAIT are unsurpassed anywhere on this continent and the high degree of proficiency attained by the graduating students is a credit not only to themselves but to the Institution and its instructors and teachers.

Perhaps the success of the Northern Alberta Institute of Technology from its opening day, aside from the keenness of students enrolled and the capabilities and enthusiasm of their teachers, can be attributed to the closeness in which the administration works with industry to determine the courses and the content which should be taught.

The success of this course of action is evident in the high number of job placements throughout Canada for graduating students.

We are sincerely proud of NAIT and its accomplishments.

Ivor G. Dent
MAYOR

AIR CONDITIONING AND REFRIGERATION

What is air? The dictionary defines air as "a mixture of invisible, odorless, tasteless, and compressible gases".

It is not a physical thing that one can see or touch, however when one enters a space the lack of fresh air and the presence of stale air is noticed at once. Fresh clean air is becoming scarce as time progresses. Therefore, air control must be emphasized to a greater extent if air pollution is to be controlled. Air pollution has advanced to such an extent that it is now a national problem.

The main object of air control is to satisfy the general public; that is comfort air conditioning. The public is now demanding more comfort in cars, homes, and all public places.

Architectural designs are changing from wood and brick tructures to glass and synthetic structures. The modern trend toward larger glass areas in buildings brings about ever-changing conditions which the air conditioning technologist has to cope with. The above conditions are due to variations in the sun cap, wind direction, wind velocity, and the changing outside temperature. These changes require a more sophisticated sustem design. This presents a greater challenge to the air conditioning technologists.

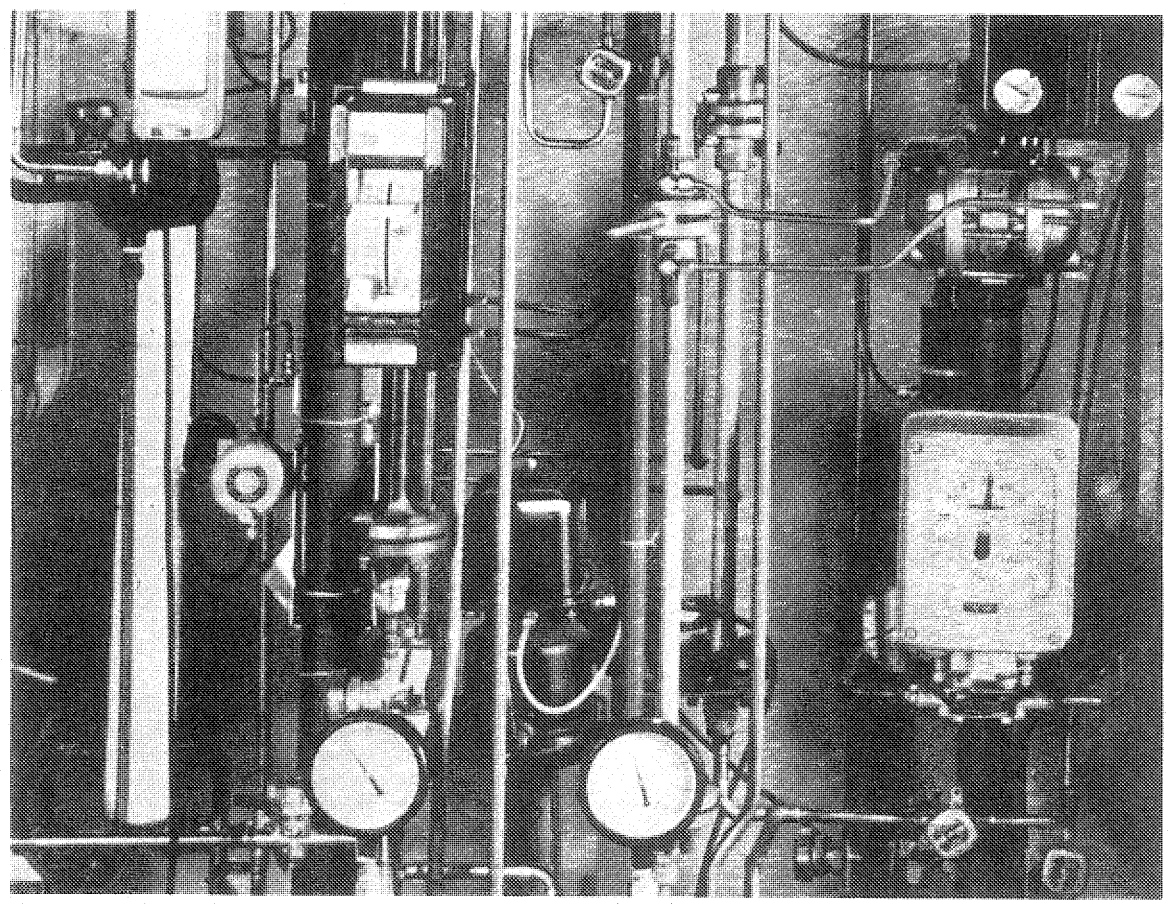
Air conditioning, refrigeration, and heating systems have been adapted towards greater refinement to meet the varied conditions.

The benefits from comfort air conditioning are immense. Imagine working on a project in a hot humid room where there is not comfort control. The heat and high humidity in the ambient air would discourage efficient work. The benefits in productivity and efficiency of the employee in an office or factory far outweigh the cost of climatic control installations.

Graduates of this technology find positions in such areas as consulting firms, contractors, mechanical equipment manufacturers and distributors, engineering sales firms, government agencies, wholesalers, and maintenance or service companies. Technologists' work includes design projects, drafting and layout testing of installations, and sales and services.

The students' assignments include instruction in the above with emphasis on design and maintenance of existing systems. New and improved products are introduced as to their application in present and future systems.

The two year program provides the future technician with a sound background in electricity, refrigeration and air conditioning theory, refrigeration and air conditioning lab, and engineering drawing. Related courses include physics, mathematics, and technical English. Supplementary subjects include: sanitary services, welding, machine shop,



sheet metal, thermodynamics, and computer programming. These subjects tend to give the student a wider insight into the vastly expanding field of air conditioning and refrigeration.

Through the use of a well equipped lab the student requires practical technical knowledge to help him solve common air condition and refrigeration problems. A specially designed air conditioning test unit may be set to simulate many varied conditions encountered in actual systems. Small training units aid the student in system analysis, and also permit individual or group projects. Many of the controls which may be encountered in the field are available for observation and setting up of sample control systems.

Employment opportunities are unlimited and varied. Advancement in this field is only limited to the individuals' initiative.

The prerequisites and requirements may be obtained from the general office. Prospective students are encouraged to apply early since a set number of students are accepted each year.

ARCHITECTURE

Today our world is changing rapidly, our ways of doing things quickly become archaic; our environment is becoming antiquated; our world is becoming inadequate. Our lives are changing. Not only the manner in which things are done, but even the very things that must be done will be different in the future. A whole new attitude and approach to life will shape our future activities; a new environment will be required. Tomorrow's world will be different, as far removed from us as we are from our ancestoral aborigines.

THE BUILDING INDUSTRY

In our rapidly changing world, the techniques of building are also changing. No longer is it possible for the glorious architect to sit isolated in his ivory tower conceiving and busily producing electric variations of previous building solutions. Today's ever changing building industry has already become a diversified giant requiring the extensive co-operation of hundreds of qualified men and women working on each project. Each of these people must be skillful, knowledgeable and talented in his own field of endeavor as they make their vital contribution to the vast operation of creating the spaces and environments of today and tomorrow. Included in this large integrated team that produces our new building are graduates from schools of architectural technology.

EMPLOYMENT

Opportunity exists in many fields for graduates of the architectural technology program. In addition to architects' offices, graduates find employment in the area of engineering, urban planning, and redevelopment, building construction, building materials supply and sales, and governmental agencies. The work is thus diversified and the demand fluctuates with the pace of the building industry. Working conditions are usually very good, and the salaries are commensurate with the ability and initiative of the individual.

THE NAIT PROGRAM

The program of architectural technology at NAIT aims to prepare the student to fulfill his important role in the changing world of the building industry. The program does not intend to produce architects, engineers, contractors, or tradesmen, although an understanding of these professions and trades are developed by the student during his studies here at NAIT. The courses offered develop skills in architectural and engineering, drafting, detailing and presentation, as well as a basic understanding of architectural and engineering design, surveying, supervision, and office practice. Architectural technology not only teaches present techniques but also emphasizes fundamental principles which will enable the student to make vital contribution to the building industry as it constantly changes its methods, requirements and goals. Therefore the program at NAIT is under constant review and alterations are made as they are required to meet the changing demands of today's world.

OPEN HOUSE DISPLAY J-WING

The east foyer of the technology wing contains a display of drawings, designs, projects and models by current students in architectural technology. These are displayed in an environment designed and built by the students themselves.

