

Career Development Manitoba

.....

Qualification Recognition, Alternative
Careers, and Training Options

May 2023

Career Development Manitoba

.....



What Roles do Certified Technicians and Technologists in Canada Perform?



Engineering and Science Technologists Job Duties

[NOC website](#)

Civil

Develop CAD engineering drawings. Prepare construction specifications and supervise field surveys and inspections.

Electrical and Electronic

Design and develop electrical equipment and systems. They can supervise the building and testing of prototypes; conduct and supervise installation and commissioning and operation of electrical and electronic equipment and systems.

Chemical

Set up and conduct chemical experiments, tests, and analyses; operate and maintain laboratory equipment; Compile records and interpret experimental or analytical results.

Mechanical

Prepare CAD designs; prepare costs and material estimates, project schedules and reports; conduct tests and analysis of machines, etc.

Architecture

Analyze building codes, by-laws, space, and site requirements; prepare manual and CAD drawings, construct architectural display models and 3-D virtual models.

Engineering and Science Technicians Job Duties

NOC 2021

Civil

Assist in developing engineering specifications and drawings; participate in field surveys, inspections, or technical investigations of topography, soils, drainage and water supply systems, road and highway systems, buildings and structures to provide data for engineering projects.

Electrical and Electronic

Assist in the design, development, and testing of electrical and electronic components, equipment, and systems; inspection, testing, adjusting, and evaluation of incoming electrical, electro-mechanical, and electronic components and assemblies to ensure conformance with product specifications and tolerances.

Chemical

Assist in developing and conducting programs of sampling and analysis to maintain quality standards; carry out a limited range of other technical functions in support of chemical research, tests and analyses, and environmental air and water quality monitoring and protection.

Mechanical

Assist in preparing CAD engineering drawings; carry out a limited range of mechanical tests and analysis of machines, components, and materials.

Architecture Technicians

Assist in the development of architectural designs.

Employment Requirements for Engineer Technologists and Technicians

Engineering Technologists usually require completion of a two- or three-year college program.

Engineering Technicians usually require a one or two-year program.

Certification in engineering technology or in a related field is available through provincial associations of engineering/applied science technologists and technicians and may be required for some positions.

Employment Requirements for Science Technologists and Technicians

Science Technologists usually require completion of a two- or three-year college program.

Science Technicians usually require a one or two-year program.

Certification in engineering technology or in a related field is available through provincial associations of engineering/applied science technologists and technicians and may be required for some positions.

The Certified Technicians & Technologists Association of Manitoba (CTTAM)

CTTAM is a professional association that certifies and regulates Engineering Technicians and Technologists in Manitoba.

To use the word certified in front of the word technician or technologist you must be registered with CTTAM.

Examples: Certified Engineering Technician (C.Tech.) Certified Engineering Technologist (C.E.T.) Certified Applied Science Technician (A.Sc.T.; C.Tech) Certified Applied Science Technologist (A.Sc.T.; C.E.T)

https://www.cttam.com/Public/Public/About_CTTAM/Self-Regulated_Profession.aspx?hkey=3f2ed384-aef0-402e-ab64-51fa27ba54d7

New Registration Process at CTTAM

Step 1: Complete the online application through the Technology Accreditation Canada [application, forms, and guide section](#). Your academic program must be listed on the Technology Accreditation Canada website under the [CTAB program](#).

- Diploma or Certificate
- Transcripts
- An up-to-date work history which is the work experience portion of a resume. A full resume will also be accepted.
- A current job description if you have met the requirement for relevant Canadian supervised practice. Your supervisor must sign the job description on each page. If you do not have Canadian experience, please upload your resume here. 5. W.E.S. ICAP (course by course) academic assessment
- Two forms of Identification: Driver's License; Passport.
- Applicants educated in the Philippines and who were a member of the Professional Regulatory Commission in the Philippines can attach a copy of their PRC card to their application which will recognize their academics at the technologist level.

New Registration Process at CTTAM

Step 2: You will need to get your credentials evaluated by [World Education Services](#) (WES).
You must request an ICAP (course-by-course academic evaluation)

[Sample TRC Application](#)

CTTAM Requirements

Applicants who have graduated from a technical program are required to have a minimum of two years of relevant work experience to be certified with CTTAM.

