



PROFILE OF A PROFESSIONAL TECHNOLOGIST

A **Professional 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 in engineering, applied science or technology is based on a core of fundamental mathematics. 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. The engineering and science fundamentals provide a firm base along with engineering mathematics technology applicable to training in a particular discipline 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. 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 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 a Professional 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 Professional Technologist will assume responsibility for his/her work and is at all times bound by a professional Code of Ethics. All Canadian provinces identify a Professional Technologist by the following professional designation:

P.Tech.