DEPARTMENT OF EDUCATION

THE MANITOBA TECHNICAL INSTITUTE

WINNIPEG, MANITOBA

SECOND ANNUAL ANNOUNCEMENT

1949 - 1950
THE MANITOBA TECHNICAL INSTITUTE

Portage Avenue at Wall Street

WINNIPEG, MANITOBA

Under the Direction
of
The Department of Education
Technical Branch

Hon. C. RHODES SMITH, K.C. ............... Minister of Education
Mr. R. O. MacFarlane, Ph.D. ............ Deputy Minister of Education
Mr. B. F. Addy, B.Sc. ......................... Principal
Foreword...

THIS BOOKLET describes the educational opportunities and outlines the courses of the Manitoba Technical Institute.

The work of the Institute is on a more advanced level than the regular High School work. It is built on the foundation of the general education obtained in the High School, and designed to provide training of a scientific and technical nature that will fit students for leadership in industry.

The courses offered are closely related to the industrial life of the Province of Manitoba. They have been planned in co-operation with representatives of the various industrial fields. They provide practical shop experience judiciously mixed with theory. For young people of ambition and ability, they offer a sound basis for growth in proficiency in some of our major industries.
The Technical Institute

The Manitoba Technical Institute has been established for the purpose of furnishing advanced technical training to qualified high school graduates and adults. There is a steady demand for workers who can qualify as foremen, supervisors, superintendents, master-mechanics, toolmakers, inspectors, salesmen, draftsmen, and designers. The courses of the Institute give a preparation which leads to these important positions.

The philosophy of Manitoba Tech is summed up in the school slogan "Learn to Earn" and instructional practices are directed toward that aim. Whether students are training to become cooks, watch repairmen, hairdressers, or diesel mechanics, they learn on the same type of equipment that is standard in the trade and from instructors who have made good on the jobs they teach. Training conditions are closely paralleled with those of industry. Thus, the transfer from training to employment is easier.

The Manitoba Tech provides for the welfare of its students as they "learn to earn" under state sponsorship. Well established as a part of Manitoba's educational system of terminal education, although not yet a year old, the Institute continues to grow at a rapid pace meeting the needs of the people. Vacancies exist in the majority of the courses now offered, and new courses will be added as the need arises. Facilities are available for approximately 50 courses with an enrolment of about 750 students.

Since the technical institute is a comparatively new type of school, it may be worthwhile to list some of its characteristics:

1. Its purpose is to train men and women for positions in industry which lie between the skilled crafts and the highly scientific professions.

2. It offers training both for pursuits concerned with planning and control and for supervisory pursuits concerned with operation and maintenance.

3. Being intensive in purpose, its courses are briefer, more practical, and more specific than those of the professional college. They are essentially terminal rather than preparatory.

4. High School graduation or its equivalent is preferred as an admission requirement.

5. The scheme of instruction follows much more closely the actual usage of industry rather than that of professional engineering schools; its methods of teaching are relatively direct with a strong emphasis on doing as distinct from book study.
6. Courses are based upon principles of science, require the use of mathematics usually beyond high school, and emphasize rational processes rather than rules of practice.

THE INSTITUTE BUILDINGS

The main building is situated on Portage Avenue at Wai Street in Winnipeg and has a floor area of approximately 155,000 square feet. It was purchased from Ford Motor Company of Canada in 1942 and throughout the war years was used to train Service tradesmen. After the war, Canadian Vocational Training, in co-operation with the Department of Education used the building to train thousands of ex-service personnel so they could rehabilitate themselves in commerce and industry and also provided the necessary academic training for those who desired to enter University.

On the First of September 1948, the Provincial Government assumed control and the Manitoba Technical Institute came into existence. Throughout the winter of 1948-49 additional modern equipment was purchased and installed. A new annex was added to house the construction trades, where facilities are available for the construction of bungalows and other smaller types of framed buildings; an information and reading room and several new departments and classrooms were added. At the present time, instruction is being offered in the following departments:

- Automotive
- Commercial
- Construction
- Electrical
- Metalwork
- Draughting, Surveying and Relating Subjects
- Specialities
- Teacher Training
- Farm Mechanics

REQUIREMENTS FOR ADMISSION

An applicant for admission to the Manitoba Technical Institute must be sixteen years of age or over and although a High School education is desirable it is not essential. Minimum academic requirements have been laid down for most of the courses and are indicated in the outline of the various courses.

Where an applicant does not possess the required formal educational standard, an opportunity will be afforded for competent students to enter classes if, in the opinion of the Principal of the Institute, the student is capable of doing the work. Age, practical experience in industry, business and the Armed Services, and the educational background of the applicant will be taken into consideration.
GRADUATION

Certificates of Attainment will be issued to all students who complete satisfactorily day courses with at least 90% attendance and a minimum standard of 60% in all subjects. Duplicate certificates will be issued only on payment of a fee of $1.00.

EQUIPMENT AND TOOLS

The Institute provides all machine tools, special equipment, hand tools and supplies for school projects. Students in the various courses are required to furnish text books, materials required for any special projects constructed for themselves, stationery supplies, such as pencils, erasers, notebooks, etc., and shop clothing. Two suits of coveralls are required for most shop courses.

ATTENDANCE AND DISCIPLINE

Day classes are operated from 8:30 a.m. - 12:00 noon and from 1:00-4:00 p.m., five days per week throughout the school year. A fifteen minute break period is allowed morning and afternoon.

All students are subject to the rules and regulations of the Institute and may be suspended or dismissed if their conduct and attitude are unsatisfactory. The Institute reserves the right to dismiss at any time students who are unable or unwilling to profit from instruction. In such cases no portion of the fee other than the tool deposit is refundable.

Students are required to complete all assignments of home work.

FIELD TRIPS

Due to the fact that the work at the Institute is closely related to the work of industry, it is the policy of the school to take field trips to outstanding establishments closely related to the students' studies. The students are expected to bear their own expenses, if any, on these trips.

LIBRARY

The Institute library and reading room located on the second floor of the main building functions as a dynamic center through which students and faculty are enabled to carry on many of their research, study and recreational activities. The library collection consists of a variety of volumes and a wide selection of magazines, indexes, and pamphlets. The library is open from 8:30 a.m. to 5:00 p.m., Monday through Friday; Saturdays from 9:00 a.m. to 12:00 noon.
EXPENSES AND DEPOSITS

No dormitories are operated in connection with the Institute. Students may obtain board and room in the city. A list of suitable boarding houses may be obtained from the main office. Board and room will cost from $40 to $45 per month.

A tool deposit fee of $10.00 per course is required of all students. This amount less any deduction for tools lost or damaged is returned to the student if application is made within thirty days after the completion of the course.

