

# Guide for Engineering and Geoscience Licensee Applicants

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# **Guide for Engineering and Geoscience Licensee Applicants**

In addition to this guide, the following items will inform and enable you to apply for registration as an Engineering Licensee or Geoscience Licensee, hereafter referred to as a Licensee Member, of the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS). All are available on the APEGS website under Apply, Eng/Geo Licensee, except as noted:

- a. Application for Registration as a Licensee Member
- b. *The Engineering and Geoscience Professions Act,* Regulatory Bylaws and Administrative Bylaws. These are available on the APEGS website under "About Us".
- c. APEGS English Competence Policy
- d. Experience Guideline 2 Components of Acceptable Engineering Work Experience OR
- e. Experience Guideline 3 Components of Acceptable Geoscience Work Experience
- f. Scope of Professional Practice Form
- g. Licensee Member Chronological Activity Form
- h. Engineering Licensee Report on Experience OR
- i. Geoscience Licensee Report on Experience
- j. Proof of ID Guarantor Form

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## 1.0 Introduction

# 1.1 WHAT IS LICENSEE MEMBERSHIP?

The licensee membership category is intended to recognize and to formalize the fact that certain individuals, who do not have the academic qualification for registration as Professional Engineers or Professional Geoscientists in Saskatchewan, can be permitted to carry out certain specific functions, normally within the definition of the practices of professional engineering or professional geoscience. A Licensee Member may practice engineering or geoscience, as the case may be, independently and without the supervision of a Professional Engineer or Professional Geoscientist. The restricted licence which may be granted to a Licensee Member is an official authorization to engage in the practice of professional engineering or professional geoscience within a specified, restricted scope of practice. A Licensee Member will be entitled to use the designation "Engineering Licensee" or "Geoscience Licensee" following their name.

The practice of the Licensee Member is governed by *The Engineering and Geoscience Professions Act*, the Regulatory Bylaws (including the Code of Ethics) and Administrative Bylaws of APEGS (hereinafter referred to as the Act and Bylaws). Licensee Members are entitled to vote and run for Council and have all the same rights and privileges as Professional Members.

A Licensee Member must not engage in the independent practice of professional engineering or the practice of professional geoscience except in a manner consistent with the scope of the restricted licence and according to the provisions of that restricted licence.

A Licensee Member is not entitled to assume, verbally or otherwise, the title of Professional Engineer or Professional Geoscientist.

Certain demand-side legislation stipulates that only a Professional Engineer or Professional Geoscientist can assume responsibility for the services prescribed in the legislation. In this case, the services of a Licensee Member may not be able to be substituted for those of a Professional Engineer or Professional Geoscientist.

# 1.2 TERM OF A RESTRICTED LICENCE

The term of a restricted licence is one year or a part thereof, and terminates on December 31 of each calendar year. Licensee Membership can be maintained and a restricted licence renewed upon submission of all required renewal forms and annual fees, providing the Licensee Member has had no disciplinary actions against them.

# 1.3 What is the Practice of Professional Engineering?

### From The Engineering and Geoscience Professions Act, 1996:

2(1)(m) ...any act of planning, designing, composing, measuring, evaluating, inspecting, advising, reporting, directing or supervising, or managing any of the foregoing, that requires the application of engineering principles and that concerns the safeguarding of the life, health, property, economic interests, the public interest or the environment.

# 1.4 What is the Practice of Professional Geoscience?

From The Engineering and Geoscience Professions Act, 1996:

2(1)(n) ...the application of principles of geoscience that include, but are not limited to, principles of geology, geophysics and geochemistry, to any act of acquiring or processing data, advising, evaluating, examining, interpreting, reporting, sampling or geoscientific surveying, that is directed toward:

- i. the discovery or development of oil, natural gas, coal, metallic or non-metallic minerals, precious stones, water or other natural resources; or
- ii. the investigation of surface or sub-surface geological conditions.

