A STRUCTURED PROGRAM FOR MEMBERS-IN-TRAINING

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This guideline is published and distributed by the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists to assist Members-in-Training, and their employers, in the development of the Member-in-Training as a professional member of the association.

Persons relying on this guideline should be aware that it is intended as an aid and that conformance with its suggestions does not constitute a guarantee of registration. In all cases, the Member-in-Training or applicant for registration bears the onus of meeting the requirements for registration to the satisfaction of the NAPEG Board of Examiners (APEGGA Board of Examiners).

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SUMMARY

The Member-in-Training Program represents a significant step in the development of candidates for entry into the professions of Engineering and Geoscience. This guideline is designed to help address the need for a more structured Member-in-Training Program leading to professional membership in the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG). It is meant to assist not only the Member-in-Training, but also his or her employer and mentor in identifying and understanding the components of an effective training program. The end result of a Member-in-Training participating in this voluntary program will be a heightened understanding of professionalism.

Students graduating in accredited university programs in engineering, geology and geophysics are required to obtain at least four years of work experience before they can be considered for registration as a professional, subject to the acceptance of the candidate's qualifications by the Association's Board of Examiners. In reviewing each candidate, the Board considers assessments based on various aspects of the applicant's work experience. Getting the required work experience to become registered as professionals within a reasonable time frame may be difficult for some applicants due to company personnel and other limitations. In some cases several different positions may be held by the candidate to obtain the required work experience. This guideline seeks to address this issue by clarifying the training program components and the role of the mentor by encouraging more consistency in program structure and delivery.

The work experience outlined in this document is designed to develop such professional traits as good organization, judgement and the ability to develop team skills. The Member-in-Training needs to gain experience in applying technical theory in various ways such as data collection, analysis, design preparation and testing. Practical experience in conducting work site visits, acknowledging interdependencies between various disciplines, recognizing limitations, applying codes, enhancing technical education and developing working relationships are also required. In addition, learning management techniques, communication skills and an awareness of the social implications of professional practice are important components of this training program.

This training program incorporates the role of a mentor should the Member-in-Training (MIT) desire to participate in this program. These guidelines describe the mentoring process and make recommendations as to the content and structure of the mentoring relationship. The mentor's role is a complementary one, meant to counsel, guide and inspire the Member-in-Training. The mentor should set an example of professional excellence, have a full understanding of his or her organization, be aware of industry changes and developments, be able to give advice in a non-authoritarian manner, provide encouragement and be committed to making time available to develop and maintain a good relationship with the MIT. The transfer of skills and knowledge from experienced professionals to relatively less experienced professionals in the organization provides continuity, succession management and continued learning for all involved. Mentoring empowers younger professionals with skills they may traditionally have acquired through trial and error. The MIT will be registered with NAPEG, and be working towards attaining their Professional Engineering (P Eng) or Professional Geoscience (P Geo) status. An individual embarks into this relationship in order to enrich his or her experience as an MIT. He/She will have to be open to the mentor’s input and
participate actively in the mentoring relationship. The Member-in-Training should discuss freely concerns and issues with the mentor, and input thoughts for his or her future as an engineer or geoscientist.

The last portion of this guideline outlines the required documentation of the Member-in-Training's work experience, including a suggested draft of an Agreement Letter and Experience Record.

The Association believes that a strong Member-in-Training program is essential to building a meaningful, successful professional career in engineering or geoscience. It's hoped that this suggested program will promote a more consistent, equitable training program, lead to more mobility in the global marketplace, and provide a keen sense of professional satisfaction to all individuals and businesses involved in its delivery.
SECTION 1

INTRODUCTION

1.1 OBJECTIVE

NAPEG's objective in publishing this guideline is to better serve Members-in-Training (MITs), employers of both, MITs and professionals, MITs' mentors and the public interest.

Specific goals to achieve the objective are to:

1. Provide a detailed framework to assist in delivering a training program leading to becoming qualified as a professional member of NAPEG. This framework is intended to assist the MIT, MIT's employer and MIT's mentor in:
   - understanding prescribed training requirements
   - providing requisite training to a MIT
   - monitoring progress of MIT experience

2. Promote and ensure implementation, by the MIT, of diverse technical and business concepts in practical applications and thereby establish a basic foundation on which to build a meaningful, successful professional career.

3. Ensure consistency of MIT training experience in NAPEG-governed professions.

4. Support and assist the MIT in progressively gaining suitable practical experience to supplement formal education and ensure that such experience is of an acceptable level of quality and quantity by providing a guide to facilitate development and to assist the MIT and his or her employers to effectively maximize the value of experience gained during the training period.

5. Facilitate the transportability of the MIT's experience from one employer to another when continuous employment with a single employer during the training period may not be available.

6. Assist the MIT to become more mobile in the global marketplace.
1.2 STRUCTURED PROGRAM

The structured program outlined in the guideline is to:

1. Ensure that MITs receive an acceptable level and diversity of practical experience.

2. Ensure public safety through MITs' early establishment and maintenance of high standards of practice.

3. Assist MITs in achieving full professional status and integration into their respective professions.

4. Establish a reporting program to assist the Board of Examiners in determining the competence of applicants for professional status.