CTTAM recognizes international technical work experience but one year of relevant Canadian supervised practice is still required to proceed with certification as Canadian references need to be provided to become fully certified.

If you are internationally educated but do not have the required one year of relevant Canadian work experience, you can still apply with CTTAM as you may qualify for “**provisional**” **certification** providing that you have more than two years of relevant international work experience.

CTTAM Requirements

References and employers need to be provided if the applicant does have the two years or more relevant international work experience.

The cost to apply is \$175.00.

Applications will only be processed once payment has been received. Applicants must pass the online Professional Practice Exam for their file to be reviewed along with all the required documents must have also been uploaded to the application.

Applicants can “track” the progress of their application by logging into their account on the Technology Registrations Canada website.

Accreditation fee: \$5000.00

CTTAM Member Benefits

Certification is industry driven
and is increasingly becoming a
requirement for employment

Inter-Provincial
Mobility

Networking
opportunities

Members have
access to seminars
and training
programs

Inter-Provincial
Mobility

Professional Licensure Contacts



General Enquiries 2nd floor - 870 Pembina Hwy
Winnipeg, MB R3M 2M7
Phone: 204-784-1088 Email: admin@cttam.com
Toll-Free Number: 1-844-558-8751



Certified Technicians and Technologists Association of
Manitoba <https://www.cttam.com/>

Robert D. Okabe, C.E.T., FEC (Hon.), IntET (Canada) — CEO and Registrar
Phone 204-784-1080 Email: registrar@cttam.com

Alternative Careers for Certified Technicians and Technologists



Alternative Careers for Architect Technicians and Technologists

Construction Estimators

CAD Drafter / Designer

Construction Inspectors

Technical Sales

Urban Planner

Landscape Architect

For more information visit [NOC website](#)

Alternative Careers for Civil Technicians and Technologists

Cost Estimator

Drafter

Planner

Land Surveyor

Construction Tradesperson

For more information visit [NOC website](#)

Alternative Careers for Mechanical Technicians and Technologists

Drafter

Fabricator

Facility Manager

Technical Sales

Machine Operator

Millwright

Machinist /CNC Control Operator

For more information visit [NOC website](#)

Alternative Careers for Applied Science Technicians and Technologists

Non-Destructive Testers and Inspectors

Water and Wastewater Laboratory Techs

Chemical Analysts

Process Technician

Conservation and Fishery Officers

For more information visit [NOC website](#)

Alternative Careers for Electronic and Electrical Technicians and Technologists

Electronic Assembler

Electronic Tester

Electrical Assembler

Electrician

For more information visit [NOC website](#)

Training Options

Building Construction Technician Certificate, Part-Time, 1-year, Red River College Polytech

CNC Machinist Technician Certificate, Full-Time, 1-year, Red River College Polytech

Architectural / Engineering Technology Diploma, Full Time, 32 months, Red River College Polytech

Construction Management degree, Full-Time, 4-year, Red River College Polytech

Training Options

Industrial Electrical Maintenance Certificate, Part-Time, 1-year, Red River College Polytech

Power Engineering Technology (5th Class) Diploma, Full-Time, 2-year, Red River College Polytech

Quality Systems Management and Applications Certificate Part-Time, 1-year, Red River College Polytech

Training Options


Electrical Engineering Technology Diploma, Full-Time, 28 months,
Red River Polytech

Drafting/CAD Certificate, Part-Time, 1-year, Red River College
Polytech

Network And Systems Administrator Certificate, Full-Time, 1-year,
Manitoba Institute of Trades and Technology

Training Options

Build Force Canada Training through the Manitoba Construction Council
Courses are offered online

	Pipeline Construction Safety Training
	Construction Law
	Construction Industry Ethics