BIOLOGICAL SCIENCES

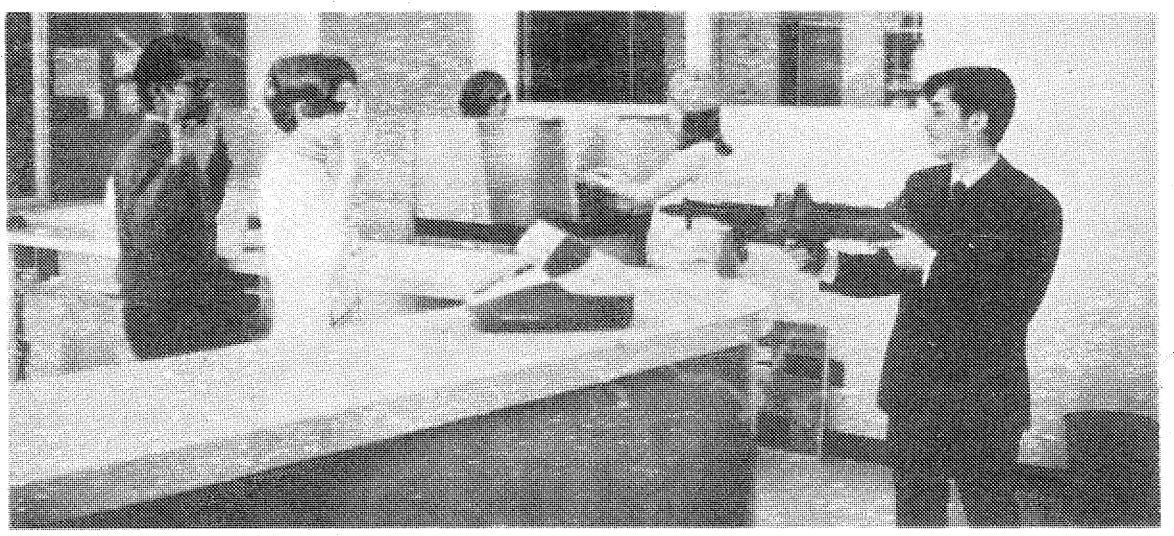
This program has been developed in co-operation with the Advisory Committee to help fill the increasing national demand for suitably qualified Biological Sciences Technologists. The need for trained technicians in the life sciences (biology, health and environment) has been created by the increasing concern of all levels of government and related industries in biological research and control measures. The increasing human population will place additional stresses on the natural resources of this country and the world. Recognition of the into the preservation of wild life species, botanical and zoological; health sciences dealing with diseases of both man and animals; and concern over the increasing expenditures of public and private monies. Authorities have estimated that present needs exceed 30 per year on a national basis and there is no doubt that the need will continue to increase.

Emphasis is placed on theoretical and practical instruction in a broad variety of biological processes common to both Botanical and Zoological sciences. Laboratory activities will include: animal care; plant growth; bacteriology; analytical analysis of biological material; the instrumentation, recording and analysis of physiological data; preparation of plant and animal material for microscopic examination; and environmental health laboratory procedures. Technicians are also required for field work involving: the collection and analysis of air and water samples, surveys of plant and animal populations, ecology studies, related activities.

Career opportunities are available in a wide variety of fields. These include: University Departments; Medical Schools; Federal and Provincial Experimental and Research Stations; Veterinary Laboratories; Fish and Wild Life Services; Environmental and Public Health Agencies; the Meat and Food Processing Industry; Biological Supply Houses, and many other areas.

Individuals considering a career in Biological Technology should have a good background in biology and chemistry. An interest in working with living material and the aptitude for attention to details are considered desirable. Direct contact with laboratories or agencies involved in the activities of major interest to the student may be of value in determining the type of work involved. The course will demand a considerable amount of work by the student.

The cost of books and other supplies should not exceed $100.00 per year. Attendance on occasional field trips will be required.



BANKING

Dynamic expansion and rapid change have become trademarks of Canadian financial institutions. This has led to increased employment opportunities. Expansion means newer and more challenging positions, too.

Today, there is a greater need for young men and women who understand business. If such understanding is combined with specialized training in banking and financial operations, one becomes particularly valuable to financial institutions of all kinds. This fact is reflected in the demand for Banking and Finance graduates, and in the increased starting salaries available.

The objective of the Banking and Finance course is to prepare students to meet present day requirements and provide a basis for future developments.

The NAIT Banking and Finance course is divided into two programs:

1. Teller Training and General Business (One Year) This course deals mainly with teller training practical banking, accounting, general bank practices and procedures, typing, and learning the operation of various machines.

2. Banking and Financial Management (Two Years) This course prepares students for a managerial routine within a bank after about five to eight years of graduation. The program includes instruction in accounting, economics, credit, business law, banking machines, business machines, and general bank practices and precedures.

The completion of one of the above courses leaves a student prepared for banking as well as for a career in almost any phase business. For example, bookkeeping, payroll or general office work of any kind, or sales.

The two year course can also lead to Commerce or Business Administration at a university.

A visit to the fourth floor of the Tower building will enable you to see Canada's future bankers in action. There is a banking lab, equipped with modern banking machines, which is a small-scale operating bank, and a "Bank of Tomorrow".

Banking offers many benefits, some of which are: a good pension fund scheme; an excellent group life, sickness and accident plan; ideal working conditions; and competitive salaries. Also, Canadian banks have over 220 branches in over 20 foreign countries, such as the United States, Britain, France, Germany, Mexico, Japan and the Caribbean. A career in banking could get you a job in any one of these countries.

BUILDING CONSTRUCTION TECHNOLOGY

Far in the most northerly regions of NAIT, safely isolated from the female students, one may find a small collection of men staggering under the load of Building Construction Technology. These brave lads, though seldom heard from, are daily struggling through a course which includes: statics, methods, estimating, designs, drafting and occasionally, when the mood is upon them, effective communication.

In the last few years construction has undergone tremendous changes. When our apartment blocks and office buildings start reaching for the skies, the old construction methods and materials become obsolete. New methods and new materials demand new knowledge. From this demand rises the need for construction technologists. It is this need that George and the boys are endeavoring to fulfill.

BUSINESS ADMINISTRATION

CAN YOU ANSWER THESE QUESTIONS

No...Yes...1. When you first find an employee incompetent would you "FIRE" him?

No...Yes...2. If you get a raise would you consume the extra income provided you are a rational being?

No...Yes...2. Is the probability of getting a head when a flipping a two-headed coin 100 percent?

No...Yes...4. Is it a good idea to speak fast when delivering a speech to an audience?

No...Yes...5. Are contracts that are in writing the only binding legal type?

6. Who is Dun and Bradstreet?

No...Yes...7. Is an accountant a glorified bookkeeper?

No...Yes...8. Do ASSETS=LIABILITIES=EQUITIES?

No...Yes...9. Is FORTRAN a spoken language?

No...Yes...10. Will you go see the Business Administration display on the second floor of the Tower Building?

The results and your rating as a modern business person will be made available at the Business Administration display on the second floor of the Tower Building.

Business Administration is the broadest field of employment in our society. The number of opportunities existing in this field are unlimited. The very substance of our nation's wealth, and where wealth is involved so is Business Administration.

It is the aim of the Business Administration program at NAIT to equip students with the fundamental tools of business and to train them in areas of modern business that will allow graduates to adapt readily to areas of modern business occupations. This specialized training when coupled with on-the-job experience and application, will result in rapid progress and promotion within the chosen field. The quality of the course is evidenced by the growing number of employers who are approaching the Business Administration graduates to fulfill their Company's needs for future management.

First year students enrolled in the Business Administration program study material designed to give them a general background in business practice and theory. Having this background, the student starting the second year may then choose, from the options offered, the one program in which he is most interested.

SECOND YEAR OPTIONS

ACCOUNTING

In any business, management needs systematic, comparative cost records and reports as well as analytical cost and profit to manage an enterprise. The accounting option is designed to give a general knowledge of how an organization presents, analyzes and interprets its own financial affairs both for management and owners. Students enrolled in the Accounting option are trained for careers as accountants, auditors, cost analysts, controllers and/or other related fields. Graduates who continue with their studies may challenge examinations to obtain second year R.I.A. or C.G.A. certification.