# 1.5 What are the Legislative Provisions for Licensee Membership?

The provisions of the Act and Bylaws respecting Licensee Membership and restricted licence are as follows:

## From The Engineering and Geoscience Professions Act, 1996:

- 20(2) Notwithstanding that a person does not comply with the requirements in subsection (1), the council may register the person as a member and issue a restricted licence to the person to practise professional engineering or professional geoscience, as the case may be, where the person produces evidence establishing to the satisfaction of the council that he or she:
  - (a) is eligible, according to the bylaws, to be a member;
  - (b) has paid the prescribed fees; and
  - (c) has complied with the bylaws with respect to registration.

#### From the Regulatory Bylaws:

Licensee member:

- 6(1) Registration in the Association as an engineering or geoscience licensee is available to a person of good character who meets the requirements of subsection 20(2) of the Act and these bylaws.
- 6(2) An engineering or geoscience licensee is entitled to the following privileges of membership:
  - (a) to hold himself or herself out as a engineering licensee or a geoscience licensee, as the case may be;
  - (b) to attend, participate in and vote at all meetings of the Association and in elections;

- (c) to be eligible for appointment to committees of the Association and to stand for or be elected or appointed to office; and
- (d) to receive any notices or newsletters from the Association.

#### Engineering and Geoscience Licensees:

9 To qualify for registration as an engineering or geoscience licensee, a person must, in addition to the requirements set out in subsection 20(2) of the Act, in the opinion of the Council, be qualified to practise in a particular field or type of engineering or geoscience, under any terms and conditions that the Council may determine.

#### Restricted licence:

15(1) A restricted licence is available to a licensee member whose area of practice is restricted, for any reason, to certain types of work, times or geographical locations.

15(2) For the purposes of subsection 20(2) of the Act, the Council may impose appropriate restrictions on the practice of a licensee member.

# 1.6 LICENSEE MEMBER OFFERING CONSULTING SERVICES

A Licensee Member may offer consulting engineering or geoscience services, providing the services offered fall within the scope of the restricted licence. Section 17 of the Regulatory Bylaws defines consulting engineering or geoscience services as "engineering or geoscience services provided by a member to be used by persons other than the employer of that member."

If you wish to offer consulting engineering or geoscience services, you must submit a Notice of Intent to Consult. This notice is separate and distinct from the application process for Licensee Membership. You may submit a Notice of Intent to Consult with your Licensee Member Application. Refer to the APEGS website under: Apply, Permission to Consult.

# 1.7 CERTIFICATE OF AUTHORIZATION

The Engineering and Geoscience Professions Act requires that every partnership, association of persons or corporation that engages in the practice of professional engineering or the practice of professional geoscience as its principal or customary function shall obtain a Certificate of Authorization (CofA).

The requirement for a CofA applies equally to a large, publicly-traded corporation and to a corporation in which one member is the sole shareholder, director, officer and employee. This requirement also applies equally to the traditional engineering or geoscience consulting firm (principal function) and to those firms that are not thought of as "engineering or geoscience" firms, but customarily engage in the practice of professional engineering or professional geoscience.

A business that engages in the practice of professional engineering or professional geoscience as an unincorporated sole proprietorship is not required to obtain a CofA.

The holder of a CofA is limited to providing services under the supervision of a licensee or licensees who hold an annual or temporary licence and in accordance with any limitations to the licensees of those licensees.

If the Licensee Member is employed by an organization that does not have an APEGS CofA that is undertaking Engineering or Geoscience work in Saskatchewan, an application must also be made for a CofA. Refer to the APEGS website: Apply, Certificate of Authorization.

# 1.8 COMPETENCE IN ENGLISH

Applicants whose first language is not English or who have not completed a degree or diploma of at least two years' duration at an institution where the language of instruction was English must provide evidence of competency in the English language. The English Competence Policy is available on the APEGS website under Apply, Eng/Geo Licensee.

# 2.0 Academic and Work Experience Requirements for Licensee Membership

### 2.1 LICENSEE MEMBERSHIP APPLICATION CATEGORIES

The academic and experience requirements for Licensee Membership are interrelated. Table 1 provides the requirements for the three different Licensee Membership Application Categories.

Table 1 - Licensee Membership Application Categories

Category *	1	2	3
Education Requirement	Four-year science degree from a university program acceptable to Council.	Diploma in engineering or geoscience technology from a program acceptable to Council. The program must be of at least two years duration (equivalent to technologist, not technician).	Other education acceptable to Council – successful completion of a minimum of two years of post-secondary bachelor's degree in engineering, geoscience, or related science.
Experience Requirement*	Minimum five years post- degree work experience.	Minimum eight years post-diploma work experience.	Minimum eight years of post- study work experience.

