GUIDELINE
for the ENGINEER-IN-TRAINING Program

May 2013

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SECTION 1 - INTRODUCTION

The Association of Professional Engineers of the Province of Prince Edward Island is charged with the responsibility for regulating the Practice of Engineering within the province of Prince Edward Island. In 2008, the Association adopted the business name of **Engineers PEI**. The duties of the Association with respect to safeguarding the public interest are clearly defined by the *Engineering Profession Act*. Similarly, the responsibilities of the individual engineer to the public, the employer, the client and fellow engineers are embodied in the framework of the code of professional conduct entitled *The Code of Ethics*, contained within the *By-laws* of the *Act*. Together, these documents serve to define the Practice of Engineering within Prince Edward Island. All Engineers-in-Training (EITs) are strongly advised to obtain a copy of these documents for review.

Education is an on-going activity for those who choose engineering as a career. It starts early in life, sparked by an interest in the world around us, and continues through periods of academic study and apprenticeship, before becoming an integral part of a professional career. This continuum of education is marked by formal programs along the way including the undergraduate engineering degree and Engineers PEI's Engineer-In-Training and Professional Development programs. As one part of the formal process, this program guide has been prepared by Engineers PEI to outline the requirements of its Engineer-In-Training program. The purpose of the EIT program is to provide EITs with guidance to assist them in their transition from engineering graduates to fully qualified professional engineers and members of Engineers PEI.

The EIT program benefits multiple stakeholders. The EIT receives guidance to ensure that quality experience is obtained, ethics and professionalism are developed and licensure is achieved as seamlessly as possible. The EIT's employer benefits from the enhanced qualifications, experience and skills gained by the EIT. The Association is able to bring engineering graduates into the profession while monitoring their experience and providing them with meaningful feedback. The profession gains better-prepared and professionally motivated members. Society benefits from the EIT's understanding of the paramount impact that engineering practice has on the public interest.

This guideline sets the standards that EITs are expected to meet to qualify for full professional registration with Engineers PEI. It is intended as an aid only. Conformance with this guideline does not constitute a guarantee of registration. In all cases, the applicant bears the onus for meeting all requirements for registration as stipulated by Engineers PEI's Council (Council) to the satisfaction of the Engineering Qualifications Committee (EQC). The EQC will make final recommendations with respect to applications for registration, subject to the approval of Council.

1.1 EIT PROGRAM OBJECTIVES

The objectives of this EIT Program are to ensure that EITs enrolled with Engineers PEI:
- ► acquire the appropriate level of engineering work experience;
- ► meet the levels of responsibility and accountability required for professional practice;
- ► understand their roles in protecting the public interest;
- ► gain values of ethics and professionalism and of social and environmental awareness;
- ► appreciate the value of working within the limits of personal training and experience; and
- ► understand the role of the profession in society and their responsibility to support it.

As Engineers PEI's EIT Program is generally consistent with those of the other constituent associations/ordre, meeting its requirements should improve the mobility of EITs across the country.

1.2 STEPS TO PROFESSIONAL REGISTRATION

Prior to submitting an application to Engineers PEI for registration as a professional engineer, all EITs must satisfy various requirements associated with the following steps:

► Completion of academic qualifications;
► Enrollment as an EIT (the first step after obtaining academic qualifications);
► Acquisition of engineering work experience;
► Compilation and submission of experience logbook (most recent 48 months);
► Completion of National Professional Practice Examination; and
► Compliance with continuing professional development requirements.

1.3 INFORMATION SESSIONS

Information sessions will be offered semi-annually to enable new EITs to obtain a thorough understanding of the requirements of the EIT Program and of the responsibilities which will be incurred upon becoming a Professional Engineer. These sessions will be organized and presented by the EIT Committee. Attendance by the EIT at one of these sessions is mandatory within the first six months of enrolment as an EIT. Engineers PEI will advise all newly registered EITs of the dates and times of these information sessions.

SECTION 2 – REGISTRATION REQUIREMENTS

The following section describes the requirements for registration as a Professional Engineer with Engineers PEI. To be registered, all applicants must demonstrate qualifications in the following areas:

► academic background;
► engineering work experience;
► professional practice and ethics;
► language of jurisdiction of practice;
► local practices and conditions; and
► personal character.

Note that full professional registration with Engineers PEI is subject to the acceptance of the candidate's qualifications by the EQC and approval by Council. Again, the applicant bears the onus for demonstrating that all requirements for registration have been met.

2.1 ACADEMIC QUALIFICATIONS REQUIREMENT

The primary manner in which academic qualifications are met is through a degree from a Canadian Engineering Accreditation Board (CEAB) accredited program or a CEAB-recognized program. All graduates of such programs are considered to be academically qualified for licensure. Alternatively, individuals who do not hold such a degree may demonstrate academic qualifications through the successful completion of examinations and/or other requirements assigned by the EQC.

For academically qualified individuals, the first step in the path toward registration as a professional engineer is to enroll in an EIT Program. It is during this time that development of qualifications in each of the noted areas other than academic background is expected to be accomplished. Note that at the time of enrollment, EIT Program applicants may be required to provide the Association with a certificate of graduation and transcripts. The EQC reserves the right to recommend that other individuals enroll in the EIT Program to ensure that their qualifications meet the standards set by this guideline. For instance, foreign trained engineers with considerable years of experience may be asked to enroll for a sufficient period of time to become familiar with local conditions and practices.