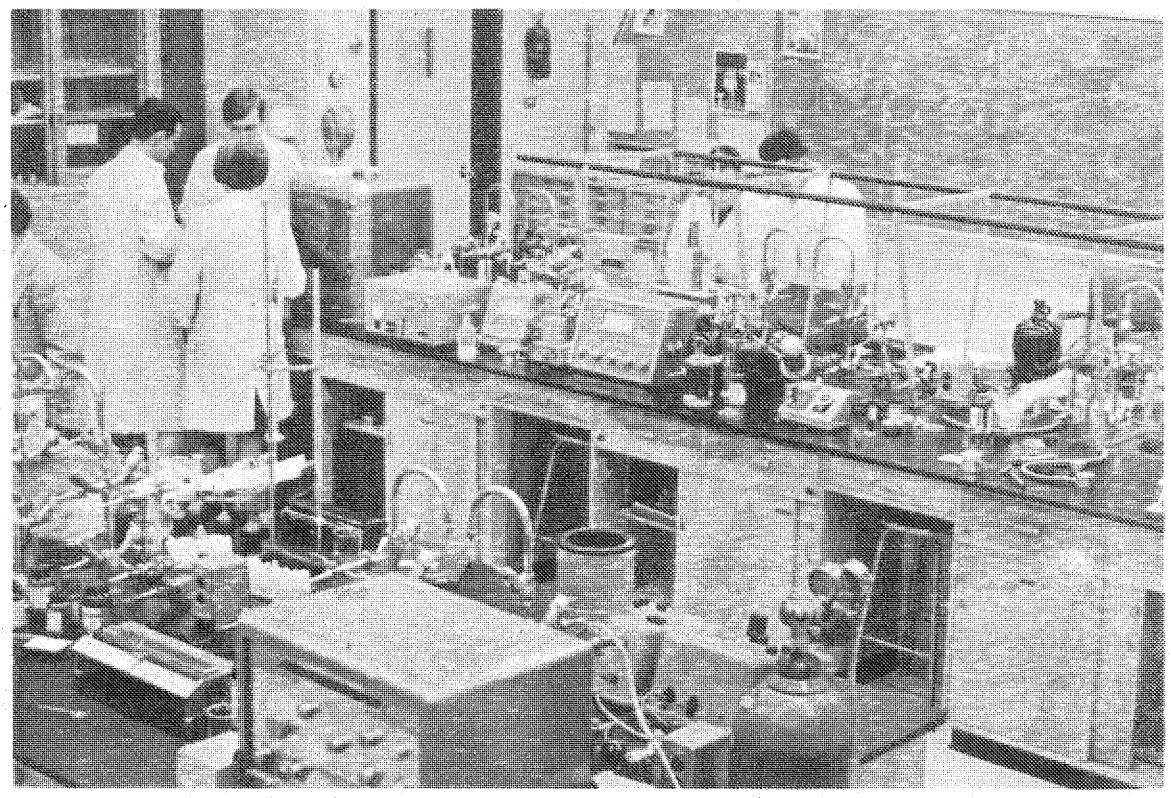
BUSINESS MANAGEMENT

This option is designed to add to the understanding of the fundamental principles of business from the viewpoint of the administrator. It emphasizes administrative decision and the general unity of business administration. Graduates are trained towards eventual supervisory administrative positions in commerce, industry, and government. After a period of orientation with an employer, a graduate may find himself in a responsible position in the general office, plant work, production, sales, finance, marketing, traffic, etc., to name a few of the potential areas of employment.

CREDIT ADMINISTRATION

This option is designed to meet the need for trained credit personnel in such activities as credit granting, credit reporting, and credit procedures. Emphasis throughout the course is placed on practical applications. Employment will be available in the areas of wholesaling, retailing, industrial equipment, financing, banking and other specialized forms of credit. Credit administration is big business and affords many job opportunities. These opportunities include investigation of credit, credit applications, reporting of credit, clerical operations, credit counselling, etc.

CHEMICAL TECHNOLOGY



A practical and challenging course is being offered by the Chemistry Department of NAIT. The rapid growth of the Chemical Industry in Alberta and Canada has increased the demand for competent Chemical Technicians. The requirements of Industry and Research must be filled and the Northern Alberta Institute of Technology has endeavored to do its part in providing programs which will give the students adequate training in the field of Chemical Technology. A great potential exists in the field of chemistry and students choosing this field will have picked an interesting and continually developing vocation.

A two year course is offered in Chemical Technical with a second year option (Chemical Research Technology) for honor students. Theory classes in inorganic, organic, oil chemistry, instrumentation and biochemistry are applied in the lab where the student performs experiments that illustrate the thoughts presented in the lectures. The practicality of this course is emphasized in the amount of time the student spends in the laboratory where he or she learns good laboratory technique and procedure. The first year course includes 12 lab hours and the second year course averages 20 lab hours out of a total week of about 30 hours. As a student Chemical Technician, one will learn to perform qualitiative and quantitative analytical tests and determinations, to reproduce industrial procedures on a laboratory scale, to operate various analytical instruments and in general to get a good background of chemical knowledge.

Industry has been very generous in providing scholarships and awards for students who prove their academic merit. Several hundred dollars has been allocated to Chemical Technology students.

A graduate of Chemical Technology is employed in a variety of industries: Chemical, Petroleum, Plastics, Electrochemical, and Food industries as well as Research Institutions, Consulting Firms and The Atomic Energy Commission of Canada. NAIT offers a student placement service where future employers come to the Institute to interview the students. An average starting monthly salary of $425 may be expected with the range being $355 to $525. Opportunities for advancement may depend on position, type of work and company policy. Each student of the Chemical Technology is eligible for student membership in the Chemical Institute of Canada (C.I.C.) which is the National Professional Organization for Chemists and affiliates. Upon graduation, student members are elegible for certification as Chemical Technologists by a program of development recommended by the C.I.C. This includes on the job development, extension courses, or University courses.

The course requirements are listed in the NAIT Calendar and any prospective students are encouraged to visit the Chemistry department and look our facilities over. In order to avoid disappointment, register early.

COMMERCIAL BAKING

When you are at Open House --remember to visit the bakery. You'll be greeted by that unmistakeable aroma of oven-fresh baked goods. We are situated downstairs, just north of the main cafeteria.

The commercial Baking Course was established in 1968, with graduates now holding prominent positions in various baking establishments in and around the city.

The prime objective of the course is to graduate qualified and competent bakers having a sound background of practical, theoretical, and test baking, with related math, science and business knowledge, enabling them to be employed in positions of responsibility in industry. Graduates also have the opportunity to enter affiliated trades such as in test baking laboratories or bakery supply houses (ingredients and equipment).

Last year the students broke the world's record for producing bread from the raw wheat kernel to the baked loaf. This year we plan to demonstrate a relatively new process of dough making where bulk fermentation is completely eliminated, this being called the Chorleywood bread process.

Within the past year the Bakers Club have been active in both business and social functions. During open house, visitors are invited to see the bakery in operation as well as purchase the finished products. This bake sale being promoted and financed entirely by the club.

If you are considering a career in this field, the staff members of Commercial Baking would be pleased to discuss the program with you.

Touring a Technical Institute of this size can be a very exhausting experience so when you get tired and hungry REMEMBER THE BAKERY!

COMMERCIAL COOKING

In recent years millions of dollars have been invested in the Food Service industry to cater to the ever increasing demands of the Canadian population, as well as the flourishing tourist industry.

The Food Service Department at the Northern Alberta Institute of Technology has a dual purpose. First, the Food Service department trains young men and women for the expanding field of Food Servicing. Secondly, the Food Service Department provides catering as a professional service to the institute. To effectively train students and at the same time provide suitable service to the Institute.

This is a two year course. The objectives of this course are to develop the student's appreciation and understanding of sound food preparation methods. This entails a knowledge of the physical facilities within a food preparation area as well as various methods of cooking and serving food. This course is designed to fill the growing need for men and women who are trained in the preparation of food on a large scale. Students are taught to prepare and serve nutrious food in varied an attractive ways, and to purchase and handle supplies so that an establishment may operate as a reasonable profit, observing at all times the importance of cleanliness, sanitation and good public relations.

Students are taught meat cutting, pastry and desert preparation, salad making, soup and vegetable cookery and the service of food. Mastery of the practical skills is achieved by realistic and practical work in the kitchen, with the comprehension and technical information is taught in the classrooms. While the first year students are acquainted with the basics of Commercial Cooking, the second year broadens and deepens the knowledge and skills learned in the first year. Emphasis is placed on the culinary arts.

Advanced cooking, ice cooking, fat scupturing, pulled sugar work, chocolate work and marzipan, are some of the areas covered in the second year. Professional responsibility are also emphasized in the second year. The students are encouraged to assess themselves as a professional food worker. Since catering is a service to people, the prospective student should have certain personality traits - He must be able to work under pressure, communicate effectively, and bear in mind that food catering means evening and weeken work.

EMPLOYMENT OPPORTUNITIES

Jobs are many and varied from: restaurants, hotel dining rooms, department stores, coffee shops, clubs, hospitals, institutions, mining and logging camps, and catering firms are all looking for people trained in quality cooking. Starting salaries vary depending of experience, personality, willingness to cook, amount of training, and other factors.

CIVIL ENGINEERING TECH.

Civil Engineering Technology is a course in the training of semi-professional people: draftsmen, surveyors, estimators, designers and materials inspectors to aid the Civil Engineer in modern construction.

Qualified graduates are employed in various engineering fields – wherever there is construction. Approximately one-third of the graduates are employed by engineering consultants and material testing companies. This includes the study, design, construction and inspection of roads, sewers, water mains, reservoirs, sewage disposal plants, water treatment plants, harbour installations and irrigation canals. The materials testing field includes the laboratory and field testing of soils, cements, concrete, asphalt and other materials used in construction. Another third of the graduates are employed by private contractors as estimators, draftsmen, surveyors and job superintendents. The remaining third work for various governmental agencies as draftsmen, surveyors and inspectors.

Apart from the engineering fields mentioned before, there are graduates involved in technical sales, while still others are continuing their education at university level.

Salaries for graduates are comparable to those paid semi-professional people, and vary depending on the experience and personal capabilities of the employee.

Advancement opportunities are good for graduates because of the increasing amount of construction and the resulting expansion of the need for technology graduates. Many graduates start as junior inspectors, draftsmen, and estimators. The road to seniority in these fields involves experience and diligence, but many graduates will succeed. Civil graduates are given basic knowledge required of job superintendents for private contractors: grads may start work as assistant to the superintendent and advance to superintendent, field superintendent and construction manager. Advancement is on a merit basis, and so the individual dictates his rate of advancement as opportunities present themselves.

To become a Civil Engineering Technician, a person must have a Civil Technology diploma. The Civil Technology course at NAIT is a two year program. Entrance requirements are a high school diploma or equivalent, with at least a "B" standing in mathermatics 30, 32 or a combined average of mathematics 30 and 31, and credit in Physics 30 or 32. Additional data may be obtained from the Office of the Registrar, NAIT.