REGISTRATION FEES

Fees for all courses are confined to that of registration. They are as follows:

<table>
<thead>
<tr>
<th>Length of Course</th>
<th>Manitoba Resident</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months or less</td>
<td>$25.00</td>
<td>$50.00</td>
</tr>
<tr>
<td>12 months</td>
<td>50.00</td>
<td>100.00</td>
</tr>
<tr>
<td>18 months</td>
<td>75.00</td>
<td>150.00</td>
</tr>
<tr>
<td>2 years</td>
<td>100.00</td>
<td>200.00</td>
</tr>
</tbody>
</table>

These fees represent the maximum fee for the periods indicated. When additional training is required, a further charge of $5.00 per month will be made, e.g., the fee for a nine months course, for a resident will be:

$25.00 and $15.00 = $40.00

or the fee for a fourteen month course will be:

$50.00 and $10.00 = $60.00

Non-Residents will pay $10.00 per month for additional training beyond the basic period.

ARE FEES REFUNDABLE?

Applicants are urged to make sure that they are enrolling for a course in which they seek instruction. These small registration fees are not refundable.

BURSARIES

Bursaries for technical courses are available. For application forms and particulars write to the Registrar, Department of Education, Winnipeg.
**Calendar 1949-1950**

**FIRST TERM**

**Tuesday, September 6** — Teacher Training, Watch Repair, Hairdressing and Beauty Culture, and all 7-12 month courses open.

All three month courses open.

**Monday, October 3** — First six-week Automotive Apprenticeship course opens. (1st and 2nd year Apprentices only.)

Night classes open for a period of ten weeks (two nights per week).

**Tuesday, October 11** — First two-month Apprenticeship and one-month Apprenticeship courses open. (Other than Automotive).

**Monday, October 17** — First Farm Mechanics (Short Course) opens.

**Monday, November 14** — Second six-weeks Automotive Apprenticeship Course opens. (1st and 3rd year Apprentices only).

**Wednesday, December 21** —

Institute closes for Christmas vacation.

**1950**

**SECOND TERM**

**Tuesday, January 3** — Institute re-opens for all classes.

Third six-weeks Automotive Apprenticeship Course opens. (4th and 5th year Apprentices only).

First six-week Blacksmith Apprenticeship Course opens.

Second two-month Apprenticeship and one-month Apprenticeship Courses open. (Other than Automotive).

Second Farm Mechanics (Short Course) opens.

**Monday, January 9** — Night classes re-open for a period of ten weeks. (Two nights per week).

**Monday, February 6** — Third one-month Apprenticeship Course opens (other than Automotive).
Monday, February 13 — Fourth six-week Automotive Apprenticeship Course opens. (4th and 5th year Apprentices only).
Second six-week Blacksmith Apprenticeship Course opens.
Third Farm Mechanics (Short Course) opens.

Monday, April 3 — Fifth six-week Automotive Apprenticeship Course opens. (2nd and 3rd year Apprentices only).

Wednesday, April 5 — Institute closes for the Easter Vacation.

Tuesday, April 11 — Institute re-opens for all classes.

Thursday, June 29 — Graduation exercises for Teacher Training and the 7-12 month classes.

Tuesday, July 4 — Summer School for General Shop Instructors opens.

Friday, August 11 — Summer School for General Shop Instructors closes.

Saturday, August 12 — Institute closes for three-week vacation period.

The Institute reserves the right to alter its courses and programs at any time.

Students under certain circumstances may arrange, by obtaining permission from the Principal, to enter classes periodically during the school year.
## Courses

<table>
<thead>
<tr>
<th>No. 10 — Automotive</th>
<th>Length in Months</th>
<th>Capacity</th>
<th>Entry Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Automobile, Carburetion and Ignition</td>
<td>3</td>
<td>10</td>
<td>3 Jan., 1950</td>
</tr>
<tr>
<td>* 12. Automotive Apprentices</td>
<td>11(\frac{1}{2})</td>
<td>40</td>
<td>See 1949-1950 Ca.</td>
</tr>
<tr>
<td>13. Automobile Mechanics</td>
<td>10</td>
<td>24</td>
<td>1st each month</td>
</tr>
<tr>
<td>* 14. Auto Body Repair</td>
<td>8</td>
<td>15</td>
<td>1st each month</td>
</tr>
<tr>
<td>15. Diesel</td>
<td>10</td>
<td>15</td>
<td>1st each month</td>
</tr>
<tr>
<td>16. Automotive Related</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. 30 — Commercial</th>
<th>Capacity</th>
<th>Entry Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>31. Business Machines</td>
<td>5-7</td>
<td>1st each month</td>
</tr>
<tr>
<td>32. Stenography</td>
<td>7-9</td>
<td>1st each month</td>
</tr>
<tr>
<td>33. Secretarial</td>
<td>9-11</td>
<td>1st each month</td>
</tr>
<tr>
<td>34. Junior Accountancy</td>
<td>9-11</td>
<td>1st each month</td>
</tr>
<tr>
<td>35. Selected Courses (May be arranged)</td>
<td>—</td>
<td>1st each month</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. 50 — Construction</th>
<th>Length in Months</th>
<th>Capacity</th>
<th>Entry Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>* 51. Bricklaying</td>
<td>8</td>
<td>12</td>
<td>6 Sept., 1949</td>
</tr>
<tr>
<td>* 52. Painting and Decorating</td>
<td>8</td>
<td>15</td>
<td>6 Sept., 1949</td>
</tr>
<tr>
<td>* 53. Plumbing</td>
<td>8</td>
<td>12</td>
<td>6 Sept., 1949</td>
</tr>
<tr>
<td>* 54. Plastering</td>
<td>8</td>
<td>12</td>
<td>6 Sept., 1949</td>
</tr>
<tr>
<td>* 55. Carpentry</td>
<td>8</td>
<td>15</td>
<td>6 Sept., 1949</td>
</tr>
<tr>
<td>* 56. Factory Woodwork</td>
<td>8</td>
<td>15</td>
<td>6 Sept., 1949</td>
</tr>
<tr>
<td>57. Bench Woodwork and Woodturning</td>
<td>3</td>
<td>15</td>
<td>1st each month</td>
</tr>
<tr>
<td>58. Furniture Construction and Design</td>
<td>6</td>
<td>15</td>
<td>1st each month</td>
</tr>
<tr>
<td>Length in Months</td>
<td>Capacity</td>
<td>Entry Dates</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
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<td></td>
</tr>
<tr>
<td>59. Upholstering</td>
<td>8</td>
<td>20 1st each month</td>
<td></td>
</tr>
<tr>
<td>60. Related Woodwork</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

