



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 in engineering, applied science or technology is based upon a core of fundamental mathematics. The mathematics core would include topics such as Math 30 or equivalent, geometry, trigonometry, introductory calculus, descriptive statistics, computer applications, and introductory technical components required for the explanation 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 the program is suitably reinforced by laboratory and project experience amounting to approximately one-half of the total program. High school graduation classes are prerequisites for entry into post secondary institutions. To apply for TPS registration applicants must have completed college and/or university applied science / engineering technology courses.

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.