COMMERCIAL SIGNWRITING

Collected Ramblings from
Commercial Signwriting
As simple as a, b, c to construct
the B is really quite tough
Cee the instructor carefully show
a Dozen signs arts students
Essentials of brush control
For in the field of signwriting
Gothic, roman and all
Have to be lettered perfect
In every word we draw.
Just a simple layout
Kept clean of extra frills
Leads your eye to reading
Messages, ads and brills
Never a laggard here
Only ambitious artists
Painting project panels and paper
"Quick brown fox jumps over"
Red, yellow and blue,
Slowly, straight and square
There is sometimes someone
Under Mr. D.'s watchful eye
Viewing from above
Who is relaxing and
Xercising their freedom of speech
Yes, 'tis a colorful career
Zooming ahead this century
to TELL THE WORLD WITH SIGNS.

DENTAL ASSISTANT TECH.

DENTAL ASSISTANT CREED

To be loyal to my employer, my calling and myself.
To develop initiative---having the courage to assume responsibility and the imagination to create ideas and develop them.
~~To be prea~~
To be prepared to visualize, take advantage of and fulfill the opportunities of my calling.
To be a co-worker---creating a spirit of co-operation and friendliness rather than one of fault finding and criticism.
To be enthusiastic---for therein lies the easiest way to accomplishment.
To be generous, not alone of my name but of my praise and my time.
To be tolerant with my associates, for at times I too make mistakes.
To be friendly, realizing that friendship bestows and receives happiness.
To be respectful of the other person's viewpoint and condition.
To be systematic, believing that system makes for efficiency.
To know the value of time for both my employer and myself.
To safeguard my health, for good health is necessary for the achievement of a successful career.
To be tactful---always doing the right thing at the right time.
To be courteous---for this is the badge of good breeding.
To walk on the sunny side of the street, seeing the beautiful things in life rather than fearing the shadows.
To keep smiling always.

It is by this quote, that the girls making Dental Assisting their careers must live.

In September of every year, girls from all over the province enter one of the world's oldest and most honored of all professions. Throughout the years duration, such subjects as Oral Anatomy, Radiology, Bacteriology, Materials and Equipment are offered in order to give each girl a knowledge so that she in turn becomes a valuable member of the dental health team.

As in every other technology in NAIT, we are on the quarter system. This means that we cover a lot of new and strange material in a twelve week period. During the first quarter we are subjected to a whole new atmosphere. Besides the strangeness of the course most of us must learn to take notes and study all over again. We write final exams approximately the second week in December. Then comes Christmas when everyone gets that well deserved break.

During the second quarter, we are scheduled to observe the dental health team at work. We make the rounds of the Specialists' offices here in the city. After observing it seems to awaken some feeling hidden deep down inside that makes you wish you were working at this most pleasant of professions.

The highlight of our training comes in March and April when at last we are able to get our "fingers in the pie". For three weeks we're off to the University where we work with the dental undergraduates to learn the ropes. We then continue our practical training by going to a dental office for three weeks either here or in Calgary. When our time is up we return to NAIT for a months instruction in various other courses. Then final exams.

To break the monotony of all these studies we try to earn a little money on the side. The D.A.s lower their dignity and pride and become slaves for a day. The Dental Technology sells us to the highest bidder. During that day you may see the odd girl strugling under a pile of books or busy running errands. Most of the guys were very nice though and we girls spent most of the day drinking coffee and having fun. Most of the class belongs to the Edmonton Dental Nurses and Assistant's Association. This gives us a chance to meet the other girls in the profession and to have an evening out.

In early June we have the highlight of the year, "Graduation." I think this is everyone's dream, to complete their chosen course and feel as though they have accomplished something. We would like to wish all the girls the best in the future.

There cannot be a more urgent request that D.A.'s continue their education. As one man said:

"Education, your self improvement, you must tuck under your white cap for one and all---regardless of what subject, at what level, or for what purpose it is intended, is best accomplished by a liberal application of Patience, Love and Understanding. These fundamental truths apply whether you want to be a Dental Assistant, an Actor or a Politician. Any D.A. worth her salt will accept this and apply her learning daily."

COMPUTER SYSTEMS TECHNOLOGY

The Computer Systems course at NAIT is a two-year program. The student learns computer concepts, programming languages, systems design and other subjects that provide the Computer Systems graduate with a sound business oriented educational background.

The Computer Systems graduates of 1969 found rewarding careers as commercial programmers, programmer analysts and systems analysts. Many of the graduates found jobs in Edmonton. Others went to Ottawa, Toronto, Saskatoon, Calgary, and Vancouver. The salaries obtained were very attractive.

The Computer Society is the student's organization that looks after several social activities such as parties, dances and sports. Students enrolled in this technology are welcome to become members and to seek executive positions. Involvement in society affairs supplements the students academic training.

The Society has been very active this year. For the first time it participated in the NAIT queen contest. Its talented and beautiful candidate Brenda Tyler made an admirable Princess.

Also this year, computer systems has made a very good showing in Intramural sports, having better participation and performance that any other year.

The Nugget Yearbook of Activities

PHOTO CREDITS - BOB (FLASH) HOOEY

EXPLORATION TECHNOLOGY

What is exploration? Exploration is the search for economic mineral, oil and gas deposits using geophysical, geochemical and surface prospecting methods.

Previous to the actual exploration work a student must pass the difficult and long program set up by NAIT. This program includes a background in electronic, physics and computer mathematics. The geologies program includes courses in: minerology, study of description of approximately 150 common and important minerals. Geophysics, study of gravity and magnetics, self-potential, induced polarization, and electromagnetic anomalies. Economic geology, the study of economic mineral and oil deposits. Geologic instruments, the uses and practical application of geologic instruments in actual field work. Structure, the use of aerial photography and structural interpretation of maps. Siesmology, the interpretation of seismic data. Mine operations, the study of actual mines. All of these courses plus surveying and drafting are combined in the final quarter where a student presents a three hour seminar on a case history of one particular location of his choice.

A student's activities aren't all academic but include many other activities. One of the main interests this year is sports. At the present time Exploration is number one in this department. Other activities are keg parties, pub parties, general parties and once in a while a dance. This year the Exploration boys got together and decided to grow beards. Twenty-eight made the full two months.

Upon completion of this program ample work awaits the students in any province of Canada and in many other countries as well. To be in this program a person must like living outdoors for that is where he will spend three to four months a year. One could say that the Exploraion student is fun loving, outdoors man with the ability to put his knowledge into a practical and economic application.

FOOD TECHNOLOGY

Food Technology deals with applications of principles and techniques of science, engineering, and social sciences to industrial preparations, processing, preservations, packaging, and distribution of the world's foods. The goal of Food Technology is to manufacture better foods more efficiently through development of new processes and techniques, selections of suitable raw materials, and the economic direction of industrial operations.

Canada's development has been marked by the transfer of acquiring food from an individual effort to a complex industrial operation, until today the vital food industry is our largest manufacturing industry. Almost all foods are now processed to some extent between producer and supermarket. Food technicians, working together with food scientists and engineers, form the vital technological links in the food chains from producers to consumers.

The two-year NAIT program has been developed to train technicians for a wide range of technical and supervisory career opportunities in the food industry. Surveys indicate that this industry will require about twenty qualified technicians in Alberta each year and well over a hundred annually across Canada. The need for more highly qualified personnel at all levels in the food industry will continue to increase as processing methods and equipment become more complete, as more food crops are processed, as more convenience foods are developed for modern living, as fabricated foods are developed to assure adequate proteins, vitamins, and other essential nutrients, and as efforts are greatly expanded for feeding the world's rapidly growing populations.

The curriculum is planned to provide a sound knowledge of the basic sciences as a foundation for technical courses in food and industrial microbiology, food preservation, biochemistry, food analysis, sanitation, quality control, instrumentation, processing equipment, packaging, industrial relations, and production management. Laboratory exercises are supplemented wherever possible with organized visits to industrial food plants and laboratories for observations of manufacturing operations, testing, and research.

The graduate food technician often seeks initial work experience in quality control. With suitable experience, ability, and application he can progress to occupations such as assistant chemist, government inspector, packaging technician, pilot plant supervisor, plant maintenance supervisor, plant superintendent, product development technician, production foreman, quality control supervisor, or research technician. Major components of the Alberta food industry include: dairy foods, meat and poultry packing, brewing and distilling, canning, freezing, and dehydrating, vegetable oil refining, sugar manufacturing, milling and baking plants, and research, education, and government inspection agencies.

The food technician applies the principles and technical developments of food science and food engineering. Wherever he may work, he must be aware of the effects of production procedures on product quality and must be constantly alert against impaired quality spoilage from use of unsuitable raw materials or improper processing. The food technician must also be a good manager: he must be able to get things done effectively both with and through people whether his work is in the laboratory, in the plant, or behind a desk.

Program admission requirements are a high school diploma with 50% or better in Grade XI chemistry 20. Grade XI mathematics, biology, physics are asset subjects. Persons entering this field must have an interest in the sciences.

See the Food Technology Open House Display in E118.

FORESTRY TECH.

The management of our renewable natural resources is gaining an ever increasing importance in today's world. Faced with the problem of accommodating an exploding population, the wise use of our remaining wild lands is becoming imperative. One need only consider the house he lives in, the water he uses, and indeed, the very newsprint he is reading now, to realize the consequences of losing our forests, ranges, and watersheds.

The forest technology course at NAIT trains individuals to become part of the management team. Since forestry can be divided almost equally into engineering and biological sciences, a thorough grounding in both is given at the Institute in the first year. Instruction includes the subjects of botany, zoology, soils, wood technology, and meteorology. The technical training involves the use of cruising instruments, construction materials, surveying and drafting equipment. Theory is supplemented with practice in the laboratory and field.

