

Application and Academic Review

Process for International Graduates

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Outline

- About APEGS
- Application Process for International Grads
 - Special Cases
 - Self Assessment
- Academic Review Process
 - Results
- Closing Remarks

About APEGS

- Approximately 13,500 individual members (as of Aug. 2018)
 - ~ 10,000 P.Eng.
 - ~ 2,000 Engineer-in-Training
 - ~ 700 P.Geo.
 - ~ 200 Geoscientist-in-Training
 - ~ 100 Eng & Geo Licensees
 - ~ 30 Temporary Licensees
 - ~ 1000 Life Members
- Non-profit organization
- Financed by member fees

*Ensuring proficiency
and competency*



A P E G S

*Association of Professional Engineers
& Geoscientists of Saskatchewan*

About APEGS (Continued...)

- Role of Society
- Privilege of Self regulation
- What is a profession?
- *The Engineering and Geoscience Professions Act (the Act)*
- Right to practice

About APEGS (Continued...)

Role of Society:

- Through an **Act** of the Provincial Legislature the people of Saskatchewan have given the professions the privilege and authority of self regulation.
- Through the **Act** there is a “Social contract” between the public and the professions

About APEGS (Continued...)

Self Regulation:

- All professions in Canada are self-regulating under provincial/territorial legislation
- Members of the profession regulate themselves by ensuring:
 - only qualified people are licensed
 - all those practicing are licensed
- professional practitioners are in the best position to judge who is competent to practice

About APEGS (Continued...)

What is a Profession?

- A profession is a calling requiring specialized knowledge and long academic preparation
- Professionals assign their highest obligation to society above all others
- In cases of conflicting responsibilities/interests, public safety, health and welfare, and the environment are paramount

About APEGS (Continued...)

The Act:

- APEGS is legally responsible to the people of Saskatchewan for licensing engineers and geoscientists in the province, and for regulating the practice of these professions **in the public interest** (i.e. to protect the health, safety, and financial wellbeing of the people and protect the environment).
- APEGS is governed by the “**Engineering and Geoscience Professions Act**” <http://www.publications.gov.sk.ca/details.cfm?p=510>
- *The regulatory and administrative bylaws that govern the association can be found on our website <http://www.apegs.ca/Portal/Pages/Act-Bylaws>*

About APEGS (Continued...)

Right to Practice:

- If you are doing work that would be considered professional engineering you must be licensed as a Professional Engineer
- If you are not, then you must be supervised by a professional member who is taking responsibility for your work.

Application Process for International Graduates

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Application Process

What is an International Grad?

An international engineering graduate (IEG) or international geoscience graduate (IGG) is a person who completed his/her relevant **Bachelor Level** university education outside of Canada*.

*Even if you have a Canadian graduate degree you are still considered an international graduate

Application Process (Continued...)

- All applicants must apply as a **Member-in-Training**, regardless of years of experience, **unless** registered elsewhere in Canada.

Application Process (Continued...)

Member-in-Training Requirements:

- Good Character
 - If at any time during the registration process APEGS becomes aware of something that suggests good character might be an issue, action will be taken.

Application Process (Continued...)

★ Academic Qualification:

- “Bachelor level university program of study in engineering or geoscience* that can be recognized by Council”
 - To “prove” their education, applicants provide original or notarized copies of their diplomas and transcripts by obtaining a WES credential assessment
 - Official course descriptions may also be required.
 - Depending on the situation, an applicant’s ability to meet the academic requirement may be straightforward OR it may require significant effort.
- * geoscience specifies “four-year”

Application Process (Continued...)

New Process and Required Documents – January 2018!

- For engineering applicants, refer to www.apegs.ca – Apply – International Engineering Graduates.
- For geoscience applicants, refer to www.apegs.ca – Apply- International Geoscience Graduates

Application Process (Continued...)

Required Documents For Standard Process:

- Member-in-Training application form and fee (\$210)
- World Education Services(WES)
 - *ICAP course-by-course* credential assessment.
 - If you have a WES ECA report you must upgrade to ICAP course-by-course. ECA report is not acceptable.
- Academic Assessment Fee (\$210)
- Self-assessment
- Official program syllabus
 - required if you graduated within the past 10 years
- Proof of Identification Form
- **Resume – Emphasize on Technical Experience!**

Special Cases

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Special Cases

Engineering only

Special Case #1 Four year bachelor in engineering plus Canadian Grad Degree in related discipline.

- **WES assessment**
 - ICAP Document by Document
 - includes copies of academic documents
- **Canadian transcript**
 - sent to APEGS directly from university
 - must include confirmation of graduation
- **Proof of ID**
- **Resume – Emphasize on Technical Experience!**

Special Cases (Continued...)