<sup>\*</sup>For all categories – a minimum of five years of work experience must be obtained under the direct supervision of a P.Eng., P.Geo., Engineering Licensee or Geoscience Licensee. Also, the applicant must have at least five years of experience within the requested scope of practice.

All approved experience must be directly related to the scope of work to be identified in the restricted licence and have been performed under the direction of a Professional Engineer or Professional Geoscientist.

Original transcripts for all completed or partially-completed degrees, diplomas and/or certificates must be submitted directly to APEGS from the educational institution. Transcripts should show courses taken, marks received, and the qualification awarded.

The applicant will be asked to obtain certified translations if the documents received by APEGS are not in English.

At least one year of the experience submitted in support of the licensee member application must have been obtained in Canada or in an equivalent-to-Canadian work environment within the scope of practice being requested.

# 3.0 Mobility of Restricted License in Canada

This category of licensure is not available in all jurisdictions at this time. Mobility for Restricted License holders registered in Canada is not covered under the Agreement of Internal Trade (AIT). However, APEGS Council has adopted a policy allowing for mobility of Engineering and Geoscience Licensees. Where the equivalent license exists, APEGS will process applications for Restricted Licenses consistent with the spirit and intent of this agreement. If an applicant is registered (i.e. has met the academic and experience requirements), and is in good standing with their home association, APEGS will process the application as an inter-association mobility application, of the comparable category in other Associations. Refer to the APEGS website under Apply, Inter-Association Mobility, Eng/Geo Licensee to see if you qualify for mobility and for further details and application instructions.

Regulatory Acts vary across Canada, therefore applicants should be aware that the application process will vary across the Constituent Associations/Ordres. APEGS will confirm the applicant's registration with another regulatory body and confirm that they are a member in good standing.

# 4.0 Application Process and Checklist for Licensee Membership

#### 4.1 REQUIRED INFORMATION

Refer to Self-Checklist on the APEGS website (under Apply, Eng/Geo Licensee)

The following items must be completed and submitted to the APEGS office in order to apply as a licensee member. All documents are available on the APEGS website under Apply, Eng/Geo Licensee:

- a) Application for Registration as a Licensee Member
- b) Application fee of \$300 plus GST
- c) Original copies of transcripts from highest level of education completed, or partially completed, sent directly to APEGS from the educational institution
- d) English test result (if applicable, see English Competence Policy)
- e) Scope of Professional Practice Form
- f) Licensee Member Chronological Activities Summary
- g) Report(s) on Experience
- h) Proof of ID Guarantor Form

Do not submit the application to write the Professional Practice Exam until after you have been admitted to the probationary period.

Upon receipt of all these items, APEGS sends out the reference forms directly to referees. Once all references are received, the application is reviewed by the Licensee Admissions Committee and the applicant is informed as to whether or not they have been admitted to the one-year probationary period and what term applies. You may submit the application form and payment prior to completing the remainder of the documents, allowing APEGS to contact references sooner.

# 4.2 REFEREES

An applicant must provide the names of four or more people to act as referees with first-hand (supervisory or in a review capacity) knowledge of the applicant's work. Names of referees are provided by the applicant on the application form. At least three of the referees must be Professional Engineers, Professional Geoscientists, Engineering Licensees or Geoscience Licensees. If experience outside Canada or the United States must be verified, additional referees may be required. At least one of the referees must be registered in Canada with exceptions shown in the Professional References Policy (Reg1.0).

Referees will be called upon to verify the level and performance of the applicant's work in professional engineering or professional geoscience and to endorse the proposed scope of practice of the licence. The responses of referees to the questions posed on the reference form are critical to the success of the process. The sum of the responses provides the basis for judgement of those reviewing the application as to the ability of an

applicant to function as a professional. Prior to nominating their referees, applicants are urged to contact them and to ensure their willingness to participate in the process. Referee reports are provide in confidence and will not be shared with applicants.

