ASTTBC TECHNOLOGY PROFESSIONALS

Technician profile

Certified Technician (CTech) is a protected title; these professionals are graduates of a one-year accredited certificate program or an equivalent, in engineering or applied science technology, who have completed two or more years of progressive experience in an area of work directly related to the program of study. The type of work experience considered at the technician level includes but is not limited to:

- Assists in manufacturing, testing, constructing, installing, operating and maintaining of engineered products processes, buildings, infrastructure, facilities, systems and services.
- Performs defined technical tasks and solves problems based on the established principles and practices of engineering and applied science and technology.
- Interprets and are guided by text and graphical instructions applicable to a defined range of services, products or processes to ensure quality control and compliance with codes and standards compliance.
- Performs standard practices, techniques and procedures to provide a service, produce products and operate equipment or processes.
- Assesses conditions and takes corrective action within a defined scope and predetermined limits.
- Supports and contributes to the implementation of design specifications, conducting inspections, performing standardized testing and the operation and maintenance of equipment, processes and services.
- Identify and analyze well-defined engineering problems reaching substantiated conclusions using established methods of analysis specific to their field of activity including the use of specific tools and equipment.

Technicians are professionals capable of performing responsible and varied technical tasks – usually in a specialized portion of the field of engineering or applied science technology by virtue of academic qualifications, training and experience.

Technicians work in a variety of fields, such as building and construction technology, infrastructure, geomatics, biosciences, allied health and resource or systems management.

Technicians examine assignments, objectives, and instructions to select appropriate procedures and actions to resolve assigned problems. They apply techniques, resources, technology, and discipline-specific engineering fundamentals to solve well-defined engineering problems, often involving sophisticated equipment or processes.

Technicians create substantiated conclusions for well-defined technical problems that assist in the design of systems, components, or processes that meet regulatory constraints. Typical activities of a technician include testing, troubleshooting, inspection, calibration, design drafting, quality control, maintenance, modeling, data collection and compilation, estimating, sales, surveying and field investigations.

Through accumulated field and work experience, technicians may become recognized as technical experts.

Technician – typical activities	
Role	Performs routine or proceduralized technical tasks, testing, and inspections based on standardized methods.
Scope of work	Works to address or resolve well-defined applied science and engineering technology problems that are encompassed by standards and codes.
Judgement	Applies standard methods with minimal interpretation.
Design and drafting	Assists in the preparation of technical drawings, plans, and specifications.
Inspection and testing	Conducts field inspections, site investigations, tests, data compilation, documentation and reporting.
Problem solving	Diagnoses technical problems using field data and known procedures to troubleshoot and resolve well-defined engineering problems.
Examples of work	Testing electrical systems. Field surveys/data collection. Industrial controls work such as the installation, configuration, programming, testing and troubleshooting of: • Programmable Logic Controller (PLC)-based automation and control systems. • Human-Machine Interface (HMI) systems. • Supervisory Control and Data Acquisition (SCADA) systems. Quality assurance and quality control. Mechanical equipment inspections/testing. Concrete or soils material testing. Engineering drafting of layouts or plans. Drafting and design

Qualifications & experience

Title & practice restrictions licensing

Under the *Professional Governance Act*, only individuals who are appropriately registered may use the reserved title **Certified Technician (CTech)**.

Registration may also be required to lawfully perform certain reserved scopes of practice. For example, CTechs may serve as qualified environmental professionals (QEP) under the Riparian Areas Protection Regulation where they meet all QEP requirements.

Education & training required after high school

Approximate duration including work experience: three years.
Typical classroom contact hours & credential: 1,000 hours, certificate of technology.
Typical education content/focus: academic, technical, business.

Required work experience

A minimum of two years of work experience, including at least one year at the technician level.

Technician registration requirements can be found in the ASTTBC Bylaws.