



## CAREER TRACKER – RECORD OF PROFESSIONAL EXPERIENCE

### Introduction:

The purpose of the Career Tracker is to help ensure:

- i. the development of the Applied Science Technologist (A.Sc.T.) / Certified Technician (C.Tech.) into a technically and proficient member of the Professional Design Team; and
- ii. an understanding of the roll of the A.Sc.T. / C.Tech. in relation to their employer, clients, professional association, and the public.

A.Sc.T.(s) / C.Tech.(s) are responsible for their own success and development of their career.

Documenting specific work experience will help to ensure that the applicant has:

- i. the required work experience in their discipline for professional status as an A.Sc.T. or a C.Tech.;
- ii. developed ethical and professional work habits, and;
- iii. developed a good knowledge base.

Professional experience includes work completed under general supervision, technical knowledge of performance standards, and education. Original thinking in the analysis of a problem is required to achieve the end results. The professional has the ability to make decisions pertaining to their work and assumes technical responsibility in developing the end result.

### Information Required:

Report, skills development, application of theory, practical experience, supervision, design, etc. Writing must be concise. It is important to be specific in describing the work you did and/or projects you undertook. Specify your role in larger projects and where you were part of a team. Identify your progression from previous work experience.

The immediate supervisor is to review the information for each project and initial at the right hand side. At project completion the immediate supervisor is to review all information and fill out the bottom of the page. The immediate supervisor must have a professional designation: i.e., A.Sc.T., C.Tech., P.Eng., P.Geo., SLS, Architect, etc., and be able to attest to accuracy of the duties identified on the Record of Professional Experience form by initialing each job, signing, and dating all pages. In the event your immediate supervisor does not have a professional designation, please contact Technology Professionals Saskatchewan for Mentor program information.

At times the Technology Professionals Saskatchewan's Registration Board and Technology Professionals Saskatchewan's Examination Board may request additional information if a change in employer or a significant change in job function is found.

Technology Professionals Saskatchewan's Registration Board and Technology Professionals Saskatchewan's Examination Board uses the Career Tracker to aid in assessing the qualifications for a professional designation as an A.Sc.T. or a C.Tech. Therefore, you must be specific in your description, and elaborate on your daily work activities following within the Professional Profile.



***At the time of application for registration as a professional, applicants must be working in accordance with the applicable Professional Profile. The work experience must be related to the discipline of academic training.***