**No. 70 — Electrical**

* 71. Electrical Construction 8 15 6 Sept., 1949
72. General Electrical Course 10 10 1st each month
* 73. Elementary Motor and Coil Winding 8 10 1st each month
74. Lineman's Course 3 10 2 May, 1950
75. Radio Servicing 10 15 1st each month

**No. 90. — Metalwork**

* 91. Blacksmithing $1.20 10 See 1949-1950 Cal
92. Machine Shop Practice 10 20 1st each month
93. Tool Making 10 20 1st each month
94. Welding, Oxy-acetylene 4 10 1st each month
95. Welding, Electric 4 7 1st each month
96. Welding, Related -- --
* 97. Sheetmetal 8 15 6 Sept., 1949
* 98. Mechanical Refrigeration 8 15 6 Sept., 1949
100. Forging and Heat Treatment 8 10 1st each month

**No. 110 — Drafting, Surveying and Related Subjects**

111. Related Drafting and Blueprint Reading -- --
112. Elementary Surveying (Instruments) 3 20 1st each month
113. Mechanical Drafting .. 10 20 1st each month
114. Architectural Drafting .. 10 20 1st each month
<table>
<thead>
<tr>
<th>No.</th>
<th>Specialty</th>
<th>Length in Months</th>
<th>Capacity</th>
<th>Entry Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td>Sheetmetal Pattern Drafting</td>
<td>6</td>
<td>20</td>
<td>1st each month</td>
</tr>
<tr>
<td>116</td>
<td>General Science (Related)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>117</td>
<td>Industrial Mathematics (Related)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>Trade English (Related)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**No. 130 — Specialties**

<table>
<thead>
<tr>
<th>No.</th>
<th>Specialty</th>
<th>Length in Months</th>
<th>Capacity</th>
<th>Entry Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>131</td>
<td>Commercial Cooking</td>
<td>6</td>
<td>10</td>
<td>1st each month</td>
</tr>
<tr>
<td>132</td>
<td>Hairdressing and Beauty Culture</td>
<td>7</td>
<td>20</td>
<td>1st each month</td>
</tr>
<tr>
<td>133</td>
<td>Power Machine Operators (Needle Trades)</td>
<td>3</td>
<td>40</td>
<td>1st each month</td>
</tr>
<tr>
<td>134</td>
<td>Shoe Repairing or Shoe Making</td>
<td>6</td>
<td>15</td>
<td>1st each month</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td>1st each month</td>
</tr>
<tr>
<td>135</td>
<td>Watch Repairing</td>
<td></td>
<td>15</td>
<td>1st each month</td>
</tr>
<tr>
<td>136</td>
<td>Practical Nursing</td>
<td></td>
<td>12</td>
<td>35 See page 31</td>
</tr>
</tbody>
</table>

**No. 150 — Teacher Training and Farm Mechanics**

<table>
<thead>
<tr>
<th>No.</th>
<th>Specialty</th>
<th>Length in Months</th>
<th>Capacity</th>
<th>Entry Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>151</td>
<td>Industrial Arts Instructors</td>
<td>10</td>
<td>10</td>
<td>6 Sept., 1949</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>or 3 Jan., 1950</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17 Oct., 1949</td>
</tr>
<tr>
<td>152</td>
<td>Farm Mechanics</td>
<td>1½</td>
<td>20</td>
<td>3 Jan., 1950</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13 Feb., 1950</td>
</tr>
<tr>
<td>153</td>
<td>Summer School for General Shop Teachers</td>
<td>1½</td>
<td>50</td>
<td>4 July, 1950</td>
</tr>
</tbody>
</table>

* Applications to be registered with Provincial Department of Labour.
COURSE No. 11

Automobile Carburetion and Ignition (3 months).

Pre-requisites: Completion of course No. 12 or No. 13, or grade VIII with at least two years trade experience.

Contents: Theory: Specialized tools, equipment and materials; Automotive electricity; basic principles of carburetion; Types, makes, maintenance and adjustments. Theory of special test equipment.

Practice: Building up of electrical circuits; Inspecting and testing ignition systems, generators, starters, cut-outs and regulators. Taking down and assembling carburetors and fuel pumps. Testing with specialized equipment. Tune-up and trouble shooting.

Related: Course No. 117—Mathematics
Course No. 111—Blueprint Reading and Related Drafting
Course No. 116—Science.

COURSE No. 12

Six-week Automotive Courses for Indentured Apprentices in various stages of their training.

Pre-requisites: Approval of the Director of Apprenticeship, Department of Labour.


5th Year: General review. Trade test.

Related: Course No. 117—Mathematics
Course No. 116—Science
COURSE No. 13

Automobile Repair (10 months).

Pre-requisites: Minimum Grade VIII education and consent of the Principal.


Practice: Dismantling, cleaning, inspecting, fitting, repairing and adjusting, assembling and testing of all parts. Driving. Battery and tire service. Trouble shooting. Tune-up. Preventive service. Maintenance and use of garage equipment and mechanics hand tools.

Related: Course No. 117—Mathematics
Course No. 116—Science
Course No. 111—Blueprint Reading
Course No. 96—Welding and Soldering
Course No. 99—Machine Shop
Course No. 118—Trade English

Textbook: Audels "New Automobile Guide".

COURSE No. 14

Automotive Body and Fender Repair (8 months).

Pre-requisites: Grade VIII completed or approval of the Director of Apprenticeship.

Contents: Theory: Basic tools; Expansion and contraction of metals; The identification and characteristics of lacquers, paints and enamels; Thinner and paint removers; Color blending; Polishing and finishing.

Practical: Care and use of hand and power tools; Frame alignment and estimating; Metal finishing; Sanding; Bumping; Masking; Body hardware repair; Priming; Rubbing out and polishing; Care and use of spray gun, pressure head, etc. Repair and covering of cushions, panels, etc.

Related: Course No. 96—Welding
Course No. 117—Mathematics
Course No. 116—Science
Course No. 111—Blueprint Reading and Related Drafting.

Remarks: Applicants must be physically fit and not allergic to lacquers and paints.
COURSE No. 15

Diesel Mechanics (10 months).

Pre-requisites: Completed Automotive Course No. 12 or Course No. 13 or Grade VIII with previous experience in the Automotive Trade.

Contents: **Theory:** Diesel Engine History; Compression ignition principles; Engineering fundamentals; Fuel oil. Combustion; Lubrication; Cooling; Governing.

**Practice:** General repair and maintenance; Cylinder and valve refinishing; Fitting; Fuel injection pumps and nozzles; Governor adjustments; Transmission; Steering; Final Drive.

Related: Course No. 117—Mathematics
Course No. 116—Science
Course No. 111—Related Drafting
Course No. 99—Machine Shop
Course No. 96—Welding
Course No. 16—Automotive Related

COURSE No. 16

Automotive (Related).