Armed with this knowledge, the student then proceeds to the forestry school at Hinton for the second year. Here the emphasis is placed on conservation and practical wood's experience. Fire control, photogrammetry, silviculture and other related fields are all taught, with an eye towards duplicating employment conditions after graduation.

What kind of person succeeds at this course? A desire to work out of doors with living material is mandatory of the prospective student. However, it should be emphasized that this is not a course for people interested primarily in studying wildlife. Forestry today tends to deal in the botanical, not zoological aspects of nature. Coupled with this liking of the outdoors, an aptitude in the physical and biological sciences is necessary. Forestry at NAIT makes use of both, and there is an unparalleled opportunity to follow one, or combine them in a forestry career. Finally, the technician must be able to communicate and deal with people. The day of the lone forester disappearing into the woods for months on end is over. Nowadays most work is carried out by a team of men, however this does not detract from the chance to use one's own judgment and initiative.

The graduate of forest technology will find employment in government or industry as a forest ranger, park warden, cruiser, scaler, fire control officer or research technician. If travel is your bag, then CUSO offers a means of work in aiding underdeveloped countries in managing their forests. Pollution control may also offer employment in the future. In all cases, opportunity is limited only by individual interest and ambition.

Nature does not run to a man-made timepiece. So to you, who don't mind sometimes irregular hours and adverse conditions, forestry offers a career of variety and challenge. The rewards of a healthy outdoor life in a stimulating atmosphere, compensate entirely for any lack of conveniences enjoyed by your urban counterparts.

GAS TECHNOLOGY

The Natural Gas Industry is one of the fastest growing industries in Alberta. Since 1960 the production of Natural Gas has more than doubled and the future promises even greater increases and expansion in all phases of the industry.

The Gas Technology Advisory Committee, a group of representatives from the major gas companies, has recently indicated that the industry can absorb up to 40 Gas Technologists per year. Considering the enrollment limit of 45 students and less than fifteen diplomas awarded each year, it is easy to account for the high starting salary of the graduate technologist. The average starting salary is presently among the highest obtained by any of NAIT's graduates.

The Gas Technologist is trained to fill the gap between the skilled tradesmen and the professional Engineer. Graduates may begin their careers in either the Engineering Technology field or the Operations field, both of which provide interesting and challenging opportunities.

The Gas Technology course is a two year program which commences in September and is completed the first part of June. Upon acceptance of a student's application and payment of tuition fees, the student spends two years at concentrated studies in the Institute.

A basic review of mathematics, chemistry, physics and English begins the student's studies. The remainder of the first year includes courses in such subjects as geology, reservoir mechanics, drilling operations, surveying, drafting, staticsm dynamics, report writing, organic chemistry and equipment testing. The second year is made up of several basic courses covering the following fields of study: power plant engineering, computer programming, instrumentation, strength of materials, calculus, organic and inorganic chemistry, design of gas processing equipment, natural gas analysis, formal report writing, industrial chemistry, gas instrumentation, electronics, gas plant operations, materials of construction, thermodynamics, economic evaluation and industrial relations. Upon successful completion of the two year course, the graduate is given a Technicians diploma which certifies that he is a Registered Technician III in the province of Alberta. In addition, successful Gas Technology graduates have the opportunity to write the Alberta Fourth Class Steam Ticket. This is the first steppingstone to a secure and rewarding career as a Steam Engineer.

Gas Technology's Open House display will be located in room E123 (second floor of the Technical Building). We hope a model of gas processing plant, gas analysis and measuring equipment along with literature and opinions will be of interest to the public.

HEAVY DUTY

Heavy Duty Equipment Technology deals with the field of larger construction equipment including, automotive, stationary and marine applications. Such equipment demands knowledgeable selection and careful application as well as competent operation and skilled maintenance. The Heavy Duty Equipment course offered at NAIT provides an opportunity for students to pursue these technical skills.

Technicians must be competent in using hand tools, both powered and unpowered as well as machine tools. To utilize these manual skills during "trouble shooting" or maintenance, a technician must have a thorough understanding of the construction and theory of operation of heavy equipment. The course curriculum therefore includes basic welding, metal working, mechanics and Engine and Equipment theory. The comprehensive course in practical mechanics enables the student to safely handle the massive components of heavy equipment.

Heavy equipment not only needs to be serviced, it must also be bought intelligently, applied economically and maintained constantly.

The second year's curriculum contains subjects such as hydraulics, thermodynamics, electricity, materials testing and business subjects, to broaden the scope of the students' knowledge.

There are social activities as well as scholastic ones! Heavy Duty Equipment students will be eligible to join the technology club and are also eligible to participate in activities sponsored by NAITSA.

Graduates of the Heavy Duty Technology course will find numerous opportunities. The graduate could enter the Provincial Apprenticeship program, train as service and field representatives or even go into sales work. In general, this specialized training will allow one, after experience has been gained, to advance to a responsible position in industry.

INDUSTRIAL PRODUCTION

One of the more challenging courses offered at NAIT is Industrial Production Technology. This is a two year post high school course which trains those with technical and mechanical interests for positions in industry.

NAIT is one of three technical institutes in Canada which offers this type of program. It has been patterned after a British engineering course called Production Engineering.

The two main areas into which the course may be divided are mechanical and production. In the first year the emphasis is on the mechanical aspect. With subjects such as mathematics, mechanics, drafting and effective communications, a firm basis is established on which much of the rest of the course depends. These subjects provide the student with skills he will use constantly.

The second year of the course contains a substantial amount of mechanical emphasis but also introduces the production aspect. Courses included in this area are work study, production management, and plant layout.

Industry, being as diversified as it is, makes it difficult for anyone to specialize in any particular area. With this in mind, Industrial Production includes a wide range of subjects including welding, manufacturing processes, materials, metallurgy, tool design, hydraulics, plastics, and thermodynamics. This range of subjects provides the student with an adequate fundamental knowledge in many different fields. It should be kept in mind that even though some of these subjects may have little or no relevance to his future job, the student's ability to adapt, investigate, and reason will be fully developed.

The prospective student should have ability in mathematics and the sciences and should be interested in things mechanical. A willingness to work consistently throughout the year is a definite asset.

The course is continually being revised to meet the demands of industry. Graduates are finding jobs which, with a few years of experience, allow them to enjoy responsible positions.

HOST-HOSTESS

EVERY CUSTOMER A GUEST

"We never close" might be the motto of the food service industry. Across the nation there is always a demand for food--from "hamburger to go" to filet mignon or Lobster Thermodor. People are eating out more often than in the past. With rising population and income levels, increasing leisure and more working wives, it seems likely that this trend will continue.

It is only in recent years that the food service industry has been made aware of the lack of adequately trained service and sales personnel. Through the two 12-week Host-Hostess programs offered yearly, NAIT is attempting to alleviate this shortage.

In the work situation, the food service Host or Hostess generally supervises the dining room service and the sales people. This supervisory aspect (of the position) makes it necessary that students have the personality and leadership abilities for the position, as well as the necessary skill in selling and serving food. For this reason public relations --the art of welcoming guests and seeking to satisfy their wishes--is a significant feature of the course offered. (Relating to guests the foods involved when the menu reads: Pate foie gras, Hespenpfeffer, Pommes des Terre, and Crepes Suzette is no mean task!) Also, specialized training is given in the proper methods of serving informal as well as the most formal dinners. The program includes practical work in banquet service, buffet and catering to receptions, with emphasis on setting attractive table arrangements, efficient, courteous service and pleasant surrounds. Experience in these areas is gained through use of the Staff Dining Lounge.

Educational requirements vary but it is most important that students be neat, well grommed, possess an agreeable disposition and --above all--like people.

Employment opportunities for graduates include positions in dining lounges, and clubs as well as supervisory position with catering firms and industrial food service...and for the adventuresome, summer and winter resorts. An additional bonus goes to those fortunate enough to marry the graduate of the Host-Hostess course--gracious dining with the "right" fork and spoon!

THE PURPOSE OF MATERIALS TECHNOLOGY

The purpose of the Materials Technology course is to train technicians in the selection, application and inspection of engineering materials for industry. Graduates from this technology are working in positions in metallurgical control and research, testing of materials such as steel, concrete, soils and asphalt, non destructive testing of welds and forgings and experimental stress analysis.

In order to provide the necessary theoretical knowledge of the courses studied are varied. The main areas of study are metallurgy, destructive and non destructive testings of construction materials, math, physics, chemistry and English. Laboratory exercises are undertaken to relate the theory and practice in the extenstive laboratory facilities at the Northern Alberta Institute of Technology. Approximately half of the time spent is in the laboratories. With this arrangement the materials technologist is capable of doing the work and applying the theory.

Job opportunities for graduates are excellent with starting salaries competitive with those offered other technologies. Positions are available in either industry or governmental organizations.

INSTRUMENTATION

In the world of today, and the future, instrumentation is the key to automation. The trend towards electronic and pneumatic control in the modern industry of today and tomorrow demands highly trained individuals. This is the function of the Instrumentation Program, to train individuals for a challenging and rewarding career in an increasingly important field.

A graduate can expect to work in such fields as sales, design, installation, services, maintenance and others. The technician is the man who takes the process from the drawing board to the process start-up. The areas of employment include: petroleum, petrochemical, chemical, pulp and paper, metallurgical, fertilizer, food processing, and power generation. These industries are increasingly dependent on control instruments to keep the processes operating smoothly, efficiently, and with a minimum of operator supervision. It is the job of the instrument technician to set up, maintain, calibrate, service and supervise these processes.