2.2   ENGINEERING WORK EXPERIENCE REQUIREMENT

Engineering work experience is an essential element in determining whether or not an individual will be accepted for professional registration. Experience must be current and consistent with the EIT's field of academic qualification to be acceptable. Also, experience is normally obtained following academic qualification while enrolled in an EIT Program, with the exception of any allowable pre-graduation and post-graduate degree experience. No experience will be automatically credited.

In order for experience to be regarded as acceptable engineering work experience, an EIT must work under the supervision of and receive engineering training from a professional engineer. This supervising professional engineer, then, must provide signature verification on work experience being reported. It is recognized, however, that an EIT's direct supervisor may not be a professional engineer. In this case, signature verifications for work experience being reported must be provided by both the direct supervisor and the supervising professional engineer.

Eligibility for professional registration with Engineers PEI requires that an EIT obtain a minimum of four years of acceptable engineering work experience. When submitting your application for professional registration, you must submit **your most recent** 48 months of engineering experience. Note that it is the quality of the experience obtained that is important, not just the quantity of experience obtained. In all cases, however, the four year minimum time period must be met. The EQC may require that further engineering work experience be obtained if it deems the experience gained during the minimum four year period to be of insufficient quality.

Ideally, acceptable engineering work experience should include exposure to, and hands-on experience in, the following broad areas:
- ► practical engineering experience;
- ► application of theory;
- ► management of engineering;
- ► communication skills; and
- ► the social implications of engineering.

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

2.3 PROFESSIONAL PRACTICE EXAMINATION REQUIREMENT

Engineers PEI requires that applicants for professional registration write and pass the National Professional Practice Examination (NPPE). The examination, conducted in the English language, is held twice a year in Charlottetown.   In exceptional circumstances, and by consent of the EQC, the exam may be written in other locations. Candidates may make application to write

the NPPE after a minimum period of one year of engineering work experience following completion of an academic degree.

Professional engineers must understand:
- ► their role in protecting the public interest;
- ► values of ethics and professionalism and of social and environmental awareness;
- ► the importance of working within the limits of personal training and experience; and
- ► the role of the profession in society and their responsibility to support it.

The NPPE is designed to examine applicants on the ethical considerations and obligations that accompany the privileges of professional status and the legal concepts relevant to professional engineers. Part of the examination tests the applicant's understanding of professionalism, while the remaining part tests the applicant's knowledge of engineering law and familiarity with jurisdiction-specific statutes, rules and regulations and the *Engineering Profession Act and By-Laws*. The NPPE is, in general, based on the syllabus of the Canadian Council of Professional Engineers (CCPE). The CCPE syllabus has two sections:

- ► Professional Practice and Ethics, and
- ► Engineering Law and Professional Liability.

Details of the NPPE, such as examination schedules, venues, recommended reference books, examination regulations, supervision and fees, will be supplied to the EIT by Engineers PEI when the applicant's request to write the examination has been received and approved by the Association.

2.4 CONTINUING PROFESSIONAL DEVELOPMENT REQUIREMENT

All members of Engineers PEI, including EITs, are required to comply with the requirements of the Association's *Continuing Professional Development Program For Professional Members and Engineers-in-Training*. For the requirements of professional development activities, EITs should refer to the document *Guidelines for Compliance*. The responsibility for continuing professional development rests with the member or EIT.

2.5 ADDITIONAL REQUIREMENTS

- ► The applicant must demonstrate satisfactory communication skills in the English language.

- ► The applicant must provide three references to vouch for his or her professional engineering experience, good character and reputation. Two of the references must be from registered professional engineers in the Province of Prince Edward Island.

- ► Subject to the *Engineering Profession Act*, applicants must be residents of Prince Edward Island.

- ► At least one full year of the minimum engineering work experience requirement **must be** gained in Canada.

SECTION 3 - ENGINEERING WORK EXPERIENCE REQUIREMENT

In general, acceptable engineering work experience is defined as experience that:
- ► comprises the practice of professional engineering;
- ► is normally consistent with the field of academic qualification and is current; includes exposure to, and hands-on experience in the areas of practical engineering experience, application of theory, management of engineering, communication skills, and the social implications of engineering;
- ► demonstrates progression and growth;
- ► is normally obtained while enrolled in an EIT Program with the exception of any acceptable pre-graduation and post-graduate degree experience;
- ► is obtained under the guidance and supervision of a professional engineer; and
- ► is normally recorded and reported to the Association.

This section provides supplementary information to Section 2.2 in the form of more detailed qualitative descriptions to assist in identifying activities which may qualify under the five broad areas of engineering work experience identified. These descriptions are not intended as a point rating system. In determining whether the candidate has gained acceptable overall engineering work experience, the EQC examines the experience obtained with respect to the following criteria:
- ► a well-rounded work program with some experience in each of the five identified categories;
- ► an understanding of individual limitations with respect to the practice of engineering; and
- ► progression into work of greater complexity and increased responsibility.

3.1 PRACTICAL ENGINEERING EXPERIENCE

Practical experience allows applicants to understand the practical limitations of real systems. Practical experience should include:
- ► site visits to existing engineering works, with opportunities to see equipment and systems in both operational and maintenance circumstances;
- ► application of equipment as part of the larger system, including, for example, the merits of reliability, the role of computer software, and understanding the end product or engineering work in relationship to the equipment;
- ► opportunities to experience and understand the limitations of practical engineering and related human systems in achieving desired goals, including for example, limitations of production methods, manufacturing tolerances, performance minima and maintenance philosophies; and
- ► opportunities to experience the significance of time in the engineering process, including for example, workflow, scheduling, equipment wear-out and replacement scheduling.