# 4.3 WORK EXPERIENCE REPORTS

Work experience is an essential element in determining whether or not an individual is qualified for professional licensing within the proposed scope of professional practice.

Acceptable engineering work experience must include (refer to Experience Guideline 2):

- the application of theory;
- practical experience;
- management;
- communication; and
- the social implications of engineering.

Acceptable geoscience work experience must include (refer to Experience Guideline 3):

- application of knowledge of geoscience principles and practices;
- management of geoscience;
- social implications of geoscience; and
- communication skills.

Assessment of the acceptability of the work experience is based on the extent to which the applicant's experience includes these areas.

The number of experience reports required depends on the application category as shown in section 2 of this guideline and the number of positions held by the applicant that are relevant to the application. Separate reports are required for separate jobs. Two work experience reports are also required during the one-year probationary period. Experience described in the experience report must be verified by the Professional Engineer or Professional Geoscientist who supervised the work.

**NOTE** – ensure that you use the form for reporting Engineering or Geoscience Licensee work experience NOT the ones for reporting Engineer-in-Training or Geoscientist-in-Training work experience.

#### 4.4 THE PROFESSIONAL INTERVIEW

Applicants for Licensee Membership may, at the discretion of the Registrar, be required to undergo a personal interview, either at their place of work or other location designated by APEGS. Interviews may be held if the experience reports or re-submission of experience reports do no suffice in describing the work experience. During the interview, the practice of the applicant will be reviewed and the applicant will be expected to demonstrate good familiarity with codes and regulations that are applicable to the practice in Saskatchewan. An applicant may be required to provide evidence, including

drawings, designs, specifications, photographs, videotapes, and job files, to support the claimed experience.

# 4.5 PROBATIONARY PERIOD

Following a satisfactory review of an application for Licensee Membership, formal approval of the application will be withheld for a one-year probationary period, during which the applicant will be required to report regularly to APEGS on ongoing work experience. In addition, APEGS will reserve the right to monitor and investigate the applicant's practice during the probationary period by whatever means it deems appropriate including interviews with the applicant, clients, superiors, and fellow workers, visits to the applicant's work site, and examination of drawings, designs, specifications, job files, and any other items considered relevant to the applicant's ability to function as a Licensee Member of APEGS. Two work experience reports are submitted during the probationary period, each six-months in length. During the probation period, applicants are not entitled to use title, or assume professional responsibility for their work, until the Engineering Licensee or Geoscience Licensee approval is granted by the Registrar.

An applicant's probationary period may be backdated, at the discretion of the Registrar, upon recommendation of the Licensee Admissions Committee. If it is determined that the applicant's education and experience exceed the minimum required for their application category by at least one year, the probation period may be backdated appropriately and the requirement for additional work experience and reporting revised accordingly.

# 4.6 THE LAW AND ETHICS SEMINAR AND THE PROFESSIONAL PRACTICE EXAMINATION

The applicant for Licensee Membership is encouraged to attend the APEGS Law and Ethics Seminar and is required to pass the three-hour Professional Practice Examination (PPE), after being admitted to the probation period. The PPE covers the Act and Bylaws, various aspects of engineering and geoscience law, and concepts of professional practice and ethics. The seminar and PPE are each offered twice per year. This step is undertaken any time after the applicant has been admitted to the probationary period. The PPE application form and instructions can be found on the APEGS website under Apply, Professional Practice Exam. Inter-Association Mobility applicants may not be required to complete these steps if they have successfully completed the PPE in their home association.

# 5. Determining Scope of Practice

A restricted scope of practice must fall within the definition of professional engineering or professional geoscience as defined in section 2 of the Act.

The professional services which a Licensee Member may perform under a restricted licence are defined and described in terms of a specialized function, or an activity confined to a specific product or application. In order to write your scope of professional practice, refer to the Scope of Professional Practice Form and to the examples in Appendix A of this Guide.

The wording proposed for the scope of practice must be entered on the application form and must be endorsed by the Professional Engineer or Professional Geoscientist referees. Note that APEGS may revise the proposed scope of practice to make it more appropriate.

If an existing licensee wishes to modify the scope of his or her licence, a new application must be made, accompanied by all applicable fees.