This course is designed to give students the related work for their special courses. No details are listed, as these requirements vary greatly for different courses.

COURSE No. 31

Business Machine (Approximately 5-7 months).

Pre-requisites: Grade X.

Contents: Comptometer; Typewriting (Theory, Forms and Speed); Dictaphone; Duplicating Machine; Spelling; Business English, Business Correspondence; Rapid Calculation; Office Routine.

In addition to these subjects, Bookkeeping and Bookkeeping Machine may be added.

COURSE No. 32

Stenography (Approximately 7-9 months).

Pre-requisites: Grade X.

Contents: Shorthand (Theory and Speed); Typewriting (Theory, Forms and Speed); Business English, Business Correspondence; Spelling; Penmanship; Office Routine; Duplicating Machine; (Dictaphone—optional).
COURSE No. 33

Secretarial (Approximately 9-11 months).

Pre-requisites: Grade X.

Contents: Shorthand (Theory and Speed); Typewriting (Theory, Forms and Speed); Business English, Business Correspondence; Spelling; Penmanship; Bookkeeping, Rapid Calculation, Business Arithmetic; Office Routine; Dictaphone; Duplicating Machine.

For students who desire a Secretarial Course with greater scope, Accounting and Commercial Law may be added.

COURSE No. 34

Junior Accountancy (Approximately 9-11 months).

Pre-requisites: Grade X.

Contents: Bookkeeping, Accounting; Business English, Business Correspondence; Spelling; Rapid Calculation, Business Arithmetic; Commercial Law; Typewriting (Theory, Forms and Speed); Penmanship may be added.

COURSE No. 35

Selected Course: Time depends on subjects chosen.

Pre-requisites: Grade X.

Contents: Students who do not wish a regular course may select any subject or group of subjects they desire.

COURSE No. 51

Bricklaying (8 months)

Pre-requisites: Approval of the Director of Apprenticeship.

Contents: Theory: Study of tools and materials; Types of construction; Estimating stock.

Practice: Basic bricklaying — bonds, backing up, piers, corners, pilasters, mixing mortars; Strength analysis; Finished work; Chimneys; Fireplaces; Waterproofing and insulating.

Related: Course No. 118—Trade English
Course No. 117—Mathematics
Course No. 111—Blueprint Reading and Related Drafting.
Course No. 116—Science

Note: Applicants must be physically fit and able to work at heights.
COURSE No. 52

Painting and Decorating (8 months)

Pre-requisites: Approval of the Director of Apprenticeship, Department of Labour.


**Practice:** Application of all kinds of paints, fillers, oil and water stains, shellac and varnishes. Hanging paper and allied materials. Casein paints and different sizes (Application). Oil and distemper graining of all kinds. Marbling and elementary lettering. Lining and striping. Cutting and applying stencils. Stippling and texture work. Glazing and cutting glass. Preparation of surfaces to receive desired coating.

Related: Course No. 116—Science
Course No. 117—Mathematics
Course No. 118—Trade English
Course No. 111—Basic Lettering and Sketching and Layout.

Remarks: Applicants must be able to climb and work at heights and not be allergic to paints and lacquers or enamels.

COURSE No. 53

Plumbing (8 months)

Pre-requisites: Approval of the Director of Apprenticeship.

Contents: **Theory:** Tools and materials; History of plumbing; Hydraulics, draining and sewage disposal; Rules and regulations of the trade. Sanitation.

**Practice:** Threading pipe; Lead work; Water supply systems; Installation of fixtures; Heating systems; General repairs and maintenance.

Related: Course No. 117—Mathematics
Course No. 96—Welding (Related)
Course No. 111—Blueprint Reading and Drafting
Course No. 116—Science
Course No. 118—Trade English

COURSE No. 54

Plastering (8 months)

Pre-requisites: Approval of the Director of Apprenticeship.
Contents: **Theory:** Study of tools and materials; Types of construction; Estimating stock.  
**Practice:** Preparing the walls, filling, leveling up, finishing. Ornamental work.

Related: Course No. 117—Mathematics  
Course No. 111—Blueprint Reading and Drafting  
Course No. 116—Science  
Course No. 118—Trade English

**COURSE No. 55**  
**Carpentry (8 months)**  

Pre-requisites: Approval of Apprenticeship Board or Grade VIII with previous trade experience.

Contents: **Theory:** Tools and equipment; Manufacture of lumber; Lumber and hardware selection; Types of building construction.  
**Practice:** Benchwork; Millwork; Sashes, doors and cabinets; Building construction—concrete forms, sills, framing; bracing, boarding up, roof construction; Outside finishing, inside finishing; Elementary stair building; General repairs.

Related: Course No. 116—Science  
Course No. 117—Mathematics  
Course No. 111—Blueprint Reading and Related Drafting.  
Course No. 118—Trade English

Remarks: Applicants should be physically fit and able to work at heights.

**COURSE No. 56**  
**Factory Woodworking (8 months)**  

Pre-requisites: Approval of the Apprenticeship Board or previous Trade experience satisfactory to the Principal.

Contents: **Theory:** Tool and equipment; Materials; Fastening methods; Emphasis of accuracy and correct procedure in operation of both hand and machine tools.  
Theory of conditioning saws, planes, knives and cutters.  
Instruction in values of both hard and soft woods.  
Instruction in glues, hardwood and fastening methods.

**Practice:** Joints (Framing, Lengthening and Widening)—First to be made with hand tools, later by factory production.  
Make all varieties of window and sash frames, with windows and sashes fitted.  
Make inside and outside door frames.  
Varieties of cabinets and book cases.
Door fitted and equipped with modern hardware.

Elementary stairs and newel posts.

Instruction in developing from Blueprint to full size.

Practical work in conditioning all varieties of saws, planes, planer, jointer, and cutting knives of various descriptions.

Related: Course No. 117—Mathematics
         Course No. 111—Drafting
         Course No. 116—Science
         Course No. 118—Trade English

COURSE No. 57

**Bench Woodworking and Wood Turning (3 months)**

Pre-requisites: Approval of the Principal.

Contents: **Theory:** Lectures are included on Forestry Lumbering and the manufacturing of articles made of wood. Emphasis is placed upon correct procedure in the fundamental tool processes.

**Practice:** Care, use and maintenance of hand tools.

- Grinding and sharpening of cutting edge tools and saw conditioning.
- Relation of hand tools to machine tools.
- Speed of grinding wheels and their safety features.
- Analysis and proper procedures to follow in construction of small useful projects.
- Joints (Lengthening, Widening and Framing).

In the advanced stage of the course instruction in the use of rip saw, band saw, and lathe will be given.