3.2 APPLICATION OF THEORY

The skilful application of theory is the hallmark of quality engineering work, and an applicant's experience shall include meaningful participation in one or more of the following:
- ► analysis: includes scope and operating conditions, feasibility assessment, safety and environmental issues, technology assessment, and economic assessment;

- ► design and synthesis: includes functionality or product specification, component selection, integration of components and subsystems into larger systems, reliability and maintenance factors, human and environmental aspects, and the societal implications of the product or process;
- ► testing methods: includes devising testing methodology and techniques, functional specification verification, and new product or technology commissioning and assessment; and
- ► implementation methods: includes technology application, engineering cost studies, optimization techniques, process flow and time studies, quality assurance implementation, cost/benefit analysis, safety and environmental issues and recommendations, and maintenance and replacement evaluation.

3.3 MANAGEMENT OF ENGINEERING

Management of engineering works includes the supervision of staff, project management, general exposure to an engineering business environment, and the management of technology. Engineering management includes:

- ► planning, from conception through to implementation including needs assessment, concept development, assessment of resources required, and assessment of impacts, including societal and project implementation;
- ► scheduling, from establishing interactions and constraints, developing activity or task schedules, and allocation of resources, through to the assessment of delay impacts and beyond to broader aspects, such as interactions with other projects and the marketplace;
- ► budgeting, including the development of preliminary and detailed budgets, identifying labour, materials and overhead, risk analysis, life-cycle analysis, and tracking;
- ► supervision, including leadership, professional conduct, organization of human resources, team building, and management of technology;
- ► project control, including co-ordination of work phases, tracking and monitoring costs and progress, and implementing changes to reflect actual progress and needs; and
- ► risk-analysis related to operating equipment and system performance, product performance evaluation, and evaluation of societal and environmental impacts.

3.4 COMMUNICATION SKILLS

Developing and practising communication skills are an essential experience requirement. This applies to all areas of the work environment including communication with superiors, colleagues, regulators, clients, and the public. Applicants should have regular and progressive opportunities to participate in:

- ► preparation of written work, including day-to-day correspondence, record-keeping, and report writing;
- ► making oral reports or presentations to colleagues, supervisors, senior management, and an exposure to, or participation in, reports to clients and regulators; and
- ► making presentations.

3.5 SOCIAL IMPLICATIONS OF ENGINEERING

The overriding objective of the social implications of engineering requirement is to provide experiences which increase awareness of an engineer's professional responsibility to guard against conditions dangerous or threatening to life, limb, property, or the environment, and to call any such conditions to the attention of those responsible. The social implications of

engineering are an important aspect of the practice of engineering. The work environment should provide opportunities for applicants to heighten their awareness of the potential consequences of engineering work. This should include:

- ► a recognition of the value and benefits of the engineering work to the public;
- ► an understanding of the safeguards required to protect the public and methods of mitigating adverse impacts;
- ► an understanding of the relationship between the engineering activity and the public;
- ► a demonstrated interest and involvement in the broader social implications of engineering;
- ► an appreciation of the role of regulatory bodies on the practice of engineering; and
- ► an understanding of the provincial health and safety of the workplace legislation.

3.6 PRE-GRADUATION EXPERIENCE

Pre-graduation work experience gained following the completion of at least two years of a CEAB-accredited or CEAB-recognized engineering program may qualify for up to one year of the minimum four year experience requirement. Pre-graduation experience should be supervised by a professional engineer; however, the EQC will evaluate all pre-graduation experience for eligibility. Submission of all such experience must be documented in a manner consistent with documentation for experience gained from employment while enrolled as an EIT. For those individuals whose academic qualifications are established by other means, the EQC will, at its discretion, assess potential pre-graduation experience for eligibility.

3.7 POST-GRADUATE DEGREE EXPERIENCE

Experience gained through the completion of a post-graduate degree (Masters, PhD), in an area consistent with the field of academic qualification, may qualify for up to one year of the minimum four year experience requirement. The EQC will evaluate all post-graduate degree experience for eligibility. Submission of all such experience must be documented in a manner consistent with documentation for experience gained from employment while enrolled as an EIT.

SECTION 4 - ROLES AND RESPONSIBILITIES

4.1 ROLES AND RESPONSIBILITIES OF THE EMPLOYER AND SUPERVISORS

Those supervising an EIT's work must assess the quality of the EIT's work on a regular basis and verify the EIT's documentation of work experience. Supervisors are responsible for assigning work, and for providing advice and support to EITs. Supervisors should ensure that the engineering work carried out by the EIT is progressive in complexity and responsibility. The employer and supervisors should offer the EIT a full range of responsibilities and opportunities in the practice of engineering to the extent that the EIT gains experience in all five of the engineering work experience requirement areas. Supervisors may be called upon by the Association to provide information regarding the experience and the progress of EITs.

Employers and supervisors also play a role in the continuing education and professional development of EITs. They should provide the EIT with the opportunity for professional development and reasonable progression towards increasing involvement and responsibility over time so as to assist the EIT in meeting the requirements of the Association's Continuing Professional Development Program.