Appendices A to C of this guide contain examples of restricted scopes of practice and samples of engineering and geoscience disciplines and specialties.

# 6. Becoming a Professional Member

It is possible for a licensee member to become a professional member of APEGS. In order to do so, the academic and experience requirements for professional registration would have to be met.

The academic requirement would be met if an engineering licensee or geoscience licensee goes back to university to obtain a bachelor level university program of study in engineering or geoscience acceptable to Council. This would qualify them for registration as either an engineer-in-training or a geoscientist-in-training. An exception may be available on experience reporting toward registration as a professional engineer or professional geoscientist, depending on the following<sup>1</sup>:

- if the Licensee's experience is within the discipline of the bachelor achieved, then they
  receive full credit toward professional registration for the experience gained while a
  Licensee. In some cases, that could result in an applicant immediately fulfilling their
  minimum four year experience requiremnts for registration as a professional member;
  OR
- if the Licensee's experience is not within the discipline of the bachelor achieved, then they would be processed as a new graduate. Parts of the experience may be eligible for review, but assessed at the time of submission.

Licensees who passed the Professional Practice Exam anywhere in Canada in the past do not have to write the exam again should they apply for P.Eng. or P.Geo.

Once four years of experience credit toward professional registration is granted and the Professional Practice Exam is passed, then the Licensee would apply as a professional engineer or professional geoscientist and provide three professional references on the Professional Member application. See the web page Professional Member under the Apply section of the APEGS web site for application instructions and a link to the on-line application system. The application type "Professional Member from APEGS Member-in-Training" would be used.

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<sup>&</sup>lt;sup>1</sup> Pre-Licensee work experience is assessed in the same manner as pre-grad / technologist work experience for members-in-training (i.e., a maximum of 12 months that had to be supervised by a professional member. See Guideline 1 on the APEGS website under Apply, Work Experience Reporting for full detail.

# 7. Fees

The application fee for Licensee Membership is \$300 plus \$15.00 GST. It is non-refundable, and must accompany the Application for Registration as a Licensee Member.

The fee to attend the Law and Ethics Seminar and write the Professional Practice Examination is \$305 plus \$15.25 GST and is due and payable with the application to attend the seminar and sit the exam.

After approvals are complete, the annual membership fee is \$85 plus GST and the annual licence fee is \$365 plus GST; total \$450 plus \$22.50 GST. Both fees are prorated in the first year according to the month in which Licensee Member status is approved.

There is no fee for Notice of Intent to Consult or subsequent Permission to Consult.

If required, the application fee for the Certificate of Authorization is \$325 plus GST. The annual fee which will be applied after the Certificate of Authorization application is approved is as follows:

- \$400 plus GST, for firms with 5 or fewer professional engineers or professional geoscientists registered with APEGS or similar organizations; and
- \$800 plus GST, for firms with 6 or more professional engineers or professional geoscientists registered with APEGS or similar organizations.

### For more information contact:

Director of Registration
Association of Professional Engineers & Geoscientists of Saskatchewan
300, 4581 Parliament Avenue
Regina, SK S4W 0G3
Telephone (306)525-9547 or 1-800-500-9547 (anywhere in North America)
Fax (306)525-0851
Web site www.apegs.ca (see Apply, Eng/Geo Licensee)

