Professional Engineers and Geoscientists of BC

APEGBC
Registration Process Overview

UBC Chemical & Biological Engineering Students
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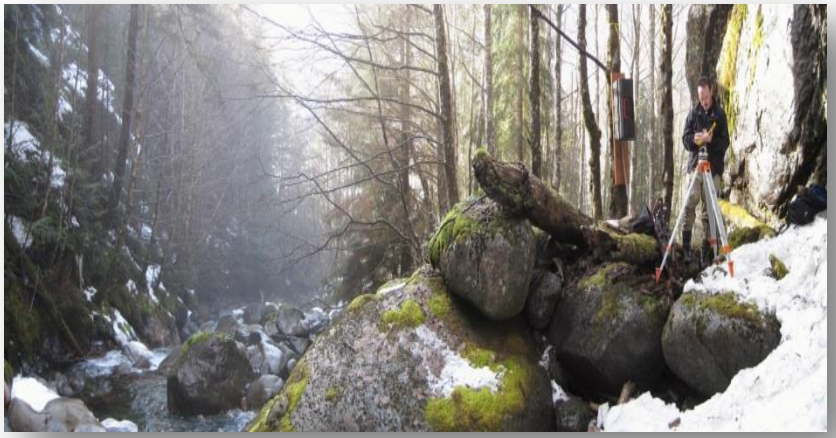
Jason Ong

APEGBC

Professional Engineers and Geoscientists of BC

APEGBC regulates the practice of professional engineering and professional geoscience in the province of British Columbia under the authority of the *Engineers and Geoscientists Act*.



Regulatory Functions

Professional Engineers and Geoscientists of BC

1. Register qualified individuals
2. Enforce standards of admission and practice
3. Investigate and discipline
4. Enforce against unlicensed or unlawful practice

#1 Purpose – uphold and protect the public interest in terms of health, safety & environment

Why Register with APEGBC?

Professional Engineers and Geoscientists of BC

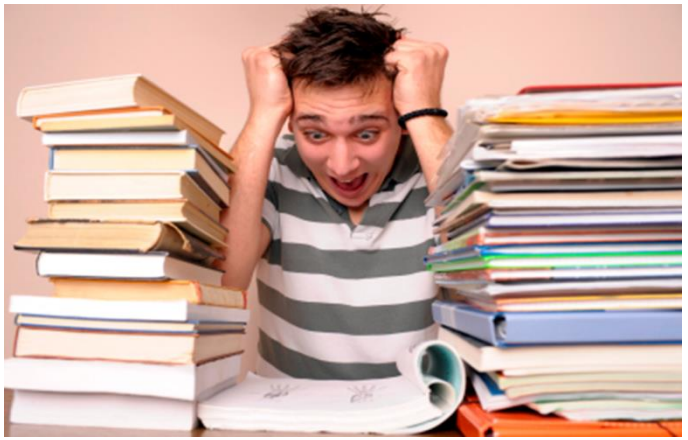
- Exclusive privilege to practice professional engineering or professional geoscience
- Right to title of P.Eng. or P.Geo.
- Use of stamp & seal
- Member benefits
- Professional Development

Student Membership

Professional Engineers and Geoscientists of BC

Benefits include:

- Access to Competency Online System
- Networking Opportunities
- Access to APEGBC Employment Centre
- APEGBC Scholarships
- Member Affinity Programs



Member-in-Training

Professional Engineers and Geoscientists of BC

Engineer-in-Training (EIT) or Geoscientist-in-Training (GIT) status is granted to individuals who meet:

- Academic requirements
- Are currently working toward their 4-year work experience requirement
- Application fee waived within 12 months of graduation

