

## **Scope of practice for Certified Engineering Technologists**

### **Current situation**

There are common elements of a regulated profession in Alberta. ASET is proposing that engineering and geoscience technologists share these common elements with other professions. Engineering and geoscience technologists have specialized training either through successful completion of an accredited post-secondary technologist program in Canada or through academic verification by the International Qualification Assessment Service provided by the Government of Alberta and other agencies belonging to the Alliance of the Credential Evaluation Services of Canada, and supported by superior experience and competency in the field, vetted by certification through ASET. Engineering and geoscience technologists provide an important service to the public by applying their education and work experience to ensure codes, standards and procedures are applied to their specific technical tasks. ASET provides certification and licensure for engineering and geoscience technologists, which ensures that members adhere to high discipline and behavioural standards; annual continuing professional development requirements to maintain competence in their field; a rigorous code of ethics; and professional liability insurance requirements to support responsibility for their work.

Most professions in Alberta have a legislated scope of practice. Most scopes of practice, and specifically the scopes of practice for other regulated technologists, do not include sign off authority. The scope outlines duties they are qualified to perform based on the elements of a profession. ASET is proposing a scope of practice that will not and does not authorize independent sign off authority. The coincidence of some of the elements of this scope of practice with some elements of the much broader professional engineer or geoscientist scope of practice should not be taken to suggest that only professional engineers or geoscientists can perform these acts – nor does a scope of practice of a permissive nature, allowing engineering technologists to work independently at roles for which they are educated and experienced, begin to suggest that their right to practice excludes professional engineers or geoscientists from also doing such work.

There are no legally enshrined certification requirements to be an engineering or geoscience technologist. ASET's proposed scope of practice for engineering and geoscience technologists is as follows:

An engineering technologist and geoscience technologist will undertake work that is the routine application of industry recognized codes, standards, procedures and practices using established engineering or applied science principles and methods of problem solving.

### **Related public policy**

Every health and non-health profession whose duties impact the public has a scope of practice set in legislation. Every technologist has a clearly defined scope of practice set in legislation, with the exception of engineering and geoscience technologists. The importance and utility of engineering technologists has grown considerably over the past fifty years. One example of this is the large number of technologist programs in Alberta's post-secondary system, as well as the over-subscription of applicants for these programs. Health technicians and technologists currently fully regulated through the *Health Professions Act* include:

- Clinical dental technologist
- Clinical dental technician
- Combined laboratory and X-ray technicians
- Electroencephalography technologist
- Electroneurophysiology technologist
- Medical laboratory technologist
- Radiological technologist
- Nuclear medicine technologist
- Medical radiation technologist
- Ultrasound technologist
- Vascular technologist

Non-health professions currently fully regulated in Alberta include:

- Accountants
- Architects
- Engineers
- Foresters (and forest technologists)
- Land surveyors
- Lawyers
- Real estate brokers
- Teachers
- Veterinarians (and veterinary technologists)

### **Impact of the proposed change**

Foreign trained engineers who will not qualify for a licence under APEGA's proposed changes will need to be formally recognized in order to compete with Canadian born applicants. One of the clearest ways to incrementally level the playing field is to formally recognize the competencies of engineering technologists. Without this formal recognition, and with significant pull back to licenced categories with APEGA, foreign trained engineers will be marginalized.

ASET has re-launched its program to encourage women to consider engineering and geoscience technologist careers. These professions, like other STEM careers, are male dominated and formal, legally recognized certification will allow women to grow careers on a more level playing field.

Most jurisdictions have moved toward assigning specific tasks to specific professions in codes, standards and regulations. Engineering and geoscience technologist graduates from post secondary programs require additional certification as the global trend toward more regulation, certification and standards grow for various forms of infrastructure.

Finally, all engineering and geoscience technologists will be recognized in legislation with a scope of practice and will thereby be fully aligned with the other regulated professions in Alberta.