5. Be compatible with government policies for self-regulation of the professions.

6. Provide a vehicle for working towards professional standards that are recognized and accepted throughout Canada and, as a long term objective, internationally.

7. Address increasing specialization in the professions.

8. Promote values, ethics and social conscience in the professions.

9. Assist with instilling pride and promoting excellence in the professions by providing a broader understanding of the structured experience required prior to acceptance into the NAPEG-governed professions.

A key element in the training, monitoring and counselling of MITs is the appointment of a mentor.
1.3 DEVELOPMENT OF PROFESSIONAL TRAITS

Through work experience outlined in this guideline it is expected that professional traits will be developed. These include:

1. The ability to fully understand the objectives of an enterprise (e.g. employer's organization, project, study, report, etc.).

2. Good judgement respecting assigned responsibilities.

3. The ability to learn and develop team skills and inter-office business skills.

4. The ability to effectively communicate verbally, in written work, in presentations, and in reports.

5. A professional approach, through
   (a) understanding and applying the concepts of professionalism including the support of NAPEG by each member in return for the right to practice under a restricted title and in a restricted scope of practice.
   (b) developing a social and environmental awareness.
   (c) understanding the role of the profession in society.
   (d) adhering to the NAPEG Code of Ethics.

6. Continually developing technical competence through experience and continuous learning.

7. Understanding and working at all times within limits of:
   (a) personal training and experience
   (b) supporting technology

1.4 PROFESSIONAL REGISTRATION

Registration as a professional at the conclusion of the MIT's training period is subject to the acceptance of the candidate's qualifications by the Association's Board of Examiners. A brief description of the Board of Examiners, their procedures and qualification requirements is provided in Section 2.
SECTION 2  
REGISTRATION

2.1 BOARD OF EXAMINERS

Authority for registration of persons as members and licensees is vested in the Board of Examiners appointed by the Council of the Association. NAPEG uses APEGGA's Board of Examiners to appraise academic and experience qualifications of applicants for registration under their Act.

The Board consists of Academic Examiners, Experience Examiners and members of the public.

Academic Examiners: prime responsibility is the assessment of academic qualifications of an applicant but they also have an interest in the suitability of the experience of the applicant.

Experience Examiners: prime responsibility is the assessment of the practical experience of an applicant but they also have an interest in the suitability of academic qualifications of the applicant.

ACADEMIC

NAPEG's registration requires that applicants must submit documentation for review by APEGGA's Board of Examiners. An applicant's academic qualification may consist of a confirmed degree, with education documentation submitted directly to APEGGA from the institution attended. Registration may also be attained by applicants passing appropriate examinations prescribed by the Board. Engineering programs accredited by the Canadian Engineering Accreditation Board are considered "approved university programs." As there is no similar accreditation process for geology and geophysics programs, the Board maintains a set of criteria against which qualifications of applicants are assessed. Normally graduates of honours geology and geophysics programs at Canadian universities will satisfy such criteria.

PRACTICAL EXPERIENCE

1. When the academic qualifications are met by an acceptable university degree, by passing confirmatory examinations or by passing examinations to make up for deficiencies in the applicant's academic qualifications as determined by the Board of Examiners, at least four years of experience satisfactory to the Board of Examiners is required.

2. When the academic qualifications of an applicant without a university degree are met by passing examinations prescribed by the Board of Examiners, a total of eight years experience, at least one of which must be obtained subsequent to meeting the academic
requirements in engineering, geological or geophysical work satisfactory to the Board of Examiners is required.

**GENERAL**

The general requirements of the Board of Examiners in addition to the stated academic and practical experience requirements are:

1. Completion of an examination in professional practice prescribed by the Board and described in greater detail in Section 2.2.

2. In the case of applicants whose native language is not English, satisfactory communication skills in the English language must be demonstrated. This may be done by a Test of English as a Foreign Language (TOEFL), alternative tests, or documentation.

3. Good character and reputation confirmed by written references acceptable to the Board.

**2.2 PROFESSIONAL PRACTICE RESPONSIBILITIES**

NAPEG requires that applicants write and pass an examination in professional practice set by the Board of Examiners before being granted professional status. The examination is administered four times per year in major centres throughout the territories and by special consent of the Board, in other centres in North America.

The examination is specifically designed to address engineers, geologists, and geophysicists and is generally based on the syllabus of the Canadian Council of Professional Engineers (CCPE). The CCPE syllabus has two sections:

1. **Professional Practice**

   Definitions of a profession, ethics. The role of the Engineer, Geologist and Geophysicist in society, public responsibility, discipline. Requirements for registration and practice of engineering, geology and geophysics in the NWT. Occupational Health and Safety, Workers' Compensation.

2. **Law and Professional Liability**

   The meaning of Law. Contracts; formation, grounds upon which a contract may be impeached, interpretation, discharge, breach, specific types. The Engineer, Geologist and Geophysicist as an expert witness. Responsibility and liability of the Engineer, Geologist and Geophysicist. Patents, copyrights, trademarks, industrial design.
2.3 PROFESSIONAL PRACTICE EXAMINATION

Specifically, APEGGA has identified the following seven content areas for examination of applicants:

(1) Engineering, Geological and Geophysical Professions Act of Alberta.