**COMPARISON BETWEEN TECHNOLOGISTS AND TECHNICIANS (Note: Areas of difference in bold type)**

Comparison Areas	Applied Science Technologist	Certified Technician
<b>Registration Requirements:</b>	<ul style="list-style-type: none"> <li>Saskatchewan grade 12 diploma or equivalent</li> <li><b>Diploma</b> from an applied science or engineering technology program of <b>two or more years</b> that is recognized by Technology Professionals Saskatchewan, or equivalent academics that have been assessed against Technology Professionals Saskatchewan registration requirements and approved by Technology Professionals Saskatchewan's Examination Board; <b>OR</b></li> <li>Successful completion of an appropriate Technology Professionals Saskatchewan reclassification program</li> <li><b>An acceptable technology report or thesis</b></li> <li>Minimum of two years of approved technical experience</li> <li>Professional references</li> <li>Completion of Technology Professionals Saskatchewan's Professional Practice and Ethics Examination</li> </ul>	<ul style="list-style-type: none"> <li>Saskatchewan grade 12 diploma or equivalent</li> <li><b>Certificate</b> from an applied science or engineering technology program of <b>one or more years</b> that is recognized by Technology Professionals Saskatchewan, or equivalent academics that have been assessed against Technology Professionals Saskatchewan registration requirements and approved by Technology Professionals Saskatchewan's Examination Board; <b>OR</b></li> <li>Successful completion of an appropriate Technology Professionals Saskatchewan reclassification program established by Technology Professionals Saskatchewan Examination Board</li> <li><b>No technology report or thesis required</b></li> <li>Minimum of two years of approved technical experience</li> <li>Professional references</li> <li>Completion of Technology Professionals Saskatchewan's Professional Practice and Ethics Examination</li> </ul>
<b>Typical Training Programs:</b>	<ul style="list-style-type: none"> <li>Registration requirements includes <b>21</b> areas of study in technology related courses, including all generic competencies, and at least 6 technology major competencies outlined in the Technology Professionals Saskatchewan</li> </ul>	<ul style="list-style-type: none"> <li>Includes <b>12</b> areas of study in technology related courses, including all generic competencies and at least 5 technician major competencies outlined in the Technology Professionals Saskatchewan registration requirements</li> </ul>
<b>Professional Designation:</b>	<ul style="list-style-type: none"> <li>Bound by Technology Professionals Saskatchewan Code of Ethics and Practice Guidelines, and is recognized by the designation Applied Science Technologist (A.Sc.T.)</li> </ul>	<ul style="list-style-type: none"> <li>Bound by Technology Professionals Saskatchewan Code of Ethics and Practice Guidelines, and is recognized by the designation Certified Technician (C.Tech.)</li> </ul>
<b>Typical Scope of Work:</b>	<ul style="list-style-type: none"> <li>May work independently or under general direction</li> <li>Typical duties include: <ul style="list-style-type: none"> <li>Analysis</li> <li>Project management</li> <li>Carry out studies</li> <li>Prepare specifications</li> <li>Design modeling</li> <li>Resolve problems</li> <li>Designing equipment / processes</li> <li>Operate pilot plants / plants</li> <li>Develop prototypes</li> <li>Scheduling / planning</li> <li>Develop solutions</li> <li>Specify tests</li> <li>Estimating</li> <li>Supervision</li> <li>Inspect / Plan</li> <li>Write reports</li> <li>Interpret / evaluate situations / data</li> <li>Interpret quality control</li> <li>Numeric / spacial Modeling</li> <li>Troubleshoot complex equipment</li> </ul> </li> <li>Applies engineering principles based on a comprehensive understanding of a specific technology to resolve problems</li> <li>May assume managerial or administrative responsibility for a wide range of technical endeavors, and may supervise and coordinate a diverse working group and train less experienced technical and professional staff</li> </ul>	<ul style="list-style-type: none"> <li>May works under general supervision and assists other employees</li> <li>Typical duties include: <ul style="list-style-type: none"> <li>Calibration</li> <li>Model preparation</li> <li>Conduct quality control tests</li> <li>Operations</li> <li>Construction supervision</li> <li>Production control</li> <li>Data compilation</li> <li>Repair</li> <li>Design drafting</li> <li>Reporting</li> <li>Drawing preparation</li> <li>Sales</li> <li>Estimating</li> <li>Sampling / testing</li> <li>Inspection</li> <li>Surveying</li> <li>Installation</li> <li>Testing</li> <li>Maintenance</li> <li>Troubleshooting</li> </ul> </li> <li>Examines assignments, objectives, and instructions to select procedures and actions to resolve the assigned problem</li> <li>Duties are usually in a specific area of specialization</li> </ul>



## PROFILE OF A PROFESSIONAL APPLIED SCIENCE TECHNOLOGIST

An **Applied Science Technologist** (hereinafter referred to as the technologist) is a professional who, through academic training and experience in the application of mathematics and engineering or scientific principles, is capable of assuming responsibility and of exercising independent judgement in the field of applied science or engineering technology in which training has been achieved. By virtue of this training and experience, a Canadian technologist is prepared to take final responsibility for all aspects of work within this field of training.

### **EDUCATION AND TRAINING:**

The academic training for a technologist is based upon a core of applied mathematics and engineering / science fundamentals. The mathematics core includes topics such as differential equations, integration, Math 30 or equivalent, analytical geometry, trigonometry, statistics, and computer related mathematics, permitting the technologist to use mathematics as a tool in the synthesis of designs or in the analysis of the technical problems of the field of discipline. The engineering and science fundamentals provide a firm base along with mathematics for training in the applied science / engineering technology applicable to a particular branch or specialty of technology. The academic and theoretical portion of a program of training is suitably reinforced by laboratory and project experience amounting to approximately one-third of the total program.

### **REGISTRATION:**

An individual who successfully completes the examinations of a provincial association, or who graduates from a program recognized by Technology Professionals Saskatchewan at the technologist level, or who otherwise meets the academic standards established by the registration body, may on completion of at least two years of acceptable practical experience in an area of work directly related to the area of academic achievement, be registered as an Applied Science Technologist.