Elementary wood finishing.

Related: Course No. 117—Mathematics
         Course No. 111—Drafting
         Course No. 116—Science
         Course No. 118—Trade English

COURSE No. 58

**Furniture Construction and Design (6 months).**

Pre-requisites: Completion of Course No. 57 or equivalent.

Contents: **Theory:** Affords an opportunity for a study of period furniture as a basis for the design of modern furniture.

Native and foreign cabinet woods are studied.

The values of turning, inlaying, carving and other decorative features are considered.
**Practice:** Principles of construction by hand tools and machine processes are emphasized in the construction of built-in and regular furniture.

Students may select, in consultation with the Instructor, useful articles of furniture as projects.

Related: Course No. 117—Mathematics  
Course No. 111—Drafting  
Course No. 116—Science  
Course No. 118—Trade English

**COURSE No. 59**  
**Upholstery (8 months)**

Pre-requisites: Completion of Course No. 57 or Grade VIII completed with trade experience in woodwork or consent of the Principal.

Contents: **Theory:** Tools and equipment; Coverings and materials; Planning covers.

**Practice:** Stripping down; Frame repairs; Webbing and open frame; Springing; Tying springs; Canvassing; Stuffing up; Stitching; Edge Rolls; (Cutting, Sewing and Putting on Covers); Making cushions, Outsides and trim; Finishings; (Staining and Polishing).

Related: Course No. 117—Mathematics  
Course No. 116—Science  
Course No. 111—Blueprint Reading and Drafting  
Course No. 118—Trade English  
Course No. 60—Related Woodwork


**COURSE No. 60**  
**Woodwork (Related)**

This course is designed to give students the related work for their various courses. No details are listed as the requirements vary greatly for the different courses.

**COURSE No. 71**  
**Electrical Construction (8 months)**

Pre-requisites: Preferably High School graduate. Minimum—Grade X English and Mathematics.

Contents: **Theory:** Tools and materials; Basic electrical theory; Conductors and insulators; Wiring methods; Canadian electrical code regulations; Elementary control and signal circuits; Appliances; Single phase and D.C. motors; Elementary controls and protective devices; Transformers; Power distribution.
Practice: Connecting; Joining and splicing wires; Bell and annunciator circuits; Wiring with knob and tube; Loomex; armored cable; Conduit and surface raceways; Installation of lighting fixtures; Water heaters; Ranges and Motors with controls.

Related: Course No. 117—Mathematics
Course No. 116—Science
Course No. 111—Blueprint reading
Course No. 118—Trade English

COURSE No. 72

General Electrical Course (10 months)

Pre-requisites: Preferably, High School Graduate. Minimum—Grade X English and Mathematics.

Contents: Theory: Basic electrical theory; Control; Signal and telephone circuits; Appliances; Motors and elementary motor rewinding; Generation; Transmission and distribution of power; House wiring.

Practical: Joints and splices; Connecting, soldering and taping; Bell; Annunciator and elementary telephone and fire alarm circuits; Repairing irons; toaster and hotplates; Finding troubles; Repairing and rewinding motor-driven appliances; Maintenance, repair and rewinding of common types of electric motors; Wiring domestic lighting and control circuits.

Related: Course No. 117—Mathematics
Course No. 116—Science
Course No. 111—Blueprint reading
Course No. 118—Trade English

COURSE No. 73

Elementary Motor and Coil Winding (8 months)

Pre-requisites: Completion of course No. 71 or course No. 72.

Contents: Theory: Review of basic electrical theory; Polyphase power; Delta and star connections; Principles of operation and types of construction of D.C. single phase and polyphase motors; D.C. generators and alternators. Temperature rise in motors—Suitable insulation for various types; Motor controls and protection.

Practical: Make up winding diagrams; Locate faults; Rewind and test various types of D.C., Split-phase, Repulsion induction and 3-phase motors; Connect and operate thermal and mechanical controls. Wind, test and connect small transformers.
COURSE No. 74

Lineman's Course (3 months)

Pre-requisites: Grade VIII completed. Good physical condition, able to climb and work at heights.

Contents: **Theory:** Tools and Equipment; Materials; Safety rules and practices. Erecting, gaining and guy ing poles; Mounting crossarms and insulators; Deadending, taping, splicing and connecting wires; Switches and fuses; Transformer connections; Tree trimming; Reading line construction blueprints, sag charts and maps. Grounding.

**Practice:** Digging holes, setting, tamping and guy ing poles; Gaining, bolting and bracing crossarms; Stringing wires; Mounting and connecting transformers and H.T. fuses.

COURSE No. 75

Radio Servicing (10 months)

Pre-requisites: Grade XI or grade IX with previous electrical or radio experience.

Contents: **Theory:** Basic electricity; A.C. electrical theory; Meters and test equipment; vacuum tubes and electronics; Radio receiver theory (design and construction); Simple radio transmitters; Antennae; Frequency modulation; Trouble shooting methods.

**Practice:** Experimental work. Design and construction of receivers and amplifiers; Use of test equipment; Receiver alignment.

Related: Course No. 117—Mathematics
Course No. 111—Diagram interpretation
Course No. 118—Trade English

COURSE No. 91

Blacksmithing (1½ months)

Pre-requisites: Approval of training by Apprenticeship Board.

Contents: **Theory:** Care and maintenance of tools and equipment; Metallurgy; Heat treatment; Forging technique; Forgewelding. Ornamental iron work.
**Practice:** Forging; Forge welding; Ornamental iron work; Annealing; Normalizing; Hardening—Tempering; Case hardening; Surface hardening; Flame hardening; Tapping and threading; Drilling, filing, grinding.

Related: Course No. 117—Mathematics
Course No. 111—Blueprint Reading and Related Drafting.
Course No. 116—Science

**COURSE No. 92**

**Machine Shop (10 months)**

Pre-requisites: Grade IX completed.

Contents: **Theory:** Tools and materials; Heat treating; Fastening devices; Gearing; Grinding and precision instruments; Safety precautions.

**Practice:** Sawing, filing, chipping, drilling, shaping; Lathe work; Milling machine work; Boring machine work and polishing.

Related: Course No. 117—Mathematics
Course No. 116—Science
Course No. 111—Blueprint Reading and Related Drafting
Course No. 96—Welding
Course No. 118—Trade English

**COURSE No. 93**

**Tool and Die Making (10 months)**

Pre-requisites: Course No. 92

Contents: **Theory:** Tools and materials; Advanced theory in metallurgy; Shearing pressures; Bend allowances and precision instruments; Safety precautions.