4.2   ROLES AND RESPONSIBILITIES OF THE EIT COMMITTEE

Engineers PEI's EIT Committee is responsible for the overall operation of the EIT Program. It employs an Experience Review Board (Board) as the liaison between the EIT and the Association. The Experience Review Board shall consist of at least three members of the Association including a Past President who shall act as Chair. The Board monitors the EIT's progress during this extremely valuable training period and assesses the experience gained in terms of suitability, relevance, complexity and progression. The Board then provides feedback to the EIT at regular intervals to enhance the value obtained by the EIT's enrollment in the EIT Program. The role of the Board is complementary to that of the employer and supervisors. If the Board has any doubts as to the acceptability of experience being gained by the EIT, the EQC is to be consulted through Engineers PEI. The role of the Board is to assess the EIT's engineering development. The Board does not take responsibility, either technical or professional, for the work of the EIT.

The following conditions apply to the EIT Committee and its Experience Review Board:
- ► All communications and discussions with the EIT are confidential, however, copies of assessments provided by the Board to the EIT will be filed by the Association.
- ► EIT logbooks are reviewed only to assess the appropriateness and presentation of the engineering experience, for the benefit of the EIT. The Board must not participate in the EIT's work in any way, or offer advice on any aspects of the work itself.
- ► The Board will encourage the EIT to follow the established schedule for the submission of logbooks. Should the EIT become delinquent in this regard, the Board should contact the EIT to determine the reason for late submission. If delinquency persists, the Board shall make a reasonable effort to contact the EIT and convey the importance of such submissions. This sort of situation should be reported in the Board's assessments of the EIT's experience.
- ► As a logbook is reviewed, the Board provides an assessment to the EIT directly. A copy of this assessment and a copy of the logbook are also forwarded to the EIT's file with Engineers PEI. The original logbook remains in the possession of the EIT. Please note that review of the logbook by the Board does not guarantee acceptance by the EQC.

4.3   ROLES AND RESPONSIBILITIES OF THE ASSOCIATION

Because the EIT Program requires the co-operation and support of the employer and supervisors, and involves continuing education and professional development, the Association will endeavour to make all employers and supervisors aware of the requirements of this, and other relevant programs.

The Association has an obligation to support and encourage Engineers-in-Training in the process of professional registration, and to provide timely feedback before the end of the EIT period.

4.4   ROLES AND RESPONSIBILITIES OF THE EIT

The EIT is responsible for complying with the EIT Program, gaining appropriate experience, advice, and exposure to engineering ethics and professionalism, as well as carrying out professional development and participation-related activities.

It is the responsibility of the EIT to document properly and present all engineering work experience and professional development activities to illustrate relevance to the areas of acceptable experience described in Section 3. This information must be submitted in a logbook format acceptable to the EQC, enabling the EQC to evaluate engineering work experience fairly and consistently for all EITs applying for professional registration.

4.4.1 SUBMISSION OF LOGBOOKS

The EIT is required to prepare a professional work experience logbook, for periodic submission to the Experience Review Board on forms provided by Engineers PEI. The EIT is to record the nature and details of all engineering projects being worked on by the EIT, including the extent of assigned responsibility; problems encountered and the application of engineering knowledge by the EIT in their resolution; and any other engineering activities required of the EIT to complete assigned work projects. Besides the specific work experience, the EIT should also record all professional development activities undertaken, such as attendance at seminars, courses, and involvement with technical societies. All engineering work experience and professional development activities should be presented in a manner which illustrates relevance to the areas of acceptable engineering work experience described in Section 3. Logbooks must report the EIT's most recent experience and should explain any breaks in employment.

The EIT should recognize the importance of the professional work experience logbooks. The logbooks are used by the Experience Review Board in assessing the acceptability of the experience being gained and also by the EQC in its final review for registration. Since it is not possible to teach everything one needs to know about the practice of engineering in a university program, there remains much to be learned from the unique day-to-day experiences of professional work. It is the variety of experience gained during this important training period that will help the EIT to progress to the level of maturity required for making reliable professional judgements. Therefore, great care must be exercised by the EIT in completing logbooks to ensure that entries accurately reflect all work-related activities and provide a complete work history. The EIT's personal responsibilities and functions should be clearly documented in a manner that reports what activities have been performed by the EIT, not simply the employer's activities.

At a minimum, the EIT's logbooks should be submitted to the Experience Review Board at the following intervals: 6 months, 12 months, 24 months, and 36 months. The Board may recommend a different review schedule if necessary.

It is the EIT's responsibility to ensure that appropriate supervisor verification is obtained on all experience to ensure accuracy of the work descriptions. The EIT is solely responsible to ensure logbooks meet the submission standards. The EIT is responsible for sending a copy of his or her logbook to the Board as per the submission schedule established by the Board. The EIT retains the original logbook for submission with an application for registration as a full Engineers PEI member once all requirements have been satisfied.

The logbook is the "sales" tool of the EIT and must be completed and presented in a professional fashion. It is the quality of the experience and the presentation of the content in the logbook that will, in part, determine the progression from EIT to professional engineer. It is the responsibility of the EIT to document properly and present all engineering work experience and professional development activities to illustrate relevance to the areas of acceptable experience described in Section 3. Ultimately, the EIT is responsible for the development of his or her own career.

SECTION 5 - REGISTRATION, DOCUMENTATION AND REVIEW

5.1 APPLICATION FOR PROFESSIONAL REGISTRATION

When all registration requirements described in Section 2 have been satisfied, an application for registration as a full Engineers PEI member should be completed and forwarded to the Association with the applicable fees and dues and with the relevant supporting documentation provided in the Appendices.