Career Planning Can Help You

Enter the workforce

Plan for education

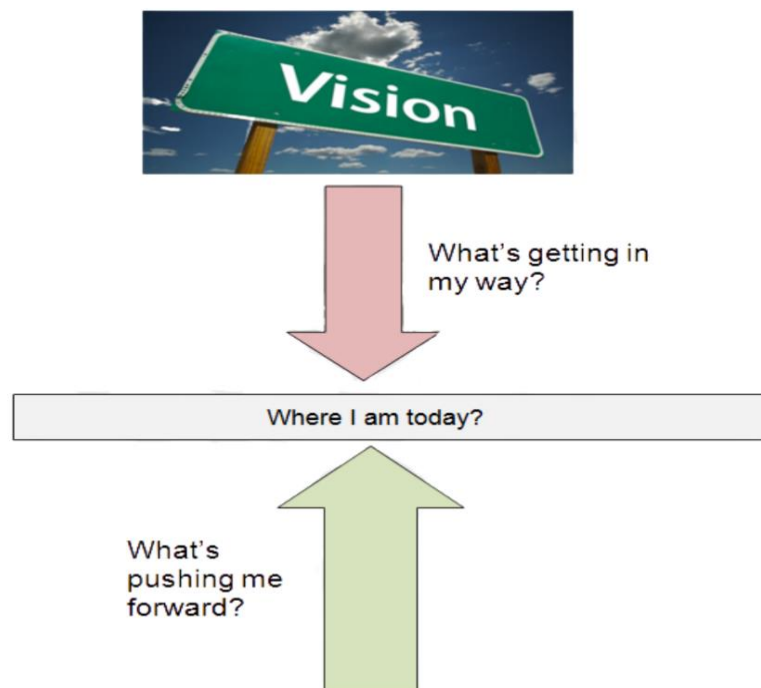
Deal with changing workplace demands

Anticipate trends or changes

Upgrade or maintain your skills

Develop skills for managing your career

Reflecting on Barriers and Strengths



Setting Short and Long-term Goals

Set SMART Goals
What? When?
How?

How much time
do you have
to complete
each step?

What resources
might you need?
Who can help?

Career and Education Plan

Name and Client ID: Jon Doe (157896)

Short Term Goal 1

Civil Technician

Short Term Goal 2

Construction Labourer

Long Term Goal

Certified Civil Technologist

Achieving and
Maintaining Long-Term
Employment

- Maintaining long term employment and Career Management – An ongoing process:
 - a. Continuous learning – develop new skills or refine existing skills
 - b. Professional development – take courses, attend workshops, read, network, volunteer
 - c. Balancing work and life – reflect on values, priorities and life circumstance
- Other: Complete Licensure process to become a Certified Technologist

Researching Post
Secondary Training

- Research education and training options
- Identify post-secondary institution
- Verify admissions requirements
- Research funding options (Employment MB, SEED Recognition Counts, Student Aid, etc.)
- Other: Book meeting with Manitoba Skills and Development Centre

Date:
Date:
Date:
Date: Jun 26, 2023
Date: Jun 26, 2023

Qualification
Recognition

- Research your regulated profession or trade
- Contact regulatory body
- Identify necessary requirements (language level, transcript, syllabus, etc.)
- Research Funding Options (Immigrant Access fund, Employment MB, SEED Recognition Counts, MB Student Aid, bursaries, financial institutions, etc.)
- Other: Attend CTTAM Qualifications Recognition webinar/information session at MB Start

Date:
Date: Jun 12, 2023
Date: Jun 6, 2023
Date: Jun 6, 2023
Date: Jun 1, 2023

Skill
Development

- Research job specific training (First Aid/CPR, fork lift, security guard license, etc.)
- Complete computer assessments sent by facilitator/coach; consider computer training
- Consider volunteering (visit www.volunteermanitoba.ca)
- Language assessment at WELARC
- Obtain Driver's license
- Other:

Date: Jun 1, 2023
Date: May 18, 2023
Date: May 25, 2023
Date: May 23, 2023
Date: Jun 5, 2023
Date:

Job Search
Preparation

- Complete Career Development Workshop at Manitoba Start
- Finalize marketing materials (resume, cover letter, references)
- Apply for Security Clearance Checks (criminal record check, child abuse registry, adult abuse registry, immunizations record)
- Other:

Date: May 19, 2023
Date: May 22, 2023
Date: May 18, 2023
Date:

Discuss the QR process for Technologists with career coach on May 24, 2023

Thank you!

If you require additional information about qualification recognition, please contact your Career Coach.

If you are not currently a Manitoba Start client, register with us:

- Call front desk at 204-944-8833
- Visit in person
- Complete our online [registration form](#) to receive career development support.

Good luck with your career planning and work search!