**Practice:** Bending dies; Shearing dies; Progressive dies; Combination dies and jig making.

Related: Course No. 117—Mathematics
Course No. 118—Trade English
Course No. 111—Blueprint Reading and Related Drafting
Course No. 91—Blacksmithing

**COURSE No. 94**

**Welding (Oxy-acetylene) (4 months)**

Pre-requisites: Grade VIII completed or Grade VI plus some trade experience.

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Contents: **Theory:** Historical development of the welding processes. Care and use of tools and equipment. Oxy-Acetylene welding techniques. Tests for identifying metals. Metal properties important to welding. The general theory of expansion and contraction. Safety precautions.

**Practice:** Fusion welding of sheet plate and pipe, all positions, including steel, cast iron, brass, copper, stainless steel, aluminum, etc. Bronze welding, silver soldering, hard surfacing. Rebuilding of jigs and fixtures. Reclaiming of broken parts by welding. Oxy-Acetylene cutting of commercial metals.

Related: Course No. 117—Mathematics
Course No. 111—Blueprint Reading and Related Drafting
Course No. 116—Science

**COURSE No. 95**

**Welding (Electric Arc) (4 months)**

Pre-requisites: Grade VIII completed or Grade VI plus some trade experience.

Contents: **Theory:** The development of the Arc welding processes. The care and operation of Arc welding machines and equipment. Tests for identifying metals. Weldability of metals. The general theory of expansion and contraction; Arc cutting of commercial metals. Safety precautions.

**Practice:** Fusion welding of steel, aluminum, stainless steels, cast iron, etc., all positions. Hard surfacing applications. The rebuilding of worn parts. Reclaiming broken parts by the Arc welding process. Severing metals by the Arc welding process. Fabrication and use of jigs and fixtures. Safety practices.

Related: Course No. 117—Mathematics
Course No. 111—Blueprint Reading and Related Drafting
Course No. 116—Science

**COURSE No. 96**

**Welding (Related)**

This course is designed to give students the related work for their special courses. No details are listed, as these requirements vary greatly for different courses.

**COURSE No. 97**

**Sheet Metal Work (8 months)**
Pre-requisites: Approval of the Director of Apprenticeship, Department of Labour.

Contents: **Theory:** Tools and materials; Operation of bench machines; Gravity warm air heating; Forced air heating; Ventilation.

**Practical:** Sheet Metal Pattern Drafting; (Parallel lines, Radial lines, Triangulation) and construction of Fittings, etc., from pattern drawn. Erection of furnaces and duct work. Also repair work.

Related: Course No. 117—Mathematics  
Course No. 111—Blueprint Reading and Related Drafting  
Course No. 116—Science  
Course No. 118—Trade English

**COURSE No. 98**

**Mechanical Refrigeration (8 months)**

Pre-requisites: Grade IX completed and training approved by Apprenticeship Board.

Contents: **Theory:** Tools, materials. Uses of Refrigeration; Fundamentals; Refrigerants; Evaporation; Compression and condensation. Cycle of operation; Metering devices; High and low pressure systems; Calculation; Sales Engineering; Conditioned air and human comfort.

**Practice:** Tube flaring; Use of flare and sweat fittings; Running copper tube and conduit; Disassembling and assembling different types of compressors; Installation and reoperation of refrigerant metering devices and controls; All types of refrigeration installations—domestic and commercial, single and multiple; Temperature installations; Minor motor repairs; complete overhauls—trouble shooting; Air conditioning installations.

Related: Course No. 96—Welding (Related)  
Course No. 111—Blueprint Reading and Related Drafting  
Course No. 116—Science  
Course No. 117—Mathematics  
Course No. 118—Trade English

**COURSE No. 99**

**Machine Shop Related**

This course is designed to give students the related work required for their particular courses. No details are listed, as these requirements vary greatly for different courses.
COURSE No. 100

Forging and Heat Treatment (8 months)

Pre-requisites: Grade VIII completed.

Contents: Theory: History of Forging—Metallurgy; Tools and equipment; Fire maintenance and control; Heat treatment of metals; Finishing and coloring of metals; Corrosion treatments.

Practice: Forging; Forge welding; Tool making; Normalizing; Annealing; Hardening; Tempering of metals; Ornamental iron work; Corrosion treatment; Case hardening; Surface hardening; Cyaniding; General repair work.

Related: Course No. 117—Mathematics
Course No. 111—Blueprint Reading and Related Drafting
Course No. 96—Related Welding

COURSE No. 111

Blueprint Reading and Related Drafting

This course is designed to give students the related work required for their particular courses. No details are listed, as these requirements vary greatly for different courses.

COURSE No. 112

Elementary Surveying (Instruments) (6 months)

Pre-requisites: Grade XI or equivalent.

Contents: Theory: Use and care of instruments; Measurements of distance, angles and elevations; Computations of areas and volumes; Land surveying.

Practice: Use of equipment; Geometrical construction; Lettering; Orthographic projection and sections; Working drawings; Pictorial representation.

Related: Course No. 117—Mathematics

COURSE No. 113

Mechanical Drafting (10 months)

Pre-requisites: Grade XI or equivalent.

Contents: Theory: Use of instruments; Applied geometry; Projection drawing; Shape description; Size description; Pictorial sketching; Developed surfaces; Intersection; Perspective.

Practice: Lettering; Tracing; Projection studies; Sectional views; Auxiliary views; Working drawings; Machine details; Assembly drawings.
COURSE No. 114

Architectural Drafting (10 months)

Pre-requisites: Grade XI or equivalent.

Contents: Theory: Use of instruments; Applied geometry; Projection drawing; Sections and conventions; Developed surfaces and intersections; Perspective.

Practice: Lettering and tracing; Projection studies; Working drawings; Floor plans; Elevations; Building details.

Related: Course No. 117—Mathematics
           Course No. 99—Machine Shop

COURSE No. 115

Sheetmetal Pattern Drafting (6 months)

Pre-requisites: Completion of Course No. 97 or experience in the Sheet Metal Trade.

Contents: Theory: Use of instruments; Practical geometry; Projection drawing; Sections; True length of a line; Development of surfaces.

Practice: Geometrical problems; Projection studies; Sectional views; Working drawings; Development by means of Parallel line method, Radial line method, Triangulation method.

Related: Course No. 117—Mathematics

COURSE No. 116

General Science

This course is designed to give students the basic principles of Science as applied to their particular courses. No details are listed as these requirements vary greatly for different courses.

COURSE No. 117

Industrial Mathematics

This course is designed to give students basic work in related Mathematics and Economics as required for their special courses. No details are listed as these requirements vary greatly for different courses.
COURSE No. 118

Trade English
Oral and written English directed to the use of clear, concise, and correct language as applied to trade and industrial needs. Correction of grammatical errors and faulty expressions. Legibility of handwriting. Use of dictionary. Trade terms. Rules of order for conduct of meetings; hints on public speaking. Supplementary reading.

