

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)

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.

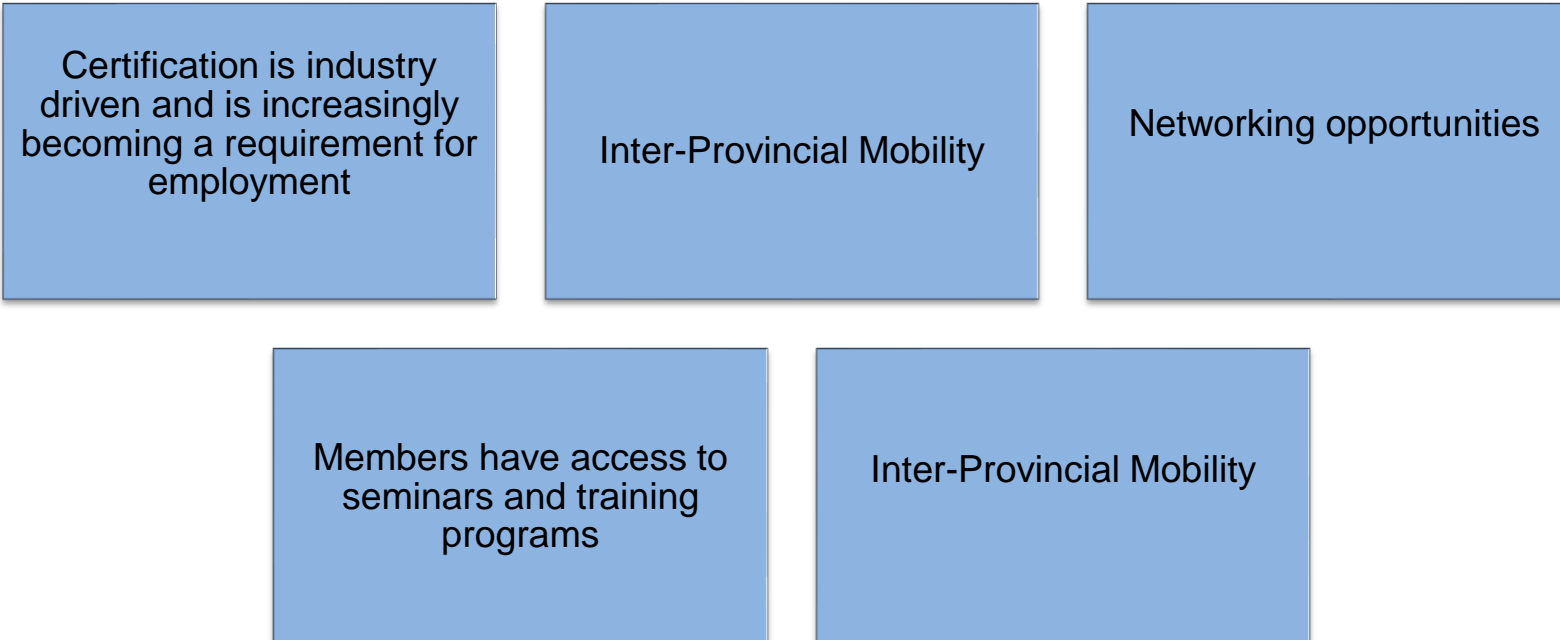
The cost to apply is \$175.00.

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



Professional Licensure Contacts



General Enquiries

Phone: 204-784-1088

Toll-Free Number: 1-844-558-8751

2nd floor - 870 Pembina Hwy

Winnipeg, MB R3M 2M7

Email: admin@cttam.com



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 Technicians and Technologists



Alternative Careers for Architect Technicians and Technologists

Construction Estimators

CAD Drafter / Designer

Construction Inspectors

Technical Sales

Urban Planner

Landscape Architect

Alternative Careers for Civil Technicians and Technologists

Cost Estimator

Drafter

Planner

Land Surveyor

Construction Tradesperson

Alternative Careers for Mechanical Technicians and Technologists

Drafter

Fabricator

Facility Manager

Technical Sales

Machine Operator

Millwright

Machinist /CNC Control Operator

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

Alternative Careers for Electronic and Electrical Technicians and Technologists


Electronic Assembler

Electronic Tester

Electrical Assembler


Electrician

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, Ful-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