### **CAREER OPPORTUNITIES:**

The technologist may carry out a wide range of complex work processes in the specialty and identified field of technology in which registration was granted. Employment or career opportunities exist in most phases of industry, consulting, business, government, and public organizations.

Typical areas would include design, marketing, sales, estimating, research and development, production control, purchasing, operations and production, testing, quality management, maintenance, customer and field service, management and supervision of projects and people, instruction and teaching. Such work may be independent or in association with other professionals as part of a team.

### **DUTIES AND RESPONSIBILITIES:**

The technologist uses an applied approach based upon a comprehensive understanding of the field of technology in which registration was granted. The technologist evaluates assignments, establishes objectives, defines problems, and determines procedures and actions to resolve the problems.

#### **The technologist may:**

- design equipment, processes or systems; analyze; plan; interpret and prepare specifications; technical drawings or instructions; prepare estimates, and manage projects;
- specify tests; conduct non-routine tests; develop prototypes; operate pilot plants; troubleshoot complex equipment; resolve production or construction problems; compile experimental data or prepare reports;
- supervise, train, coordinate and assume administrative responsibility for the work of others and participate in short and long range planning.

The technologist carries out studies, makes calculations, prepares or develops programs, provides instructions, or implements projects.

The Applied Science Technologist will assume responsibility for his/her work and is at all times bound by a professional Code of Ethics. Depending on the province in which registration is granted, he/she will be identified by one of the following professional designations: AScT; CET; TScA; RET; TP; PTech. He/she will be identified in Saskatchewan by the following professional designation:

**A.Sc.T.**



## PROFILE OF A PROFESSIONAL CERTIFIED TECHNICIAN

A **Certified Technician** (hereinafter referred to as the technician) is a professional who, through academic training and experience in the application of mathematics and engineering or scientific principles, is capable of accepting responsibility and of exercising judgment in the specialized portion of the field of applied science or engineering technology in which training has been achieved. By virtue of this training and experience, a Canadian technician is often delegated responsibility for aspects of work within this specialized portion of the field of training.

### **EDUCATION AND TRAINING:**

The academic training for a technician is based upon a core of applied mathematics and engineering / science fundamentals. The mathematics core would include topics such as Math 30 or equivalent, geometry, trigonometry, descriptive statistics, computer applications and introductory calculus, to the extent required for the explanation of technical components of the specialized areas of training. The technician will use mathematics as a tool in the solution of the technical problems of his/her specialized field. The engineering and science fundamentals provide a firm base along with mathematics for specialized training which normally invokes empirical rather than analytical solutions to technical problems. The academic and theoretical portion of a program of training is suitably reinforced by laboratory and project experience amounting to approximately one-half of the total program.

### **REGISTRATION:**

An individual who successfully completes the examinations of a provincial association, or who graduates from a program recognized by Technology Professionals Saskatchewan at the technician level, or who otherwise meets the academic standards established by the registration body, may on completion of at least two years of acceptable practical experience in an area of work directly related to the area of academic achievement, be registered as a Certified Technician.

### **CAREER OPPORTUNITIES:**

A technician may carry out a variety of technical work processes in the area of specialization in which registration was granted. Employment or career opportunities exist in many phases of industry, consulting, business, government, and public organizations. Typical areas would include design, marketing, sales, estimating, research and development, production control, purchasing, operations and production, testing, quality control, maintenance, customer and field service, supervision of projects and people, instruction and training. Such work is usually in association with other professionals as part of a team.

### **DUTIES AND RESPONSIBILITIES:**

The technician generally uses a practical approach based upon a detailed understanding of the field of technology in which registration was granted. The technician examines his/her assignments, objectives and instructions to select procedures and actions to resolve the assigned problem.

#### **The technician may:**

- design assist in the design of equipment or systems; assist in the interpretation and preparation or modification of specifications, technical drawings or instructions; prepare estimates; and supervise phases of major projects;
- conduct tests; build prototypes of models; operate pilot plants; trouble-shoot equipment; resolve production or construction problems; compile data and reports; supervise phases of construction projects; inspect construction projects; conduct tests, surveys or prepare estimates for construction activities; trouble-shoot, service, calibrate or supervise the repair or installation of equipment processes or products;
- provide support for operations activities including supervision of operations or operation-related activities such as quality assurance, production control and maintenance;
- provide support in laboratory environments by conducting experiments; conducting tests or servicing complex equipment in support of research and development, quality control or academic activities;
- supervise, train, and coordinate the activities of others.