Many smaller firms that are unable to employ an instrument engineer are finding that instrument technicians can work closely with instrument suppliers and consulting engineers in solving control problems. Larger industries find the instrument technicians provide skilled assistance to their engineering staff.

Training involves a general technical education in mathematics, physics, chemistry, drafting, and English; a thorough theoretical and practical training in basic and industrial electronics and a study of industrial measurement, control theory and control equipment. An acquisition of skills in maintaining and servicing industrial instruments and controls is obtained in a well equipped laboratory. The student is given exercises in maintenance, trouble-shooting, and repair of electronic and pneumatic instruments.

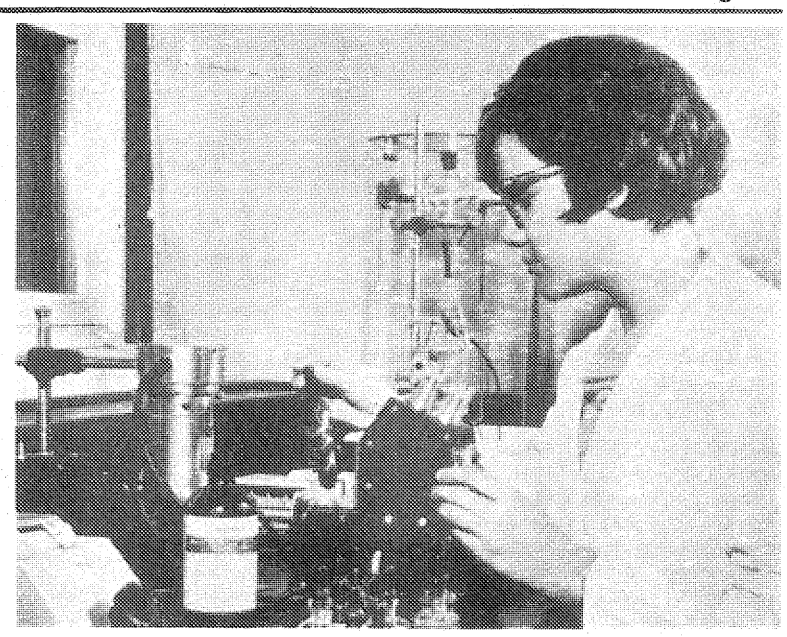
For further information we invite you to meet and speak with instructors and students in the Instrumentation program.

MEDICAL LABORATORY TECHNOLOGY

Medical laboratory technology is one of the para-medical sciences which has evolved in the last forty years. It has its origin in the work of scientists of the late nineteenth and early twentieth centuries. The discovery by Pasteur and Koch of the bacterial and viral causes of such diseases as rabies, tuberculosis, and anthrax led directly to the medical technologist who examines physiological fluids such as urine, sputum or pus in order to identify the bacterium which is causing the infection; the elaboration of a method of determining sugar in blood and urine by Benedict in 1913, and the discovery of insulin by Banting in 1922 to the biochemical technologist who determines, (among approximately one hundred other determinations) blood glucose levels - most essential in both the diagnosis and control of diabetes. The work of Paul Ehrlich, that man of many talents, who not only discovered the first chemical cure for syphilis, but also investigated the reaction of dyes with tissues is still being utilized by the Haematology technologist who examines blood smears for, among other things, abnormal white blood cells characteristic of leukemia, and also by the Histology technologist, who cuts sections of tissues which are 1/20,000 of an inch thick, and who stains (or dyes) these sections for examination by a pathologist. Landsteiner's discovery of the ABO blood groups and Weiner's discovery of the RH factor led to the Blood Bank Technologist who cross matches the blood necessary for such sophisticated and revolutionary surgery as heart and kidney transplants.

The term "information explosion" is a common one: its application to medical science means that no longer is one person - the doctor - able to perform, personally, the multitude of tests necessary for diagnosis, and treatment (or control) of disease. This is now the function of the medical laboratory technologist, who obtains, at the doctor's request, the pertinent information. This cannot be done either accurately or efficiently without a thorough grounding in the theory underlying the tests, and it is for this purpose that medical technology students come to NAIT. During the following year, the students apply this knowledge in the practical portion of their training at an approved hospital.

In their ten months at NAIT, they are expected to acquire a bsic knowledge in six laboratory disciplines: Bacteriology (or Microbiology, as it is more precisely termed), Biochemistry, Haematology, Histopathological Technique, Blood Banking (or Immunohaematology, as it is now called) and Urinalysis. It is a year in which the student must quickly adjust from a high school atmosphere (where it is interesting but not essential to learn all that is taught) to a professional atmosphere (where is is both essential and interesting to learn everything). It is a year of adjustment to the knowledge that within a very short time someone's life will depend on precise and accurate work; a year in which the prospective technologist must adjust to instructors who (almost unreasonably from the student point of view) not only expect but loudly and firmly demand perfection; a year in which a student must adjust to the knowledge that technologists in most other fields will make more money, work better hours and develop fewer ulcers; a year during which study is expected on weekends! Is there no compensation? Those who leave in the first few months of the course think there is none; those who stay (the great majority) begin to realize that their painfully acquired knowledge is essential and valuable; that they will, if only in a small way, contribute directly to a patient's welfare; that there are days when things go all right, instead of all wrong, in a lab; that they are laying the groundwork for some of the most enduring friendships they will ever have; that they starting salary, after they qualify as Registered Technologists with the Canadian Society of Laboratory Technologists, will be approximately $400 a month (not exactly starvation wages); and that their instructors can (even if they rarely do) show a glimmer of humanity.



MEDICAL RECORD LIBRARIAN TECHNOLOGY

A bright green spleen, or a lemon-colored heart, or a purple lung – that's what you will see when you come to Medical Records display on sixth floor! And while you are there, why not sit down and enjoy the medical slides and film the girls have. Our feature in the Medical Record Department of the Future - complete with a computer.

For those of you who are interested – the first year students in the Technology are responsible for this smooth running display which you see today. The second year students are presently involved in their 3-month hospital session. Granted, the second year students were responsible for some of the ideas and must be given credit as well.

Besides the information which you may have received browsing around our display, I am sure you must still have questions about our technology.

Just what is a Medical Record Librarian? If you just forget the word "librarian", as it gives a wrong connotation, that is a start. We are "chart checkers". In a hospital we are the people responsible for checking that all medical information has been recorded on a patient, completely and accurately. We do not judge or evaluate this information, but make certain that it is present on the Medical Record. We are "Custodians". The records must be filed and kept in an accessible manner at all times. We are "Retrieval Experts". Doctors require information for research projects and we have that information - coded and indexed from the Medical Record - right at our fingertips. We are "Clinical Documentalists". Our attendance at Medical Staff Committee Meetings is most challenging as we provide statistics for clinical evaluation.

Is there a great demand for Medical Record Librarians on the "market"? Medical records is a reasonably new field, and as yet there are some hospitals who are unaware of our potential. This is where the opportunities lies – in selling ourselves to those hospitals which don't really know about us. On the other hand, the hospitals which have an organized Medical Record Department usually have their full complement of staff already, and positions may be a bit more difficult to find - especially if a certain location is desired.

What sort of organization is set up for the Technology at NIAT? As we are a part of the Business Department, and in no way associated with the Medical Technologies at NAIT, we have organized to become the Medical Record Librarian Society. Our aim is to achieve a sense of belonging and group participation by first and second year students, as well as a social relationship with other Technology Clubs at NAIT. Planning such fund-raising activities as Sock Hops, candy sales, and Car Washes, form a portion of our monthly meetings. For variety, we are sometimes fortunate enough to have a guest speaker attend our meetings.

What other extra-curricular activities can a Medical Record student become involved in. Intramural sports such as volleyball, curling, badminton, and basketball have attracted many girls with a competitive spirit; or even those just wanting lots of fun. For those adept at writing or arranging material for printing, there is the NAIT newspaper and Yearbook. This year, we are proud to say that a first year student was asked ro run for NAIT Queen-just another of the many activities NAIT has to offer.

We hope that you have enjoyed the Open House displays this year, and if you have any particular questions about our Technology, please do not hesitate to ask.

MEDICAL X-RAY TECHNOLOGY

The X-Ray Technologist is a member of the medical team in the Hospital or Clinic. X-Ray is playing an ever increasing role in medical diagnosis and treatment of disease.

Over the past twelve years there has been a three to four fold increase in the number of X-Ray examinations undertaken in the hospitals and medical clinics in Alberta. During this time the size of the X-Ray department and the numbers of Radiological Technicians required has increased correspondingly. With the continual increase in population, and development of new radiological procedures there is an ever increasing need for fully qualified technicians in this area of patient care.

Medical X-Ray Technology is a two year program for either Diagnostic Radiography or Therapeutic Technology. An additional year is required for Registration in both Specialties. Before the training program at the Northern Alberta Institute of Technology was initiated in 1963, the entire training was given at the Accredited Training Schools in the X-Ray Departments in the larger hospitals. The training is now carried out as a co-operative program between the hospital school and the section at NAIT.

The X-Ray Technician spends most of his time with the patient. Following admission of the patient to Emergency, the first stop is frequently the X-Ray Department. Because of this constant involvement with the seriously ill or injured patient and as many of the x-ray procedures involve teamwork with other medical personnel, the student spends part of his training period at the hospital and the remaining time in the X-Ray Section at NAIT.