E-mail: apegs@apegs.ca

# **Appendix A**

#### **Examples of Restricted Scopes of Practice**

- Chemical Engineering, process design: well site facilities.
- Civil Engineering: municipal water supply distribution and treatment facilities.
- Civil Engineering: municipal sanitary sewage collection and treatment facilities.
- Civil Engineering: geotechnical, terrain and terrain stability mapping plus on-site terrain and terrain stability assessments.
- Civil Engineering: structural design of precast pre-stressed concrete products.
- Civil Engineering: structural component design for buildings of one to three storeys for industrial
  use.
- Civil Engineering: foundation design and inspection of residential buildings.
- Electrical Engineering: control and instrumentation systems for natural gas transportation and natural gas processing plants.
- Electrical Engineering: solid state induction motor starters.
- Electrical Engineering: Teaching and Research.
- Engineering Physics: Teaching and Research.
- Environmental Engineering: Phase I and II environmental site assessments; contaminated site remediation.
- Geology: geological surveys and doing ore reserve estimations for base/precious metals.
- Geology: mineral exploration and development for uranium.
- Mechanical Engineering: petroleum distribution facilities and service stations (excluding refining process).
- Mechanical Engineering: HVAC, plumbing, fire protection, and energy management systems for one-to-three storey industrial buildings.
- Mechanical Engineering: machine design and finite element analysis for agricultural products.
- Mechanical Engineering, stress analysis: stress and vibration testing analyses on machine components.
- Metallurgical Engineering: corrosion mitigation; pressure equipment, piping and associated components for petrochemical and oil and gas facilities.
- Mine Engineering: materials handling and pumping/piping systems for potash mines.
- Petroleum Engineering: oil and gas reservoirs, reserves, production rates and economic values.
- Petroleum Engineering: oil and gas well drilling, completion, work-over and abandonment.

# **Appendix B**

# **Partial List of Engineering Disciplines and Specialties**

**Acoustical Engineering** 

General

Noise management & control

**Aerospace Engineering** 

Aerodynamic/flight test

engineering Avionics

Mechanical systems

Propulsion
Space systems
Structures

Agricultural/Bioresource Engineering

Hydraulics/Hydrology Soils/Soil Mechanics Machinery (Agriculture)

Irrigation & Drainage Crop/Food Processing

Biotechnology & pharmaceuticals

Fisheries/Aquaculture

Forestry

**Biomedical Engineering** 

**Broadcast Engineering** 

**Chemical Engineering** 

Advanced materials & polymers

Chemical/biochemical
Corrosion Engineering
Fuel Cell Engineering
Process design or control
System integration

**Civil Engineering** 

Construction Geotechnical Hydrotechnical Ice Engineering

Materials Municipal/urban Structural

Survey

Transportation

**Computer Engineering** 

Hardware design/architecture Information systems/data

processing Software design System integration

**Electrical & Electronics Engineering** 

Control systems Electrical Electronics

Power generation/ transmission/distribution

**Engineering Physics** 

**Environmental Engineering** 

Environmental Impact Analysis Contaminant analysis / earth materials Contaminant analysis / groundwater

**Contaminant Remediation** 

Risk Assessment

**Fire Protection Engineering** 

**Forensic Engineering** 

**Geological Engineering** 

Geochemistry
Geology
Geophysics
Geotechnical
Hydrogeology
Mining/rock mechanics

Geomatics

**Instrumentation Engineering** 

Manufacturing/Industrial Engineering

Industrial

Manufacturing processes Production systems

Quality assurance, quality control, &

safety

**Mechanical Engineering** 

Controls/robotics

Heating, ventilation & air conditioning

Materials handling Mechanical systems

Solid mechanics/materials/

stress analysis

Thermodynamics/fluids

**Metallurgical & Materials** 

**Engineering** 

Ceramic Engineering

Materials Metallurgy

**Mineral Processing** 

**Mining Engineering** 

Exploration

Mineral processing

Mining

**Nuclear Engineering** 

**Petroleum Engineering** 

Drilling
Exploitation
Exploration
Facilities
Operations

**Petroleum Economics** 

Pipeline design & construction

Process & design Production Refinery Reservoir

Well testing & analysis

Structural Engineering

# **Appendix C**Partial List of Geoscience Disciplines and Specialties

<b>Environmental Geoscience</b>	Geology	Geophysics
Environmental impact analysis	Economic geology	Environmental geophysics
Contaminant analysis / earth	Engineering geology	Exploration geophysics
materials	Environmental geology	Geodesy
Contaminant analysis /	General geology	Geomagnetism &
groundwater	Geochemistry	Paleomagnetism
	Geomorphology	Gravity
	Glacial geology	Heat flow
	Hydrology	Marine geophysics
	Igneous petrology	Mining
	Land use/urban geology	Petroleum geophysics
	Marine geology	Petrophysics
	Metamorphic petrology	Remote sensing
	Mineral geology	Seismology
	Paleontology	
	Petroleum geology	
	Sedimentary petrology	
	Sedimentology	
	Soil sciences	
	Stratigraphy	
	Structural geology	
	Tectonics	
	Well site geology	