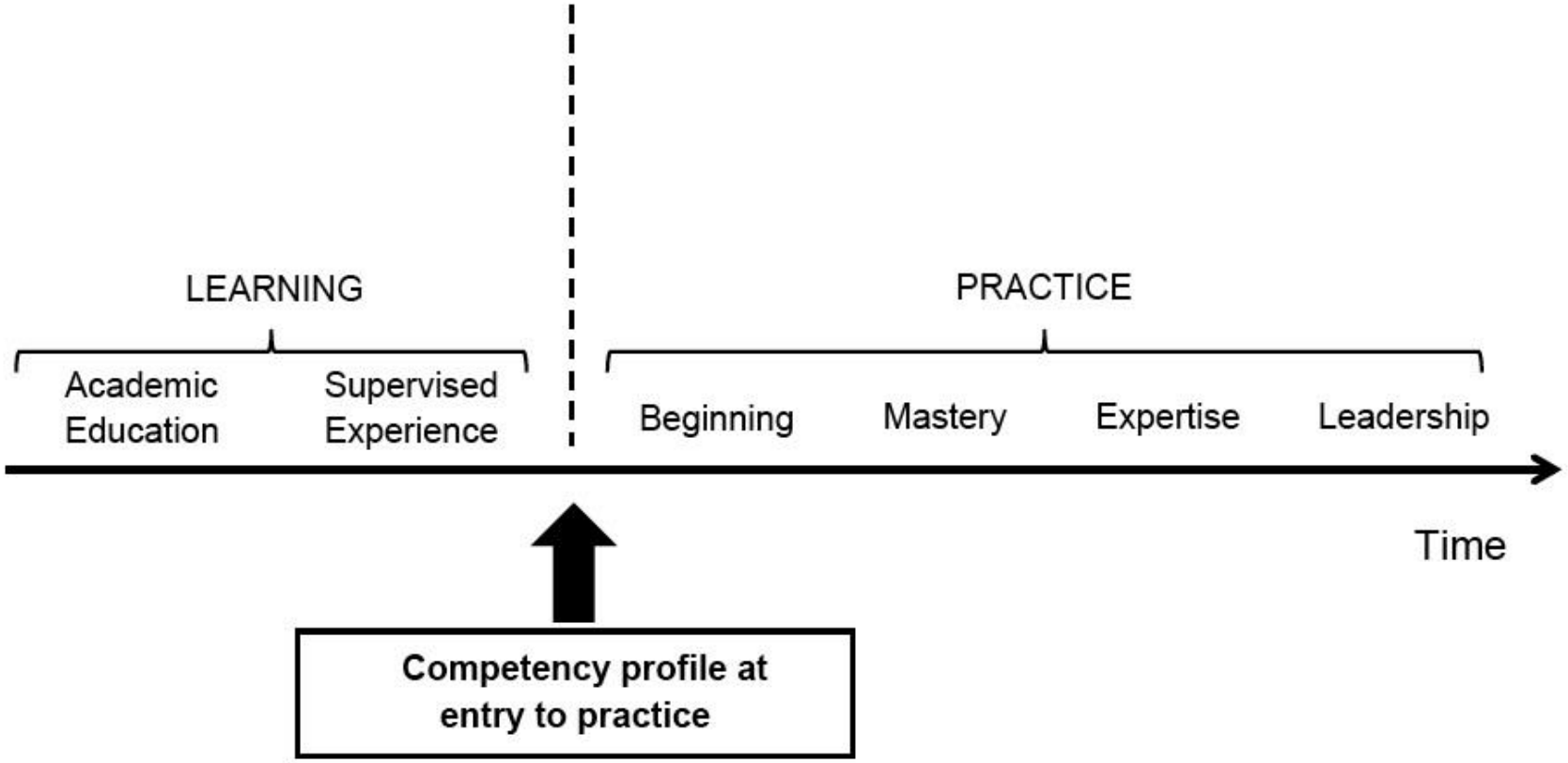
Professional Member P.Eng.

Professional Engineers and Geoscientists of BC

Professional Engineer (P.Eng.)/Professional Geoscientist (P.Geo.) registration is granted to individuals who meet:

- Academic requirement
- 4-year work experience requirement
- Professional practice exam requirement
- Good character requirement

Entry to Practice



Experience Requirements

Professional Engineers and Geoscientists of BC

- Must provide evidence of four years of satisfactory engineering experience (Report via Competency System)
- One year must be in an environment equivalent to a “Canadian one”
- Pre-Graduation experience can count up to a maximum of one year (e.g. Co-op, Summer work)
  - Experience as a certified technologist may qualify
- Post-Graduation experience is cumulative up to a maximum of two years (One year for M.Sc. and another for a Ph.D/Possibly two if only a Ph.D.)