Requirements for this course will vary greatly for different courses.

COURSE No. 131

Commercial Cooking (6 months)
Pre-requisites: Grade VIII.
Contents: Theory: Cafeteria Management; Foods; Nutrition; Menu Making; Sanitation and Hygiene.
Practical: Food Preparation; Quantity Cookery; Meal Serving.

Note: This course is designed to enable persons to become employed as chefs, cooks, waiters or waitresses, fountain or cafeteria help or in occupations concerned with the handling of food. The class will maintain a restaurant and cafeteria for the convenience of the Institute as a practical project.

Related: Course No. 117—Industrial Mathematics
Course No. 118—Trade English
Course No. 116—Science

COURSE No. 132

Hairdressing and Beauty Culture (7 months)
Pre-requisites: Grade VIII.
Contents: Theory: Lectures; Class discussions; Visual aids; Theoretical knowledge imparted to the student on all subjects contained in the course; Also salesmanship, shop practice, shop management and ethical conduct.

Practice: Hygiene; Personality; Sterilization; Sanitation; Anatomy; Physiology; Diseases of skin, scalp and hair; Electricity; Facials; Manicuring; Shampoos; Rinses; Scalp treatments; Hair tinting, dyeing and bleaching; Hair cutting; Iron curling and waving, finger waving, hair styling; Permanent waving; machine, machineless and remote control, cold wave.

Note: We believe this course in Hairdressing and Beauty Culture compares favorably with any such course offered in Canada. The equipment is modern and complete, and the examination at the end of the course leads to an Improver's license for the Province of Manitoba.
COURSE No. 133

Power Machine Operating (3 months)

Pre-requisites: Approval of the Principal.

Contents: **Theory:** Introduction to Course. Objects; Factory methods. This course follows along Factory Atmosphere lines with production and speed as objectives, together with sound basic training to fit students for Piece Work in a factory by the time they graduate.

**Practical:** Working knowledge of Power Machines. Care, maintenance and minor repairs to Power Machines. Types of materials used in industry. Types of seams common to the Garment Industry. Power handling of materials. Development of speed.

COURSE No. 134

Shoe Repair (6 months)

Pre-requisites: Grade VII completed.

Contents: **Theory:** Tools, machinery and materials. Boot and shoe styles.

**Practical:** Thread making, stripping, leveling, half soles and full soles; hand sewing, nailing, patching, machine sewing; Heeling; Dyeing; Scouring; Edging; Inking, Finishing, inspection.

Course No. 118—Trade English

COURSE No. 134

Shoe Making (6 months)

Pre-requisites: Shoe Repair course No. 134 or previous experience in the trade.

Contents: **Theory:** Shop management and purchasing.

**Practical:** Pattern making, Upper Making; Lasting; Welt sewing; Soling, heeling; Scouring; Inking; Edging; Finishing and inspection.

Course No. 118—Trade English

COURSE No. 135

Watch Repair (12-24 months)

Pre-requisites: Grade IX or the equivalent.

Length of Course: The course is divided into two parts, each of one years' duration. Students who successfully complete
two years of studies and pass the prescribed examination will qualify for a certificate from the Canadian Jewellers' Institute.

Students who successfully complete one year of study and who desire to enter the trade at the level of an improver will qualify for a Provisional Certificate from the Canadian Jewellers' Institute. At the completion of two years trade experience they may apply for an examination leading to certification to the Canadian Jewellers' Institute.

Contents: Theory: Lectures on the various escapements, drafting escapements movements, etc.; Depthing, springing, timing adjusting to position, temperature and isochronism.

Practical: Students are taught to make some of the small tools, such as drills, countersinks, jewel gravers, jewel burnishers, and screw taps. They learn the uses of grinding materials and coloring and tempering processes.

Lathe work is a very necessary part of watchwork, and in this section the students take up turning on a watchmaker's lathe. In acquiring the use of the lathe, a few articles are turned up which will be found useful throughout the remainder of the work. The following articles are made before entering upon regular watchwork: center punch, round burnishers, hair spring collet, jewel pushers, tapers for lathe, cement brass, drilling rest, large and small screws (harden and blue) square shoulders on four millimeter wire (grind and polish), cone pivots, large balance staffs, centering wires, etc.

In this section lathe and escapement work of all kinds is taken up, such as turning staffs, setting jewels, calculating size and fitting lost pinions staking on and truing wheels, making collets, drilling and fitting pivets, and slide rest work. Instruction is given in setting pallet stones; adjusting the banking pins, drop, let-off, locking fork, and roller action; fitting jewel pins to roller, etc.

Related: Course No. 116—Science
Course No. 99—Machine Shop
Course No. 117—Mathematics

COURSE No. 136

Practical Nursing (12 months)

Pre-requisites: Grade VIII or its equivalent. General good health. Medical and dental certificates and a chest X-ray are required.

Character references will be requested from business and professional people who are not related to the applicant.
Content: **Theory:** Principle and Practice of Nursing (Nursing Arts); The Human Body and How It Functions (Anatomy and Physiology); Personal and Community Health; Surgical Nursing; Medical Nursing; Drugs and Solutions; Mother and Child Care; Nutrition and Homemaking Behaviour and Working Relationship.

**Practice:** In relation to above plus 9 months training in hospitals.

Remarks: Training open to women only and consists of a 3 months' classroom period at the Manitoba Technical Institute, plus 9 months supervised training in hospitals before certificate is issued.

Applications: Apply directly to the Superintendent of Nurses at any one of the following hospitals:

- Carman Hospital, Carman, Man.
- Bethania Hospital, Altona, Man.
- Bethel Hospital, Winkler, Man.
- Bethesda Hospital, Steinback, Man.
- Neepawa Hospital, Neepawa, Man.
- Selkirk General Hospital, Selkirk, Man.
- Freemasons' Hospital, Morden, Man.
- St. Joseph's Hospital, Winnipeg, Man.
- Concordia Hospital, Winnipeg, Man.

**COURSE No. 151**

**Industrial Arts Instructors (10 months)**

Pre-requisites: 1. Equivalent to Normal School entrance.