Other Special Cases:

- Special Case #2 Washington Accord Accredited Degree
- Special Case #3 Professional Engineer in the United States
- Special Case # 4 Professional Level Mutual Recognition - ([Australia](#), [Hong Kong](#), [Ireland](#), [Mexico](#), [Texas](#))

Special Cases (Continued...)

* WES assessment **NOT** required if:

1- if you have a full NCEES Record in the United States

2 - you qualify under a **professional level** Mutual Recognition Agreement ([Australia](#), [Hong Kong](#), [Ireland](#), [Mexico](#), [Texas](#))

Special Cases (Continued...)

Geoscientists

There are no special cases for geoscientists. All internationally educated applicants must follow the standard application process.

Special Cases (Continued...)

- If you do not qualify under one of the special cases then an **Academic Review** by APEGS is required.
- There is a fee of \$210 for the Academic Assessment.
- You must complete a self-assessment form and if you graduated within 10 years of the year you are applying, you must also submit an official program syllabus.

Self Assessment

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Self Assessment

What is a Self-Assessment?

- Applicant compares his/her education on a course-by-course basis to current Canadian educational standard. (CEQB syllabi or GKE)
- Gives the applicant the opportunity to show APEGS how his/her background meets our requirements.
- Our committee completes their own assessment; the self-assessment is used as reference only.
- Instructions for completing the self-assessment are provided on the first page of the form

Self-Assessment (Continued...)

Process to complete your Self-Assessment:

- Review the self-assessment guideline
- Review the self-assessment tables
- Cross-reference your transcripts (for all university level education) with the above. Write in the name of any courses taken beside the appropriate subject description.
 - **Note:** make sure your assessment is as accurate, complete and explicit as possible, since it will be used as a guide by the person who reviews your file. This will help to ensure a timely and fair assessment of your academic credentials.
- **If you do not do a good job, or information is missing you will be asked to redo it. This will increase the time it takes to get reviewed!**

Self-Assessment (Continued...)

Example:

- You must use your WES course-by-course assessment to complete your self-assessment.

Example

Applicant Information:		Last Name, First Name		
		Patel, Andrew		
APEGS File #		45012		
Institution Information				
Credential	Awarded By	Major/Specialization	Year	Country
Bachelor of Engineering	University of Mumbai	Mechanical Engineering	2008	India

Applicant Information:		Last Name, First Name		
		Patel, Andrew		
APEGS File #		45012		
Institution Information				
Credential	Awarded By	Major/Specialization	Year	Country
Intermediate Examination Certificate	Board of Intermediate and Secondary Education	General Academic	2008	Pakistan
Bachelor of Science	COMSATS Institute of Information technology	Computer Engineering	2015	Pakistan

COURSE-BY-COURSE ANALYSIS

Name: _____ Date: December 12, 2017
 Date of Birth: _____ Ref #: _____
 Page: 2 of 3

INSTITUTIONS - DATES - SUBJECTS Credits Grades

University of Mumbai	Credits	Grades
2004-2005		
✓ Applied Mathematics I* <i>Complex Variables, Vector Analysis and Calculus</i>	2.0	B
✓ Applied Sciences I	2.5	C
✓ Engineering Mechanics Basic Electrical and Electronics Engineering I	2.5	C
Computer Programming I	2.5	C
✓ Applied Mathematics II* <i>Differential Equations and Integral Calculus</i>	2.0	B
✓ Applied Sciences II	2.5	C
Communication Skills	2.5	C
✓ Engineering Drawing	1.0	B
Computer Programming II PASCAL	2.5	C
Basic Workshop Practice I	1.0	A
2005-2006		
✓ Applied Mathematics III* <i>Complex Variables, Fourier Series and Integrals, Laplace Transforms and Matrices</i>	2.0	B
✓ Strength of Materials	2.5	C
Industrial Electronics	2.5	B
✓ Machine Drawing	1.0	B
✓ Production Processes I	2.5	B
✓ Applied Thermodynamics I	2.5	B
Machine Shop Practice	1.0	A
✓ Applied Mathematics IV* <i>Computational Mathematics</i>	2.0	A
✓ Kinematics of Machinery	3.5	B
Thermal Engineering II	3.5	C
Production Processes II	3.5	C
Materials Technology	3.5	C
Graphical User Interfaces and Database Management	3.5	A
Machine Shop Practice II	1.0	A
2006-2007		
Mechanical Engineering Measurements (Continued on next page)	2.5	B