Competency Experience Reporting System

Professional Engineers and Geoscientists of BC

- Applications in the Competency format are submitted, validated and assessed online through the Competency Experience Reporting System

- Currently used by:
  - **Student Members** and **EITs**: Keep track of their progress as they gain the necessary knowledge and experience
  - **Applicants**: Complete and submit their work experience details and Competency Self Assessment online.
  - **Validators** and **Assessors**

Competency Framework

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1. **Technical Competence** – Level 3
2. **Communication** – Level 3
3. **Project & Financial Management** – Level 2
4. **Team Effectiveness** – Level 3
5. **Professional Accountability** – Level 3
6. **Social, Economic, Environmental & Sustainability** – Level 2
7. **Personal Continuing Professional Development** – Level 3

Technical Competence

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1.1 Demonstrate knowledge of regulations, codes, standards, and safety - this includes local engineering procedures and practices as applicable
1.2 Demonstrate knowledge of materials, or operations as appropriate, project and design constraints, design to best fit the purpose or service intended and address inter-disciplinary impacts.
1.3 Analyze technical risks and offer solutions to mitigate the risks
1.4 Apply engineering knowledge to design solutions
1.5 Be able to understand solution techniques and independently verify the results.
1.6 Safety awareness: be aware of safety risks inherent in the design; and Demonstrate Safety Awareness – on-site and possible safety authorization/certificate as appropriate
1.7 Demonstrate understanding of systems as well as of components of systems
1.8 Exposure to all stages of the process/project life cycle from concept and feasibility analysis through implementation
1.9 Understand the concept of quality control during design and construction including independent design check and independent reviews of design, field checks and reviews
1.10 Transfer design intentions to drawings and sketches; Understand transmittal of design information to design documents.

Indicators - Example

Key Competency		Indicators
1.1	Demonstrate knowledge of regulations, codes, standards, and safety - this includes local engineering procedures and practices as applicable	1. Identify and comply with legal and regulatory requirements for project activities. 2. Incorporate knowledge of codes and regulations in design materials. 3. Prepare reports assessing project compliance with codes, standards, and regulations. 4. Recognize the need to design for code compliance while achieving constructability.

Competency Examples

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- Applicants select **best example from their experience to demonstrate each Key Competency**

- Must have a **"Validator" to verify** each example

- Examples include:

  Situation: A brief overview of a specific situation or problem.

  Action: The action that an applicant took in response to the situation, including engineering judgments made or solutions found.

  Outcome: The impact that an applicant's actions, solutions or judgments generated.

Advice

Examples are valid if

- They are related to unique problems without obvious pre-determined solutions
- You had full or partial responsibility for delivering the outcome
- They typically took at least one month to accomplish


JOB REFERENCES
DUŠLZN

References Validators

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Throughout your four years of experience, you need to have a minimum of FOUR people submit reference forms on your behalf

- Ideally, all references will be from P.Eng/P.Geo's
- At a minimum, you will need two P.Eng/P.Geo supervisors
- Colleagues, consultants, clients, can also submit reference forms
- At least one reference should be from a P.Eng/P.Geo supervisor in the same discipline of your application

Law & Ethics Seminar

Professional Engineers and Geoscientists of BC

- A two day seminar offered quarterly in the lower mainland (Usually one month before the PPE) or on CD
- Teaches various areas of law applicable to the practice of the professions, risk management and professional practice and ethics for engineers and geoscientists
- Applicants must have either attended the seminar or purchased and viewed the CD set before getting registered as a P.Eng

***** New online webinar format later in 2016 *****

Professional Practice Exam (PPE)

Professional Engineers and Geoscientists of BC

- A Law & Ethics based exam with questions general enough to be answered by candidates from all disciplines of Engineering or Geoscience.
- Computer-Based Testing (Available at various testing centres)
- Five sessions in 2016 (January, March, June, September, November)
- 110 multiple-choice questions to be completed within two and a half hours.
- An essay to be completed in one hour.
- Two recommended study books that can be purchased from APEGBC.

Professional Engineers and Geoscientists of BC

Questions?

For more information about the application process for P.Eng or P.Geo please visit: https://www.apeg.bc.ca/Become-a-Member

- **Register@apeg.bc.ca**
- **604-412-4856**
- competency@apeg.bc.ca
- jong@apeg.bc.ca