While some duties of the technician may be similar to skilled craftsmen or tradesmen, these would not normally be of a routine nature and would normally apply on sophisticated equipment or processes. Many of the duties of the technician will be similar to the duties of technologists and other professionals but these will normally be in a very selective area of specialization.

The Certified Technician may, through long experience in the field, become recognized as a technical expert in a well defined specialty and will assume responsibility for his/her work, and at all times be bound by a professional Code of Ethics. All Canadian provinces identify a Certified Technician by the following professional designation:

**C.Tech.**



**How to use your Career Tracker – Record of Professional Experience**

- It is easier to record your work experience as you progress towards achieving professional status.
- Fill out your Career Tracker on a daily or weekly basis.

**All entries should include:**

1) Project dates; 2) Detailed description of the duties performed during the project; 3) Initials for verification by immediate supervisor. Your immediate supervisor must have a professional designation: i.e., A.Sc.T., C.Tech., P.Eng., P.Geo., SLS, Architect, etc., and be able to attest to accuracy of the duties identified on the Record of Professional Experience form by initialing each job, signing, and dating all pages. In the event your immediate supervisor does not have a professional designation, please contact Technology Professionals Saskatchewan for Mentor program information.

**NOTE:** The Career Tracker is used by the Technology Professionals Saskatchewan Registration Board to determine if sufficient work experience exists in the appropriate areas for the classification of registration / enrollment sought.

**DETAILED SAMPLE**

PROJECT DATES FROM MM/DD/YY	PROJECT DATES TO MM/DD/YY	DETAILED DESCRIPTION OF DUTIES PERFORMED DURING THE PROJECT: <u>The work experience must be related to the discipline of academic training.</u> PLEASE PRINT (Use additional pages in this format, if necessary.)	Verification by Immediate Supervisor
01/06/07	12/07/07	<b>Commercial Office Complex—Prince Developments 20,000 square feet</b>	
		Prepare construction documents (technical drawings and specifications)	
		Prepare certain architectural presentation documents	
		Prepare cost estimate data	
		Lead the technical team in production of construction documents	
		Shop drawing reviews	
		Bid material reviews	
		Contract administration	JS
05/02/07	08/06/07	<b>Major Parking Lot for Federal Government</b>	
		Supervise survey data collection, and interpret survey data	
		Preliminary design, and prepare preliminary cost estimation	
		Develop and prepare preliminary design report	
		Direct meetings; and direct CAD operator	
		Complete detailed design	
		Prepare specifications and prepare detailed project cost estimation	
		Complete tender documents	
		Chair tender opening, and chair preconstruction meeting	
		Perform on-site construction inspection, and perform construction stakeout	
		Review shop drawings	
		Complete record drawings and complete project closing report	
		Conduct construction meetings	JS

<p>Immediate supervisor to initial beside each project and to verify that the activities recorded are complete and accurate.</p> <p><b>PLEASE PRINT</b> immediate supervisor's name and professional designation, applicant's name, and company name.</p> <p>Immediate supervisor's signature, telephone number, email and date.</p>	<p>I, <u>John Smith</u>, <u>A.Sc.T.</u> (print immediate supervisor's name) (Professional Designation)</p> <p>Verify the above job description accurately portrays the expectations of</p> <p><u>Leo Newmeyer</u> (print applicant's name)</p> <p>an employee of <u>ABC123 Engineering</u> (print company name)</p> <p><u>John Smith</u> Signature of immediate supervisor</p> <p>Phone: <u>306-555-1212</u> Email: <u>email@email.com</u></p> <p>Date: <u>09/01/2013</u> MM/DD/YYYY</p>
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Applicant's Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_ Location: \_\_\_\_\_

RECORD OF PROFESSIONAL EXPERIENCE

Table with 4 columns: PROJECT DATES FROM, PROJECT DATES TO, DETAILED DESCRIPTION OF DUTIES PERFORMED DURING THE PROJECT, and Verification by Immediate Supervisor. Includes instructions: 'The work experience must be related to the discipline of academic training. PLEASE PRINT (Use additional pages in this format, if necessary.)'