BASIC STUDIES SYLLABUS TABLE

C1 APEGS Syllabus	C2 Self-Assessment (by applicant)		C3 for Staff only	C4 for ARC only
COMPULSORY SUBJECTS (all required)	WES assessment: year, course name, credits and grade.	Program Syllabus: page number, course name	Preliminary Review	Final Review
04-BS-1 Mathematics (calculus, vector, linear algebra): Applications involving matrix algebra, determinants, eigenvalues; first and second order linear ordinary differential equations; Laplace transforms; Vector algebra; vector functions and operations; orthogonal curvilinear coordinates; applications of partial derivatives; Lagrange multipliers, multiple integrals, line and surface integrals; integral theorems (Gauss, Green, Stokes); Power series.	2004-2005: Applied Mathematics I 2 credits. Grade: B	Not required	X	X
	2004-2005: Applied Mathematics II 2 credits. Grade: B			
	2005-2006: Applied Mathematics III 2 credits. Grade: B			
04-BS-2 Probability and Statistics: Concepts of probability, events and populations, probability theorems, concept of a random variable, continuous and discrete random variables, probability distributions, distributions of functions of a random variable, sampling and statistical estimation theory, hypothesis testing, simple regression analysis.	2005-2006: Applied Mathematics IV 2 credits. Grade: A	Not required		
04-BS-3 Statics and Dynamics: Force vectors in two- and three-dimensions; equilibrium of a particle in two- and three-dimensions; moments and	2004-2005: Engineering Mechanics 2.5 credits. Grade: C	Not required		

Applicant Information:		Last Name, First Name		
APEGS File #		45012		
Institution Information				
Credential	Awarded By	Major/Specialization	Year	Country
Bachelor of Engineering	University of Mumbai	Mechanical Engineering	2008	India

Academic Review Process

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Academic Review Process

- After all of the required information is provided to APEGS (including the course descriptions and self-assessment if required), APEGS staff will put your file **“in progress”** and will then forward the file to the appropriate technical reviewers. The reviewers use the same syllabi in their review that is in the self-assessment.
- The time period from receipt of all of the required information to an Academic Review Committee (ARC) recommendation and notification to the applicant is typically 10-12 months.
 - ** This recommendation is NOT necessarily “accept/reject”, but may communicate the requirement for exams, proof of work experience, etc.

Academic Review Process (Continued...)

Results:

- Best case scenario is approval as a Member-in-Training, but this is **not** common, and would only be a possibility for those with a Masters or Ph.D. in engineering.
- Most people will be assigned exams or work experience reporting, so don't be discouraged if this is your result.

Academic Review Process

Results: **Deficiencies**

- The ARC may determine that there are deficiencies or gaps in your education.
- Deficient subjects must be fulfilled by writing exams, taking acceptable university courses, or by Prior Learning Assessment and Recognition (PLAR)*.
- Once deficiencies are fulfilled, applicant moves to the “confirmatory exam” stage (next slide).
- If there are more than six deficiencies, registration is denied.

*only an option if certain criteria are met, as determined by ARC

Academic Review Process

Results: **Confirmatory Exams - No Deficiencies/Deficiencies Met...**

- Applicants are assigned ***confirmatory exams*** (technical, typically three, but at the discretion of the ARC).
- APEGS “looking to exempt policy” is applied
 - i.e. are there any options for waiving the exams? (supplemental education, performance in fulfilling deficiencies/previous confirmatory exams, and valid work experience (5 years)... are considered)
- If an applicant can be exempted from writing exams OR he/she successfully completes the exam assignment, the application will be forwarded to the Registrar for registration as an Engineer/Geoscientist-in-Training.

Closing Remarks

Time Requirements:

- It may take up to 1 year for you to get the academic assessment result.
- If you have to take exams or write experience reports (to try and get exams waived) it may take many months or even years before you get your Engineer-in-Training license.

Closing Remarks (Continued...)

When can I start working as an engineer/geoscientist?

- You do not need to be licensed to start working in your field, but you must be supervised by someone who is a P.Eng. or P.Geo. until you become a professional yourself.
- As an Engineer-in-Training or a Geoscientist-in-Training you must also be supervised by a P.Eng. or P.Geo.

Closing Remarks (Continued...)

When Can I Use My Title?

You must **not** use the title engineer/geoscientist until you have been approved as a Member-in-Training. Once you have been approved (and paid your membership dues) you can use the title engineer/geoscientist, but you must also include that title
*Engineer-in-Training or *Geoscientist-in-Training.

e.g., Jane Brown Engineer-in-Training
Geotechnical Engineer
Government of Saskatchewan

*must be written out in full, EIT and GIT are not acceptable

Closing Remarks (Continued...)

Next Steps:

- This presentation only covered the Member-in-Training application process.
- The ultimate goal is P. Eng or P. Geo
- The remaining requirements to be met for professional licensure are:
 - Professional Practice Exam (law and ethics)
 - Work Experience (4 years approved by APEGS)
 - Language Proficiency

Closing Remarks (Continued...)

Confidentiality of Personal Info:

- For APEGS to discuss applicants' files with anyone else, written consent from the applicant must be provided.
- This can be accomplished by including an authorization form with the APEGS application form, or by sending an email from the email address we have on file.
- Before discussing file details we will verify your identity, so make sure you know your file number when contacting the office for information about your file.

Questions?

We will be breaking off into Groups so we can answer questions that pertain to your file.

Thank-you