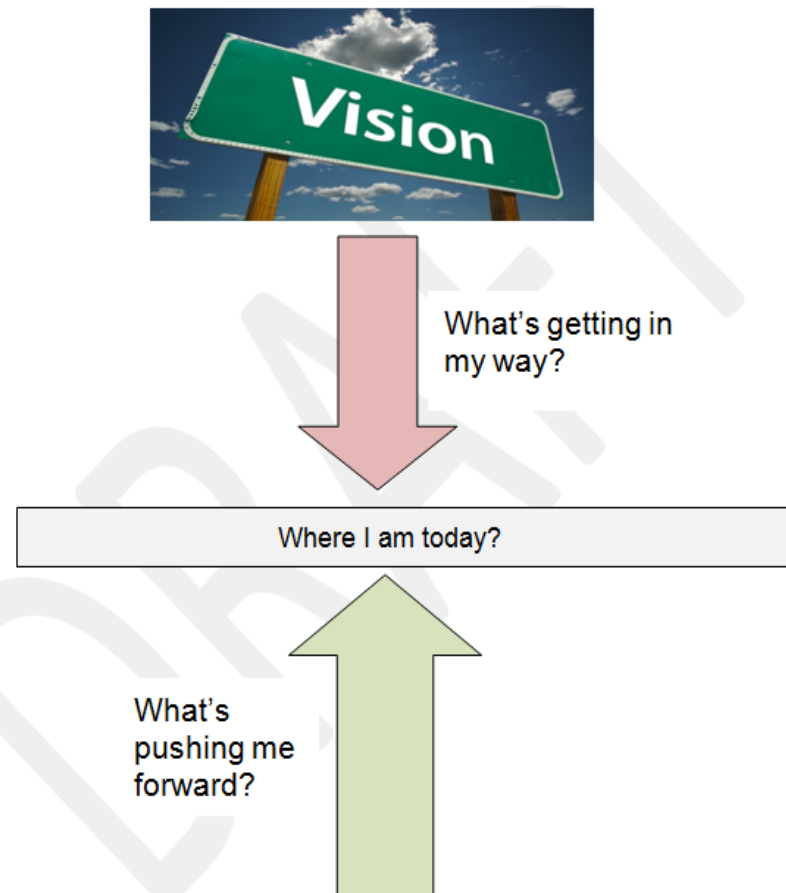
Deal with changing workplace demands

Anticipate trends or changes

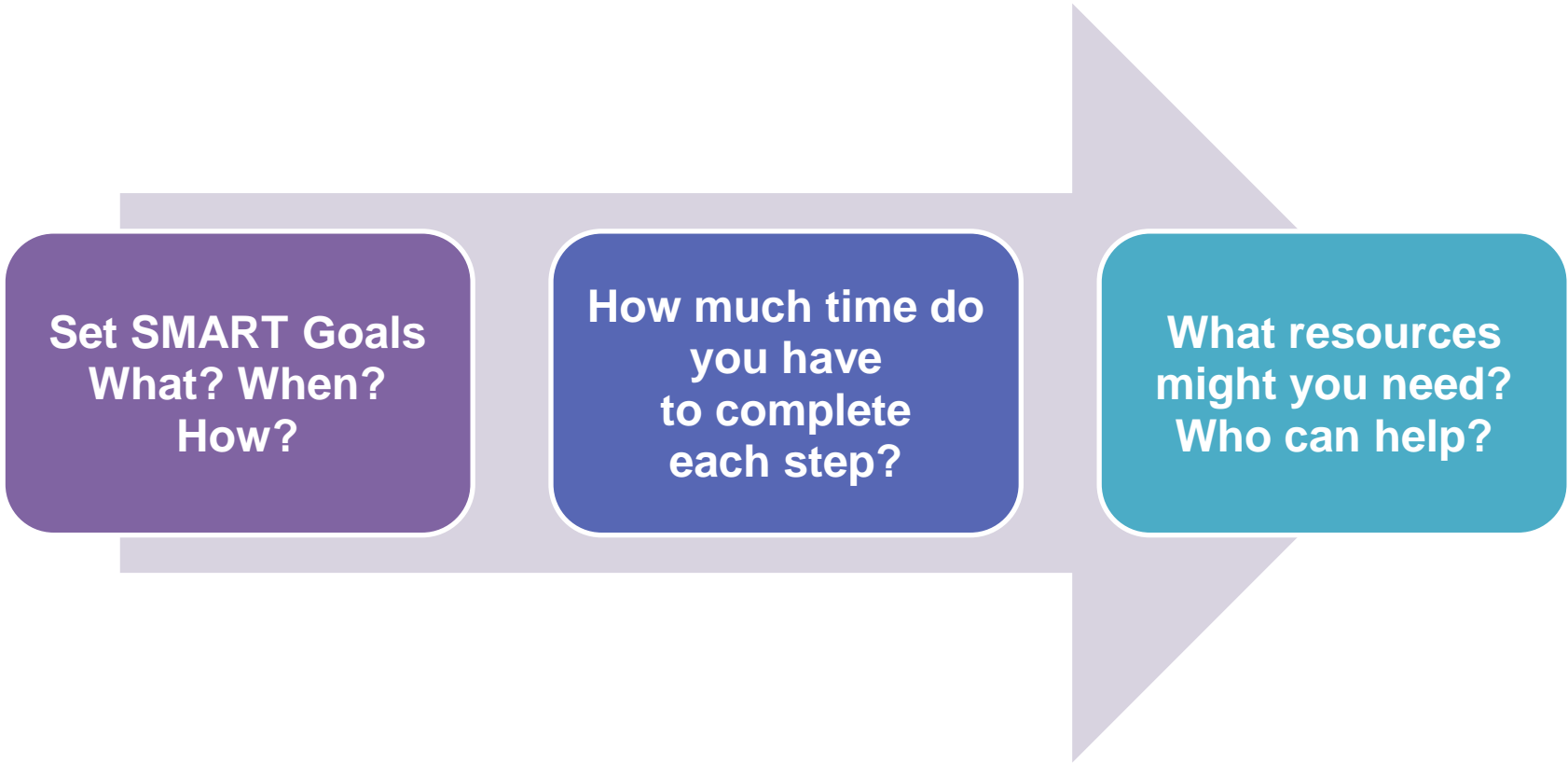
Upgrade or maintain your skills

Develop skills for managing your career

Reflecting on Barriers and Strengths



Setting Short and Long-term Goals



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 Date: _____
- Identify post-secondary institution Date: _____
- Verify admissions requirements Date: _____
- Research funding options (Employment MB, SEED Recognition Counts, Student Aid, etc.) Date: Jun 26, 2023
- Other: Book meeting with Manitoba Skills and Development Centre Date: Jun 26, 2023

Qualification
Recognition

- Research your regulated profession or trade Date: _____
- Contact regulatory body Date: Jun 12, 2023
- Identify necessary requirements (language level, transcript, syllabus, etc.) Date: Jun 6, 2023
- Research Funding Options (Immigrant Access fund, Employment MB, SEED Recognition Counts, MB Student Aid, bursaries, financial institutions, etc.) Date: Jun 6, 2023
- Other: Attend CTTAM Qualifications Recognition webinar/information session at MB Start Date: Jun 1, 2023

Skill
Development

- Research job specific training (First Aid/CPR, fork lift, security guard license, etc.) Date: Jun 1, 2023
- Complete computer assessments sent by facilitator/coach; consider computer training Date: May 18, 2023
- Consider volunteering (visit www.volunteermanitoba.ca) Date: May 25, 2023
- Language assessment at WELARC Date: May 23, 2023
- Obtain Driver's license Date: Jun 5, 2023
- Other: _____ Date: _____

Job Search
Preparation

- Complete Career Development Workshop at Manitoba Start Date: May 19, 2023
 - Finalize marketing materials (resume, cover letter, references) Date: May 22, 2023
 - Apply for Security Clearance Checks (criminal record check, child abuse registry, adult abuse registry, immunizations record) Date: May 18, 2023
 - Other: _____ 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!