5.2 SUBMISSION OF LOGBOOK

The EIT submits the original logbook with an application for registration as a full Engineers PEI member once all requirements have been satisfied. The information must be submitted in a format acceptable to the EQC, enabling the EQC to evaluate engineering work experience fairly and consistently for all EITs applying for professional registration.

5.3 DOCUMENTS TO BE SUBMITTED

The Appendices provide forms and applications relevant to the EIT program and the process of registration for professional membership with Engineers PEIthat must be submitted with an application for professional registration.

5.4 REVIEW BY THE ENGINEERING QUALIFICATIONS COMMITTEE

The EQC is responsible for assessing all documentation submitted by each candidate for professional registration with Engineers PEI and for ensuring that all requirements for registration are met. The EQC plays an integral role in the certification of academic background, engineering experience and other qualifications as part of its overall mandate to recommend EIT applicants for full registration as professional engineers with the Association. The recommendations of the EQC are submitted to Council, which decides on each application for registration. Through this process, precautions are taken to ensure that each applicant meets the registration requirements, in the interest of protection of the public.

Upon receipt of an application for professional registration, including all necessary supporting documents, the EQC initiates the following review process:
- ► a detailed review of engineering work experience logbooks and other required documents;
- ► an extensive interview with the applicant;
- ► confirmation of compliance with remaining registration requirements; and
- ► a recommendation to Council subject to a reference check.

The EQC also acts as a resource to the Experience Review Board should interpretation of this guideline or of acceptable experience be needed. However, the EQC should not assist the Board in its role as described in this guideline.

APPENDICES

- ► **Engineer-in-Training Experience Logbook form** (2 pages)
- ► **Engineer-in-Training Experience Logbook Writing Tips** (1 page)
- ► **Sample Engineer-in-Training Experience Logbook forms** (3 pages)
- ► **Engineer-in-Training Employment History (Part I: Summary) form** (1 page)
- ► **Engineer-in-Training Employment History (Part II: Details) form** (1 page)
- ► **Engineer-in-Training Experience Logbook Transmittal form** (1 page)
- ► **Experience Review Board Engineer-in-Training Assessment form** (1 page)
- ► **Application for the National Professional Practice Examination** (1 page)
- ► **Application for Registration as a Professional Engineer** (4 pages)

Engineers PEI Engineer-in-Training Experience Logbook Form

- Use this form to record all engineering work experience and professional development activity, including pre-graduation and post-graduate degree experience. Please identify any professional development activities as such.
- All experience and professional development activities should be documented with a **minimum of one page per month**.
- Ensure that all signature verifications are completed as required.
- Submit up-to-date copies of the experience logbook forms to the Experience Review Board as per the established schedule.
- Submit originals to the Engineering Qualifications Committee with the final application for professional registration.
- Submit your most recent 48 months of engineering experience when submitting your application for professional registration.

Engineers PEI Engineer-in-Training Experience Logbook Writing Tips

The following writing tips are intended to provide some guidance with respect to the preparation of the engineering work experience logbook. The Experience Review Board will be able to provide additional guidance in this respect.

ƒ   Experience logbooks should be written in prose with full sentences in the first person.

ƒ   Provide detailed reports of engineering-related work that you have performed, <u>not what your company is involved in</u>. The reviewer requires sufficient detail in order to determine from the content that you have gained relevant and varied engineering experience.

ƒ   Reviewers will be looking for sufficient detail to see that the activities define a well-rounded work program with some experience in each of the five identified categories: practical engineering experience; application of theory; management of engineering; communication skills; and social implications of engineering.

ƒ   The information you provide should also highlight your development toward an understanding of individual limitations with respect to the practice of engineering and your progression into work of greater complexity and increased responsibility.

ƒ   Document all experience including that gained through pre-graduation employment or through post-graduate degrees.

ƒ   Document time spent on professional development activities such as courses, seminars, training, etc., for both formal activities and those offered in-house by your employer. Your activities in this area demonstrate your commitment to professional development and your profession.

ƒ   Document experience on a <u>frequent</u> and <u>regular</u> basis with a minimum of one page per month. **Do not leave it all until the end!**

ƒ   Ensure that the month, year and duration in days are clearly indicated for all entries.

ƒ   Ensure that proper signature verification is provided for all work experience entries. Have experience verified as you document it. **Do not wait until the end!**

ƒ   Submit completed experience logbook forms with the experience logbook submission form and attach any other required supporting documentation.

Refer to the sample completed experience logbook forms included with this guideline.

Sample 1: Engineers PEI Engineer-in-Training Experience Logbook Form

- Use this form to record all engineering work experience and professional development activity, including pre-graduation and post-graduate degree experience. Please identify any professional development activities as such.
- All experience and professional development activities should be documented with a **minimum of one page per month**.
- Ensure that all signature verifications are completed as required.
- Submit up-to-date copies of the experience logbook forms to the Experience Review Board as per the established schedule.
- Submit originals to the Engineering Qualifications Committee with the final application for professional registration.