The student is accepted by the accredited training school in the hospital. Application may be made to any of the four city hospitals for training in Diagnostic Radiography. Students come to NAIT from Red Deer and Calgary. The Edmonton Cancer Clinic is the only training school among the hospitals or clinics in the province that is accredited for the training of both Radiographic and Therapeutic Technologists. The students undertaking the Therapeutic program attend the institute for the subject applicable to both courses. Therapeutic Technology involves the use of X-Ray, and various radioactive sources for the treatment of patients with cancer and other diseases.

If the student has fulfilled the requirements for examination at the end of the two year training program, he may attempt the National Examination set by the Canadian Society of Radiological Technicians. Certification following successful completion of these examinations entitles the technicians to use the designation "R. T." C.S.R.T. after his name which indicates proficiency in his chosen profession. This certification is recognized across Canada, and through reciprocity in the United States, Great Britain and a number of other countries.

DENTAL LAB

Within the dental profession there are two catagories – dental mechanics and dental technicians. Dental mechanics make complete dentures directly for the public and dental technicians work under the specifications of a dentist. NAIT offers a two year program designed to introduce students to this field. The first year is divided between the ritual and practical work, giving a background in business, English, mathematics, anatomy and materials used in dental prosthetics. The second year is given to practical clinical procedure and general laboratory techniques.

Upon acquiring a diploma one may choose to apprentice as a mechanic or a technician.

To become a dental mechanic requires an apprenticeship of two years. After this period one may apply for a licence as a Certified Dental Mechanic. Whereupon one may seek a position in an established clinic or set up his own clinic.

A dental technician requires a three year apprenticeship before applying for a licence. He may apprentice in a commercial dental laboratory or directly under a dentist. This aspect of dental laboratory technology entails partial dentures, gold and porcelain tooth restoration and orthodontics (the correction of tooth irregularities). In this area one may specialize or become a general dental technician.

Prospective students are required to have a high school diploma and should possess a high degree of manual dexterity.

DIETARY TECHNOLOGY

If you are interested in food service operations, Dietary Technology is for you. There is a rapidly increasing need for trained personnel capable of assuming responsibilities in food service operations.

Graduates are capable of assisting Food Service Managers or Dietitians in Hospitals, Nursing Homes, and commercial Institutions with some of the following:

Supervision in food production areas; supervision in cafeterias; handling therapeutic diets; supervision of service to food; helping in office routine.

In small country hospitals, graduates may assume responsibility for the food service area.

The Dietary Technology course was established through the combined efforts of the Departments of Education, the Department of Health, and the Alberta Registered Dietitians Association.

The Curriculum consists of a two year program of studies involving theory and practical training. The course is divided into Plan A and Plan B. Plan A involves the post high school student. Applicants must have 67 high school credits, with at least a B standing in Mathematics 20, 21 or 22 as well as high school Chemistry. Plan B is an upgrading course for persons who have had a minimum of five years employment in Hospital or Restaurant Food Services.

Instruction in theory will take place September to May at NAIT. This is followed by a one year term of in-service training at two or more hospitals or commercial institutions. At the end of the year the students return to NAIT for six weeks of classes. These classes will consist primarily of review, solving problems and applying knowledge learned so far in the course. Plan B are exempt from the year of hospital training. The course is one year, from September to June.

The courses are all interesting and a valuable asset to future careers in food service. The subjects consist of introductory courses in: typewriting, English, Mathematics, record keeping, physiology, foods, food preparation, normal and therapeutic nutrition, institutional management and psychology. The students attend weekly food labs and go on various field trips. There are also chemistry labs during the third quarter. All students wear standard white uniforms white stockings, and white shoes.

Upon graduation, students receive a Diploma in Dietary Technology, cap and pin to signify that they are Dietary Technicians.

If you're interested in Dietary Technology, come and see our displays on the 1st floor of the Tower building.

DISTRIBUTIVE TECHNOLOGY

Distributive Technology graduates start on the fifth floor not the ground floor of the business world. The course offers a good background for the man or woman who has executive level aspirations.

Between the production of an item and its final consumption there exists innumerable functions. The two year curriculum in Distributive Technology is a study of these functions. The course of study is designed to enable graduates to enter ANY of the occupations dealing with the marketing of goods and services.

Distributive Technology was first offered in 1964. Now, under the guidance of Mr. Baird, the course "runs smoothly" from the teaching of subjects to the participation in social functions. Queen Week, Open House and various sports events are enthusiastically joined in by the club.

Although Distributive is one of the most enjoyable technologies socially, it is also one of the technologies with the highest workloads.

FIRST YEAR

The first year of the program is a study of business theory and application to provide the student with a general background of knowledge and skills that can be applied to numerous occupations.

The Distributive student has a choice in the second year of the Distributive options of Advertising and Sales or Merchandising. Also, Second year Banking and Finance, and Business Administration options are available.

SECOND YEAR DISTRIBUTIVE OPTIONS

1. Advertising and Sales

In 1971 the Professional and Advertising options will be combined.

Our society demands a constant flow of goods and services. This flow is maintained through the constant efforts of the Professional Salesman, a person who can both advertise and sell his product, selling is identified with a company representative who is a market manager in his territory, who sells within a keenly competitive business structure, and who utilizes highly sophisticated motivational tools, combined with a problem solving approach to business.

Within this program, the student will be schooled in basic subject matter areas. The student will examine and develop sales techniques in the realm of industrial and retail markets. He will explore the area of the consumer with psychology and motivation. Administrative concepts are probed and analyzed, and an orientation of marketing methodology. It provides both the basic and advanced techniques of advertising. It includes the study of copywriting for print and broadcast media and the role of advertising agencies, the role of advertising in the market process, and in management.

Possible occupations open to graduates range from direct sales to corporate accounts representative. In advertising and sales research agencies to the advertishing departments in the print and broadcast medias.

2. Merchandising

The purpose behind the Merchandising program is to provide students with a solid grounding in the practical and theoretical approach to Merchandising, and to develop for retailing organizations, employees who can immediately function as responsible staff members.

The course content is very extensive, and covers the following aspects of Merchandising: Retail Organization, the Customer, the Buyer, Merchandising Policies, Technique of Buying, Fashion Merchandising, Visual Merchandising, and Merchandise Control.

There is a co-operative Work Program with Department stores in this program now, but by 1971 it will be phased out by a Sales course and two advertising courses, which will give the graduate a fuller knowledge of the field he will be dealing with.

Also available in the second year are the second year options in Banking and Financial Management and the Credit Administration, Business Management and Accounting Options of Business Administration.

Dede Hager, Department Manager of Ladies Sportswear, at the Bay, and Jim Brown, Vice President of Sales, for Stanfields. Both are Distributive graduates of 1967.

ELECTRICAL TECHNOLOGY

Of all the things taken for granted in our age probably one of the most frequent is the availability of electrical energy. We are forcefully made aware of advance in areas of medicine, science, space technology, food production and industrialization of our society but seldom correlate them all with one common factor; electrical energy. All future advances serve to accelerate the demand for electrical energy and expand the opportunities for people trained in this field.

The electrical technician receives a comprehensive training that will complement the specialization of his future employment in one of the many areas of opportunity to which electrical energy is a common factor.

Subjects in the program begin with a thorough coverage of basic electro-magnetism and electronic theory supported by related laboratory experiments as well as mathematics, physics and technical English. Successive quarters cover theory and laboratory experiments on single and three phase systems, d.c. and a.c. machines, transformers, switch gear, controllers, electronic power supplies, amplifiers, solid state and integrated circuits as applied to control functions and a continuation of applicable math, physics and English. The final year subjects concentrate on industrial electronic control, static switching, supervisory control, telemetering, protective relaying, commercial and industrial design problems and theory application of computer math.

The Electrical Technology program may be completed in either two or three years, depending on the student's academic background. A student with grade XI would require 3 years to complete the course while one with grade XII may complete an accelerated course in 2 years.
Details of high school subject requirements for admission into the course are available from the Institute.

1969 graduates average salary $500/month.

Employers:
Calgary Power
Edmonton Power
Edwards Alarm
National Transmission
Canadian Utilities
Canadian Westinghouse
Canadian General Electric.

DRAFTING TECHNOLOGY

Drafting or Engineering Graphics, as it is formally called, is small only in the number of students enrolled in the technology. There is a great deal more to drafting than sitting at a desk all day and drawing lines.

To start with, the draftsman plays a very important role in industry today. Any manufactured article, whether it is a skyscrapper or a bottle top, must be first drawn by a draftsman. The draftsman is the communicator between the engineer and the manufacturer. No matter how brilliant an idea is, it is useless until it is expressed in some concrete form.

his is the role of a draftsman.

Drafting Technology is a steppingstone into a varied number of fields such as: architectural, electrical, mechanical, municipal, topographyical, technical and design. While the Drafting program does not pretend to turn out experts in all fields, it does offer to the students a full working knowledge in several fields, there is a wide range of job opportunities available to the graduates of this program. There is a definite need in the employment field for versatile, broadly trained technicians, and on a long term basis a good technical knowledge is the key to promotion into design and supervisory positions as well as offering a good foundation into a future formal education.

The graduates from Drafting Technology are those who have sacrificed most of their weekends and weeknights in completing the often lengthy assignments. The work load in the Drafting Program is rather demanding at the best of times, but the only way to achieve anything worthwhile. This course is definitely worthwhile.

Unfortunately we cannot tell you everything about our course now, but we would enjoy answering your questions and talking to you about our course. We are located in rooms E205 and E208 on the second floor of the technical wing.