FOR INTERNAL USE ONLY

Job description meets the requirements of a:  Technologist  Technician  Neither

REVIEWED BY:

1. \_\_\_\_\_ Examiner MM/DD/YYYY

2. \_\_\_\_\_ Examiner MM/DD/YYYY

Examiner Notes:

Empty box for Examiner Notes

Date: \_\_\_\_\_ MM/DD/YYYY

I, \_\_\_\_\_, \_\_\_\_\_ (print immediate supervisor's name) (Professional Designation)

verify the above job description accurately portrays the expectations of \_\_\_\_\_ (print applicant's name)

an employee of \_\_\_\_\_ (print company name)

Signature of immediate supervisor

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Date: \_\_\_\_\_ MM/DD/YYYY



Applicant's Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_ Location: \_\_\_\_\_

RECORD OF PROFESSIONAL EXPERIENCE

Table with 4 columns: PROJECT DATES FROM MM/DD/YY, PROJECT DATES TO MM/DD/YY, DETAILED DESCRIPTION OF DUTIES PERFORMED DURING THE PROJECT: The work experience must be related to the discipline of academic training. PLEASE PRINT (Use additional pages in this format, if necessary.), Verification by Immediate Supervisor.

FOR INTERNAL USE ONLY

Job description meets the requirements of a:  Technologist  Technician  Neither

REVIEWED BY:

1. \_\_\_\_\_ Examiner MM/DD/YYYY

2. \_\_\_\_\_ Examiner MM/DD/YYYY

Examiner Notes:

Empty box for Examiner Notes

Date: \_\_\_\_\_ MM/DD/YYYY

I, \_\_\_\_\_ (print immediate supervisor's name), \_\_\_\_\_ (Professional Designation)

verify the above job description accurately portrays the expectations of \_\_\_\_\_ (print applicant's name)

an employee of \_\_\_\_\_ (print company name)

Signature of immediate supervisor

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Date: \_\_\_\_\_ MM/DD/YYYY



Applicant's Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_ Location: \_\_\_\_\_

RECORD OF PROFESSIONAL EXPERIENCE

Table with 4 columns: PROJECT DATES FROM MM/DD/YY, PROJECT DATES TO MM/DD/YY, DETAILED DESCRIPTION OF DUTIES PERFORMED DURING THE PROJECT: The work experience must be related to the discipline of academic training. PLEASE PRINT (Use additional pages in this format, if necessary.), Verification by Immediate Supervisor

FOR INTERNAL USE ONLY

Job description meets the requirements of a:  Technologist  Technician  Neither

REVIEWED BY:

1. \_\_\_\_\_ Examiner MM/DD/YYYY

2. \_\_\_\_\_ Examiner MM/DD/YYYY

Examiner Notes:

Empty box for examiner notes

Date: \_\_\_\_\_ MM/DD/YYYY

I, \_\_\_\_\_ (print immediate supervisor's name), \_\_\_\_\_ (Professional Designation)

verify the above job description accurately portrays the expectations of \_\_\_\_\_ (print applicant's name)

an employee of \_\_\_\_\_ (print company name)

Signature of immediate supervisor

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Date: \_\_\_\_\_ MM/DD/YYYY





Applicant's Name: \_\_\_\_\_ Title: \_\_\_\_\_

Company: \_\_\_\_\_ Location: \_\_\_\_\_

RECORD OF PROFESSIONAL EXPERIENCE

Table with 4 columns: PROJECT DATES FROM, PROJECT DATES TO, DETAILED DESCRIPTION OF DUTIES PERFORMED DURING THE PROJECT, and Verification by Immediate Supervisor.

FOR INTERNAL USE ONLY

Job description meets the requirements of a: [ ] Technologist [ ] Technician [ ] Neither

REVIEWED BY:

1. \_\_\_\_\_ Examiner MM/DD/YYYY

2. \_\_\_\_\_ Examiner MM/DD/YYYY

Examiner Notes:

Empty rectangular box for examiner notes.

Date: \_\_\_\_\_ MM/DD/YYYY

I, \_\_\_\_\_ (print immediate supervisor's name), \_\_\_\_\_ (Professional Designation)

verify the above job description accurately portrays the expectations of \_\_\_\_\_ (print applicant's name)

an employee of \_\_\_\_\_ (print company name)

Signature of immediate supervisor

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Date: \_\_\_\_\_ MM/DD/YYYY