EIT's Name: John Somebody	**Month:** Sept. **Year:** 2004
EIT's Employer: ABC Company (for the experience reported here)	**Member No.** 000
Is this experience: Pre-graduation? Yes No ⦂ Post-graduate degree? Yes No ⦂	**Discipline:** Civil

Duration (# of days)	**Work Experience -** Indicate the percentage of your total time reported for this month allocated to each experience category. Ensure that the total for the categories equals 100%.				
	Practical Experience 40/100	Application of theory 35/100	Management 10 /100	Communications 10/100	Social Implications 5/100
9	During this work period, I was primarily involved with the testing and design of filters for use in the construction of containment cells for dredge spoils in *Pretend City*, PEI. The testing was performed at the University of So-and-So through a joint effort by university staff and a consulting firm. My duties included supervision of testing trials and development of a design/testing standard to be incorporated into future work of this nature. The purpose of this assignment was to develop an "in-house" expertise of this type of specialized design and testing.				
7	Upon completion of the previous project, I was assigned to conduct a subsoil investigation and prepare the engineering report for the location proposed for the new "project name" to be constructed in Pretend City, PEI. I hired an excavation contractor, determined the proposed location for test pits, collected samples, logged the test pits and prepared the engineering report. The report detailed the findings and made recommendations for design parameters, such as allowable bearing pressure, site drainage, frost penetration depths, parameters for retaining wall design, fill types, compaction requirements as well as suggestions for site access during construction.				
4	Towards the end of this period, I became involved with the design of a containment facility for dredge spoils in Another Pretend City, PE. My participation included scope stability analysis, construction and post construction settlement analysis and design of a graded granular filler system.				

Engineer-in-Training	**Name:** John Somebody	**Signature:**	**Date:** Oct. 6, 2004
Direct Supervisor (not necessarily a P.Eng.)	**Name:** Frank Somebody Else	**Signature:**	**Date:** Oct. 7, 2004
Professional Engineer (if Supervisor is not a P.Eng.)	**Name:** Mary Engineer	**Signature:**	**Date:** Oct. 8, 2004

Sample 2: Engineers PEI Engineer-in-Training Experience Logbook Form

- Use this form to record all engineering work experience and professional development activity, including pre-graduation and post-graduate degree experience. Please identify any professional development activities as such.
- All experience and professional development activities should be documented with a **minimum of one page per month**.
- Ensure that all signature verifications are completed as required.
- Submit up-to-date copies of the experience logbook forms to the Experience Review Board as per the established schedule.
- Submit originals to the Engineering Qualifications Committee with the final application for professional registration.

EIT's Name: Jane Somebody	**SAMPLE**	**Month:** Sept. **Year:** 2004
EIT's Employer: ABC Company (for the experience reported here)		**Member No.** 000
Is this experience: Pre-graduation? Yes No ⫶ Post-graduate degree? Yes No ⫶		**Discipline:** Electrical

Duration (# of days)	**Work Experience -** Indicate the percentage of your total time reported for this month allocated to each experience category. Ensure that the total for the categories equals 100%.				
	Practical Experience 40/100	Application of theory 35/100	Management 10 /100	Communications 10/100	Social Implications 5/100
9	I was asked to continue my research on the network protocols for what will be called the "*Name*" instrument. The "*Name*" is to be a modular instrument platform for performing optical profiles of any large body of water. The heart of this instrument, and those to follow, is the instrument network. The task of determining exactly how - this would be implemented and the type of networking structure to use was given completely to me. I continued my research into this problem After a few meetings and some discussion with my supervisor, a network protocol was chosen. This coincided with the selection of the micro controller that would control the instruments electronics. This was also an important aspect of the network, so I had a large role in the selection.				
7	As our junior hardware engineer (EIT), I began preliminary board design. I began a formal document on my design. I chose to use a standard developed by the Philips Corporation called 12C. This standard defines a method for synchronous communications between processors at a very low level abstraction. Specifically, communication is implemented by toggling the logic level of two I/O pins on the micro controller. A master device controls communication. All others are slaves. The master can initiate a serial transfer at any time, causing an addressed slave device to accept and/or receive a series of bytes. This provides a physical layer to the network.				
4	However, the Philips standard itself was not flexible enough for our needs. We wanted a method for interchanging components in the field. This would mean that the addresses of devices in the network would be unknown at runtime. For this, a method of network discovery was needed that would allow the master device to determine what devices are on the network when the network is initialized. I work on this part of the problem toward the end of the month. This would be a very difficult feature to implement, as the I2C standard is very dependant on the address of every networked device being predetermined. However, the standard does make provisions for having multi-master systems.				

Engineer-in-Training	**Name:** Jane Somebody	**Signature:**	**Date:** Oct. 6, 2004
Direct Supervisor (not necessarily a P.Eng.)	**Name:** Frank Somebody Else	**Signature:**	**Date:** Oct. 7, 2004
Professional Engineer (if Supervisor is not a P.Eng.)	**Name:** Mary Engineer	**Signature:**	**Date:** Oct. 8, 2004

Sample 3: Engineers PEI Engineer-in-Training Experience Logbook Form

- Use this form to record all engineering work experience and professional development activity, including pre-graduation and post-graduate degree experience. Please identify any professional development activities as such.
- All experience and professional development activities should be documented with a **minimum of one page per month**.
- Ensure that all signature verifications are completed as required.
- Submit up-to-date copies of the experience logbook forms to the Experience Review Board as per the established schedule.
- Submit originals to the Engineering Qualifications Committee with the final application for professional registration.