ELECTRONICS

The Electronics Engineering course is designed to produce engineering technologists of high caliber to work in design, research, production, maintenance, or installation phases of the electronic industry.

People entering Electronics have an option of either a three year course or an accelerated two year program depending on their qualifications. During Year A the students are given an analysis of fundamental electronics theory which includes basic circuitry as applied to transistors and tubes.

During Year B students investigate the Electronics field more fully. Courses studied include the basics of instrumentation, solid state, communications, and black and white television. All of these courses consist of both instructional theory and practical lab experience, using the highest quality and most modern electronic equipment available in the Electronics industry today. During Years A and B reinforcement courses as English, Calculus, Physics, and Engineering drafting are used to expand the students knowledge.

In Year C the student delves more deeply into communications and solid state. Color television, industrial electronics, control systems, and computer fundamentals are also studied. Depending on the student's interest, there are optional courses offered so the student can expand his knowledge in the field of his own choice. The options available are standardized calibration, radio and television broadcasting, modern physics, biomedical electronics, telecommunications, computer language, and exploration electronics. Laboratory experimentation is an integral part of every electronics course taken during the three years of studies.

The curriculum and course content are being developed through the closest co-operation between the electronics department at NAIT and the employers themselves to insure that the graduate has a basic understanding of the rapidly expanding electronics endustry. Graduates from electronics are presently employed by companies throughout North America as well as other parts of the world. They are also eligible for membership in the Institute of Electrical and Electronic Engineers and Alberta Society of Engineering Technicians.

The saying that all work and no play makes Jack a dull boy also holds true at NAIT. Therefore, the Electronics Club organizes many extracurricular activities to help a student become involved in both social and or athletic life in NAIT. The Electronics Club boasts of being the most active club in school. Each year is started out by running a Miss Freshette candidate followed by a Get Acquainted Party. Regular parties are also staged throughout the year. One of the biggest aspects of the year at NAIT is the queen week. The Club traditionally sponsors a queen candidate for this gala event. As well as these social functions the Club also participates in all intramural sports. Members of the club are entitled to many useful things during his stay at NAIT. A brochure is published every year by the club and is sent to prospective employers outlining the courses taken and inviting them to tour the facilities. The membership card entitles the member to make purchases of electronic components and equipment at wholesale prices.

PATTERN DRAFTING AND TAILORING

"It is possible to make a basic bodice that does not require altering," says Mrs. Radicchi, the head of the Sewing Department at rooms 716 and 710 in the Tower Building.

A purchased basic pattern does not help many women, because it is made for the average figure. Therefore, those who complete the third and fourth year of Pattern Drafting and Design offered in the day courses, appreciate the skills learned in making patterns for the individual from personal measurements.

NAIT has the only school for individual pattern drafting in Canada. The Course was eveolved by Mrs. Radicchi, a graduate of Domestic Science Schools, Haarlem, Holland, as a teacher in Drafting, Design and Sewing. Five years teaching experience in Holland and several more in Canada have contributed to the course evolved by Mrs. Radicchi for NAIT. Mrs. vander Voet is a Day-Teacher. Sewing ability is not a prerequistite, for the women who attend 9:00 - 4:00 one day a week from October to April.

The First Year entails Basic Drafting, sewing for self and children (apron, blouse and skirt, drafted from own measurements, child's dress and pyjamas drafted from a Key.)

In the Intermediate Year the student discovers "herself" in a newspaper packed dress form, which makes her aware of the many figure "irregularities" and the wonder of the word "average size".

More drafting, tailoring and Design produce slacks, vest, child's coat and pleated skirts. European and Commercial patterns are also introduced.

The pattern drafting and tailoring of ladies coats and suits is undertaken in the Third Year. Evening and cocktail dresses, loungewear and advanced styles from European Fashion Magazines as well as opportunity for original design.

The Fourth Year is termed Dressmaker, preparatory to sewing for others professionally. Tests, utilizing judgment, sewing skill and speed are conducted regularly. Basic bodices and clothing are made for one another. Many Graduate Dressmakers are working at full capacity in their own creative way.

Stella Melnychuk, with a Dressmaker Certificate is a successful Dressmaker in the city. She also teaches in the evening extension programme.

Lola Mierke is Head Cutter in the Drama Department at the University of Alberta. It is her task to make patterns from fashions designed for plays. Once she has constructed patterns for each individual participating, she is responsible for the completion of the costumes.

Rose Vogel, advanced class '69 won second place in an All Canada "Young Designers for Tomorrow" contest sponsored by Dupont of Canada.

Pat Perry, a graduate of the Third Year evening course has a clientele which offers creative scope in dress design. One assignment entailed adapting an idea from a given pattern to several ladies of a wide range of statures for a Wedding Party.

Many women seek dressmaking as a profession, offering independence and those who have obtained the skill of Individual Pattern Drafting are assured of success.

Classes are confined to two rooms at the present time, so that space may be provided for other technologies, therefore, one hundred applicants were denied registration in the fall of '69. It is hoped that the course's value as a career for women will be recognized.

An evening course containing the essentials of drafting and basic patterns is offered as a hobby course. No exams are given, or certificates earned.

THE SECRETARIAL IMAGE

The role of a secretary is perhaps the most important one assumed by a woman in the business world. When the phone rings in a business office, it is usually the secretary who answers. When a busy executive wants to send a letter, it is the secretary who takes the dictation in shorthand and then produces a mailable transcript at the typewriter. When the executive carries heavy assignments, it is the secretary who schedules his appointments, arranges his daily activities, and reminds him when necessary. When others are nervous and on edge, it is the secretary who remains cheerful and calm.

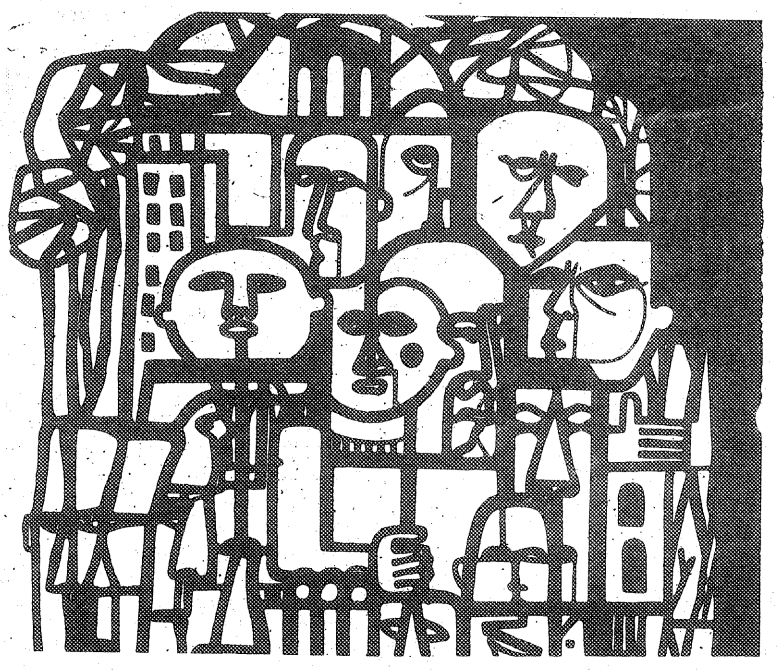
The secretary is the unsung office heroine who types, takes dictation, telephones, greets callers, keeps records, and seeks information. The secretary is an indispensable component of Canadian enterprise; she is the assistant on whom her executive relies to conduct the day to day activities of today's business office. Today's secretaries are learning to accept the challenge of change thrust upon them by modern technology. Having earned recognition, status and prestige through the years; secretaries are now beginning to emerge as important members of the management team.

A secretary must be extremely versatile. She must be prepared to perform countless activities that will free her boss to make more efficient use of his executive abilities.

A properly dressed, pleasant-looking, poised secretary with a cheerful voice, and a pleasant smile can be a great asset, not only to her employer but to an entire business organization.

Secretarial work is like any other work in that how far you go depends on you. If you are simply looking for a job, you can get it. But if you are willing to invest--in terms of service, study, time, practice, effort, improvement--you can become a top-level secretary with challenging responsibilities, a substantial salary, and a high degree of job satisfaction.

SOCIAL SERVICES



The Social Services program is designed to provide the basic knowledge and skills, both practical and theoretical, required to work with people under the auspices of social service agencies and institutions. The need for persons with this kind of training is indicated by the acute shortage of professionally trained personnel; the expansion of existing programs and agencies and the implementation of new services.

Opportunities for interesting and rewarding careers at the direct services level are provided by public and private social agencies, in the areas of child care, financial assistance, probation leadership development group homes, institutions for the aged, the physically and mentally disabled, juvenile offenders, alcoholism, drugs and many others.

Included in the curriculum are the following topics: the basic universal needs of people, human growth and development, contemporary social problems, caseworks, groupwork, community organization, social service programs and resources, current welfare problems and practical administration including recording and budgeting. In addition, students are provided with a practical field work experience two days of the week and they participate in field trips, seminars and conferences in the Edmonton area.

The program is growth oriented designed to enhance the student's capacity for human relationships and his effectiveness as a helping person: It is philosophy oriented in that each student is required to examine his personal philosophy and that of the social services: it is practical oriented in providing the student with the practical knowledge and skills required by the social service worker.

Prospective students are encouraged to make enquiries about the social services field before applying for admission to the course.

People who enjoy life, who have a wide range of interests, who are sensitive to the needs and feelings of others and who desire to work with people at the direct services level are well qualified for this program. An essential quality is a genuine concern for other people.