2. Good general health, with no detrimental physical handicap.

3. Trade or Farm background.

4. Applicants must be approved by the Provincial Department of Education.

Outline of Syllabus:

1. Trade Training in shops as required for the General Shop Syllabi for Junior High and High Schools.
   - (a) Drafting and Blueprint Reading.
   - (b) Bench and Sheetmetal
   - (c) Electricity
   - (d) Motor Mechanics
   - (e) Woodwork (Hand and Machine)
   - (f) Forging and Welding
   - (g) Machine Shop
   - (h) Related Mathematics and Science

2. Vocational Guidance

3. Analyses and study of the Manitoba General Shop Syllabi.
4. Tools, Equipment and Budgeting
5. Trade Analyses
6. Trade and Progress Testing
7. History of Vocational Education
8. Study of Regulations governing Vocational Education in Manitoba
9. Elementary Educational Psychology
10. Class Management and Control
11. The Art of Teaching
12. Teaching Methods in Industrial Education
13. Practice Teaching

Teaching License: Interim Industrial Arts Teaching certificates for the Province of Manitoba will be issued upon a successful completion of the course, entitling students to teach shop subjects in the Province.

A Permanent Certificate will be issued after two years successful teaching and attendance at two General Shop Instructors' summer schools conducted by the Department of Education.

COURSE No. 152

Farm Mechanics (6 weeks)

Pre-requisites: Approval of the Principal
Entry Dates: 17 October, 1949; 3 January, 1950; or 13 February, 1950

This course is designed to help the student become more efficient in doing the work necessary on a farm. The student may take any two subjects from the following list during each course except Number 8, which is of 6 weeks duration.

A short course of this nature must of necessity include only a few of the important fundamental principles and processes and the difficulties which the student may encounter in the daily routine of the farm.
1. Blacksmithing and Babbitt Pouring ...... 3 weeks
2. Welding (Oxy-Acetylene) .................. 3 weeks
3. Motor Tune-Up ................................ 3 weeks
4. Practical Carpentry ............................ 3 weeks
5. Bricklaying .................................... 3 weeks
6. Diesel Practice ................................ 3 weeks
7. Sheet Metal ..................................... 3 weeks
8. Farm Bookkeeping ............................... 6 weeks

COURSE No. 153

Summer School for General Shop Teachers (6 weeks)
Outline of Course available upon request.

Write: Registrar,
Department of Education,
Legislative Building,
Winnipeg, Manitoba.

EVENING CLASSES FOR ADULTS:

The Institute will offer two sessions of evening classes during the Fall and Winter months, the first session to commence on Monday, Oct. 3, for a period of ten weeks, two nights per week (Mondays and Thursdays) from 7:30 to 9:30; the second session will commence on Monday, January 9, for a period of ten weeks, for a similar length of times.

Courses will be established only when enrolment is sufficient to warrant organization of a class. Subjects offered are:

Automobile Mechanics Radio
Bookkeeping Shorthand Refresher
Diesel Typewriting
Drafting Upholstering
Dressmaking Welding
Electricity Woodwork
Machine Shop Practice Forging & Heat Treatment

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PRE-APPRENTICESHIP TRAINING:

Applicants may apply for pre-apprenticeship training. Information regarding this training can be secured on request from the Director of Apprenticeship, Department of Labour, Legislative Building, Winnipeg.

TRAINING OF APPRENTICES:

According to Section "14" of the Regulations under "The Apprenticeship Act" the Department of Education is responsible for the organization of Technical classes, trade tests and final trade examinations for all indentured apprentices in designated trades. The Technical Institute is organized to serve apprentices in this way. At present the following trades are designated under the Apprenticeship Act and apprentices of each of these trades are eligible for annual attendance in the Technical Institute classes: Automotive Body Repair Mechanics, Automotive Repair Mechanics—Blacksmiths — Electrical Refrigeration — Carpentry—Factory Woodworking—Bricklaying—Plastering—Plumbing—Painting and Decorating—Steam Fitting.

RE TRAINING OF UNEMPLOYED PERSONS:

Under Schedule "M" Agreement between the Dominion and the Provincial Governments unemployed persons with previous work experience may be eligible for vocational training. The Unemployment Insurance Commission of the National Employment Service determines the eligibility of prospective trainees under this agreement. Consequently, unemployed persons desiring vocational training should visit local offices of the N.E.S. concerning the steps to be taken to be admitted to the Technical Institute for courses that will prepare them with new skills and knowledge to meet the changing conditions of employment.
GUIDANCE:

All applicants may receive Guidance. Personal interviews can be arranged with the Principal or other appropriate officials who will be able to assist applicants to register for a course in harmony with their occupational aims and needs. Call at the Institute or write to The Principal to benefit from this service.
Application Form

The Principal,
Manitoba Technical Institute,
Portage Avenue at Wall Street,
Winnipeg, Manitoba.

I hereby make application for a ____________ month's course in ________________ at the Manitoba Technical Institute, Winnipeg, Manitoba, starting ________________, with the understanding that the first four to eight weeks is a probationary period.

1. Name ____________________________
   (Surname) Print (Christian Names) (Mr., Mrs., Miss)

2. Permanent Address ____________________________
   Winnipeg Address ____________________________

3. Date of Birth ____________________________ Marital Status ____________________________

4. What was the highest school grade you completed? ________________
   What Year? ________________ Where? ________________

5. What Vocational or Technical Education have you had?
   ________________
   ________________
   ________________
   ________________
   ________________
   Where? ________________

6. What Trade Experience have you had?
   Employer ____________________________ Address ____________________________
   Occupation ____________________________ How Long ________________
   ________________
   ________________
   ________________

7. Are You a Canadian Subject? ________________ Manitoba Resident? ________________


9. What Type of Training Do You Desire?
   1st Choice ____________________________
   2nd Choice ____________________________

10. Have You Any Prospect of Employment When Your Training is Completed? ________________ If So, Give Details ____________________________

11. Date of Application: ____________________________
    Signature of Applicant: ____________________________

(Over)
Registration Fees

Fees for all Courses are confined to that of Registration. They are as follows:

<table>
<thead>
<tr>
<th>Length of Course</th>
<th>Manitoba Resident</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Months or Less</td>
<td>$ 25.00</td>
<td>$ 50.00</td>
</tr>
<tr>
<td>12 Months</td>
<td>50.00</td>
<td>100.00</td>
</tr>
<tr>
<td>18 Months</td>
<td>75.00</td>
<td>150.00</td>
</tr>
<tr>
<td>2 Years</td>
<td>100.00</td>
<td>200.00</td>
</tr>
</tbody>
</table>

These fees represent the maximum fee for the period indicated. When additional training is required, a further charge of $5.00 per month will be made, e.g., the fee for a nine month course, for a resident will be:

$25.00 + $15.00 = $40.00

or the fee for a fourteen month course will be:

$50.00 + $10.00 = $60.00

Non-Residents will pay $10.00 per month for additional training beyond the basic period of the course.

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THIS APPLICATION IS APPROVED for a Course in

Of ...................................................................... Months Duration.

................................. (Date) ................................. (Counsellor)

Registration Fee of $......................... Paid.

................................. (Date) ................................. (Accountant)

Enrolled ................................................................

Registrar ................................................................

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