EIT's Name: Jane Somebody	**Month:** Sept. **Year:** 2004
EIT's Employer: ABC Company (for the experience reported here)	**Member No.** 000
Is this experience: Pre-graduation? Yes No ⁔ Post-graduate degree? Yes No ⁔	**Discipline:** Mechanical

Duration (# of days)	**Work Experience -** Indicate the percentage of your total time reported for this month allocated to each experience category. Ensure that the total for the categories equals 100%.				
	Practical Experience 40/100	Application of theory 35/100	Management 10 /100	Communications 10/100	Social Implications 5/100
9 7 4	In the plant we are using a central cooling system for providing temperature controlled cutting oil to all machining centers via an underground trough. I conducted an engineering study on the system in order to determine its reliability. Since the system is very crucial to the plant it is necessary to have the most reliable system possible with the least number of things to go wrong. The system utilizes two chillers for cooling the oil. The piping as it exists now does not allow for one chiller to act as a back up for the other in case of malfunction or shutdown for maintenance. In order to correct the above, I have engineered the necessary piping changes which will allow for back up, in case either chiller goes down, thus allowing production to continue. The changes have been approved by the vendor and will be implemented in the near future. After the installation of the coolant system we were faced with an oil mist problem in the plant. The mist was so substantial as to cover the entire plant with a thin coating of oil in a matter of a few hours. In order to solve this problem, I first determined the source of the problem. The mist was being created by the flush nozzles in the flumes which were atomizing the oil. To start with, I removed as many nozzles as possible, letting the oil flow through a standard fitting. This reduced the oil mist considerably. But the mist problem was still significant. Further control was possible by installing centrifugal type mist collectors at key points on the system, utilizing proper ducting for maximum collection with minimum head loss. Additional mist collectors were installed on all machine tools utilizing the coolant oil. The problem is now under control with most of the mist eliminated from the plant atmosphere.				

Engineer-in-Training	**Name:** Jane Somebody	**Signature:**	**Date:** Oct. 6, 2004
Direct Supervisor (not necessarily a P.Eng.)	**Name:** Frank Somebody Else	**Signature:**	**Date:** Oct. 7, 2004
Professional Engineer (if Supervisor is not a P.Eng.)	**Name:** Mary Engineer	**Signature:**	**Date:** Oct. 8, 2004

Revised: March 2, 2005

Engineers PEI Engineer-in-Training Employment History (Part I: Summary)

- Use this form to summarize your employment history, including any pre-graduation or post-graduate degree positions.
- When more than one position has been held with the same company, document each separately.
- Document each in chronological order.
- Complete and attach Part II of this form for each position reported on Part I.
- Submit copies of Parts I and II to the Experience Review Board each time you submit your experience logbook.
- Submit originals of Parts I and II to the Engineering Qualifications Committee with the final application for professional registration.

EIT's Name:				Member No.:
Start (yy/mm/dd)	**End** (yy/mm/dd)	**Duration** (months)	**Employer**	**Position**

Engineers PEI Engineer-in-Training Employment History (Part II: Details)

- Use this form to provide additional details for each position reported on Part I.
- Submit copies of Part II with Part I to the Experience Review Board each time you submit your experience logbook.
- Submit originals of Parts I and II to the Engineering Qualifications Committee with the final application for professional registration.

EIT's Name:	Member No.:

Position:

Employer:	Employer's address:

Is this experience: Pre-graduation?   Yes   No   Post-graduate degree?   Yes   No

Direct Supervisor's name: (not necessarily a P.Eng.)	Direct Supervisor's Contact Info: Telephone: Fax: email:
Professional Engineer's name: (if Supervisor is not a P.Eng.)	Professional Engineer's Contact Info: Telephone: Fax: email:

Scope of Position (i.e., duties; position to which it reports; # of employees supervised; value of projects managed):

Supervision and Responsibility (i.e., type of direction received from supervisor; type of guidance provided to others):

Engineers PEI Engineer-in-Training Experience Logbook Transmittal

This form is to be used as a transmittal form for the submission of engineering work experience logbooks and supporting documentation as required under the EIT Program. Use this form as a cover for submitting documents to both the Experience Review Board for assessment as per the established schedule and to the Engineering Qualifications Committee for final application for professional registration.

Attached is an Engineering Experience Logbook and supporting documentation for assessment as indicated below.

EIT's Name: _____ **Member No.:** _____

Signature: _____ **Date:** _____

Submitted to:

   Experience Review Board: Indicate milestone (i.e., 6 month, 12 month, etc) _____

   Engineering Qualifications Committee (for final application for professional registration)

Documents attached:
  Engineering Experience Logbook
  Employment History, Part I
  Employment History, Part II
  Application for Registration as a Professional Engineer
   (submit to the Engineering Qualifications Committee only for final application for professional registration)

Period covered by submission: Start (Month/Year) _____

     End (Month/Year) _____

Total experience time being claimed (Months)**:** _____

Comments:

_____

_____

_____

_____

_____

Office Use Only: Date Received: _____ Fees and Dues Collected: $_____
                              (with final application for professional registration)

Revised: March 2, 2005

Engineers PEI Experience Review Board Engineer-in-Training Assessment Form

- This form is to be completed by the Experience Review Board to provide feedback to the Engineer-in-Training following each assessment by the Board.
- The information provided here is for the purpose of guiding the Engineer-in-Training in their professional development and preparation for a final application for professional registration.
- The original of this form is to be forwarded to the Engineer-in-Training each time an assessment is completed.
- A copy of this form is to be kept for Engineers PEI's files.
- The Engineering Qualifications Committee will not use the information provided here in its assessment of your application for professional registration.

EIT's Name: _____   **Member No.:** _____

Experience Review Board Assessment:
- Indicate milestone (i.e., 6 month, 12 month, etc) _____

Period covered by submission: **Start** (Month/Year) _____

     End (Month/Year) _____

Total experience time being claimed (Months)**:** _____

Feedback to the Engineer-in-Training:

_____

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Signature: _____**Date:** _____
(On behalf of the Experience Review Board)

Engineers PEI is the business name of
The Association of Professional Engineers
of Prince Edward Island

135 Water Street
Charlottetown, PE
Canada C1A 1A8
tel 902 . 566 . 1268
fax 902 . 566 . 5551
www.EngineersPEI.com

Application for the
NATIONAL PROFESSIONAL PRACTICE EXAM

To be eligible, you must have completed a minimum of one year of engineering work experience following completion of the academic degree. Please mail or deliver this form with your payment to the address above.

PLEASE PRINT CLEARLY

NAME: _____

ADDRESS _____
(STREET, P.O. BOX, ETC.)

_____
(CITY, TOWN, VILLAGE) (PROVINCE) (POSTAL CODE)

(___) _____ (___) _____ _____
(HOME PHONE) (BUSINESS PHONE) (E-MAIL)

ENGINEERING EXPERIENCE COMPLETED: _____ Months (up to examination)

EXAMINATION FEE ENCLOSED ($160.00): $ _____

I am interested in a free evening workshop on Engineering Law one week before the exam.   YES   NO

_____   _____
SIGNATURE   DATE

Please contact the Association office regarding dates for the examination and regarding study materials.

Revised: May 2013

Engineers PEI is the business name of
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135 Water Street
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tel 902 . 566 . 1268
fax 902 . 566 . 5551
www.EngineersPEI.com

Application for
REGISTRATION AS A PROFESSIONAL ENGINEER

INSTRUCTIONS: This form will become the Association's basic source of information. It is essential that all parts of it be completed carefully in type or legible printing. Forward the completed form to the above address.

A.   Mr.
        Ms. _____
        Mrs.   (SURNAME)   (FULL GIVEN NAMES)

I hereby make application under the Engineering Profession Act to be registered as a Professional Engineer.

        Canadian Citizen   Landed Immigrant   Date of Birth: _____

B.   Residence Address _____
                                (STREET, P.O. BOX, ETC.)

        _____
        (CITY, TOWN, VILLAGE)   (PROVINCE)   (POSTAL CODE)

        (____) _____   _____
                 PHONE   E-MAIL

        Name of Employer _____

        Address of Employer _____
                                (STREET, P.O. BOX, ETC.)

        _____
        (CITY, TOWN, VILLAGE)   (PROVINCE)   (POSTAL CODE)

        (____) _____   (____) _____   _____
                 PHONE   FAX   E-MAIL

        Preferred Mailing Address: Residence   Business   (CHECK ONE)

        Present Position: _____

C.   I qualify in the discipline of: (CHECK ONE ONLY)
        Civil   Chemical   Agriculture/Biological   Industrial
        Electrical   Geological   Metallurgical   Computer
        Mechanical   Mining   Aerospace   Other

        _____

DUES AND FEES ENCLOSED (Refundable on non-acceptance)

Registration Fee $50.00   + Dues $300.00   + Stamp $ 30.00   = Total $380.00   enclosed

The registration fee is a non-recurring fee so long as membership is kept current. All registrations are based on a calendar year. Please submit all fees and dues with this application to the address shown above.

D. **QUALIFICATIONS, REFERENCES AND EXPERIENCE**

1. Post-Secondary Education: (College, Technical Institute, University)

Dates	Institution / Location	Degree Granted	Graduation Date

NOTE: For registered membership, proof of graduation must accompany this application. A letter of certification from the institution of graduation must be received by the Engineers PEI office directly from the office of the Registrar. Graduates of non-Canadian institutions must include a complete description of courses passed for the above degree or Diploma obtained.

2. Are you a member of another Provincial Engineering Association/Ordre?   No   Yes - Specify:

Organization	Location	Type of Membership

3. References: List the names and addresses of three people (preferably Professional Engineers, one of whom must be a member of this Association) who will answer enquiries as to character and engineering experience. Those listed may be asked to supply letters of reference.

(a) _____
        (NAME)   (PHONE)

_____
        (ADDRESS)

(b) _____
        (NAME)   (PHONE)

_____
        (ADDRESS)

(c) _____
        (NAME)   (PHONE)

_____
        (ADDRESS)

4. Occupational History: Give occupational history in chronological sequence and brief, concise narrative, including the name and position of the professional engineer who supervised, directed or was associated with you during that period.

PERIOD COVERED IN EACH POSITION		DESCRIPTION OF APPLICABLE EXPERIENCE	TOTAL MONTHS
FROM (MM/YY)	TO (MM/YY)		

E. **STATEMENTS AND CERTIFICATION**

1. Have you ever made application for registration in this or any other Association/Ordre of Professional Engineers of Canada?　　　No　　　Yes

    If yes, has such application been rejected?　　　No　　　Yes

    If previous application has been rejected give details. _____

    _____

    _____

    _____

    _____

2. I declare the statements made on this form to be true and correct to the best of my knowledge and belief. I have read and understand, and agree to be governed by the Act, By-Laws and Code of Ethics of the Association of Professional Engineers of Prince Edward Island.

    _____　　_____
    Signature　　　　　　　　　　　　　　　　Date

    Please print your name as you wish it on your stamp: _____

FOR OFFICE USE ONLY:	Date Received
APPROVED　　YES　　　NO	Dues/Fees Received
Council/Admissions:	Acknowledged
Date:	Certificate/Stamp Sent