(2) Practice of the professions.

(3) Agreements, contracts and specifications.

(4) Arbitration, expert witness.

(5) Patents, trademarks, etc.

(6) Duties and liabilities.

(7) Occupational Health and Safety; Worker's Compensation.

2.4 PROFESSIONAL DEVELOPMENT

Membership in NAPEG carries with it the right to practice engineering, geology or geophysics in the Northwest Territories and Nunavut. It also imposes the responsibility to practice at a professional level of quality. NAPEG is bound by its Act to establish and maintain standards of skill, care, and professional ethics among its members. The Act places onus of the respective member as well to maintain these standards under the Code of Ethics.
SECTION 3
MIT EXPERIENCE REQUIREMENTS
A STRUCTURED PROGRAM

3.1 EXPERIENCE REQUIREMENT - GENERAL

The following sections describe the essential experience requirements to be acquired by the MIT during his or her training period.

Although many experience elements are interdependent, they are listed individually for brevity. For the sake of clarity, there may be some duplication.

In the following listing the word "design" is used for brevity. That term includes "the practical application of theory", "study", "approach", "task", "geological and geophysical interpretations" or other similar activities. The allocation shows the relative importance of each major element. The indicated time ranges therefore represent the suggested percentage of the total MIT training period that each major element comprises.

Certain individual components may need to be supplemented by APEGGA-sponsored courses and forums. These components are identified with an asterisk (*).

3.2 APPLICATION OF TECHNICAL THEORY
TIME RANGE (60% - 80%)

The MIT will gain experience in applying technical theory in the following ways:

Collecting Information and Data: The MIT will collect information and data relevant to assigned tasks and responsibilities such as applicable user-specified requirements, existing and historical conditions, readings, samples, numeric data, anticipated future conditions, constraints, etc. The information and data collecting process includes personal collecting by the MIT and/or obtaining the required items by other means (e.g. from other persons using available sources and resources).

Understanding Tasks, Information and Data: The MIT will understand (visualize) assigned tasks and what the related collected information and data represents. He or she will determine the relevance of the information and data through judgement, experience and consultation.

Analyzing Information and Data: The MIT will (with appropriate assistance - when necessary) analyze the collected information and data that is relevant to assigned tasks and projects, determine the conclusions to be drawn, determine the kind of corrective action to be taken or the extent of designs to be created. This may, for example, require the MIT to determine specific applicable conditions and constraints, the availability of relevant problem-
solving technology and programs, the applicability of "Code" requirements, the benefits (including cost benefits), and the economic feasibility considering, when applicable, capital and operating costs, amortization, fixed and variable costs and present value analysis.

**Selecting Solutions:** The MIT will select appropriate solutions based on sound technical judgement.

**Preparing Designs:** The MIT will prepare detailed designs using appropriate technical practices, procedures, systems and programs.

**Testing of Designs:** The MIT will check designs using sound technical judgement and appropriate practices and procedures.

**Work Site Visits:** The MIT will carry out specific tasks at locations (sites) that are associated with his or her assigned responsibilities, or will visit such sites on a periodic basis. Alternately, the MIT will visit sites where work is similar to that associated with his or her assigned responsibilities. This will provide the opportunity to experience the significance of time and quality in the design process and to observe practical applications of designs.

**Interdependencies:** The MIT will have the opportunity to observe, and recognize in practice, the interdependence of diverse disciplines and activities in overall systems. This will include the functions and responsibilities of MIT's department and other departments in the employer's organization, information flow, work performance structures, and the importance of systems.

**Recognizing Limitations:** The MIT will recognize limiting conditions to designs by observing work in progress at appropriate stages and locations.

**Applying Codes:** The MIT will apply statutory and regulatory requirements (Codes) to designs.

**Enhancing Technical Education:** The MIT will enhance his or her technical education as it applies to assigned tasks.

**Developing Working Relationships:** The MIT will have the opportunity to develop appropriate working relationships with those involved in on-site work and the end use of the work.

### 3.3 MANAGEMENT TECHNIQUES

**TIME RANGE (5% - 15%)**

It is important that the MIT gain exposure to management techniques through:

**Managing Resources:** The MIT will manage both personnel and project resources for the effective management of time, manpower, materials and equipment.
**Management Knowledge:** To provide a knowledge base it is highly desirable, and in some cases essential, that the MIT receive training in discipline areas that include:

- Planning
- Scheduling
- Estimating/Budgeting
- Cost Control

These discipline areas may be in addition to those directly related to assigned tasks but, as a minimum, they should relate to assigned tasks.

**Producing Cost-Effective Designs:** The MIT will receive meaningful feedback on cost impact of designs.

**Participating in Quality Assurance:** The MIT will participate in quality improvement programs and other quality assurance functions.

**Keeping Records:** The MIT will be instructed in record-keeping requirements and practices for calculations, notes, project documents etc. and will rigorously apply those requirements.

*Understanding Corporate Structure:* The MIT will become knowledgeable about organizational structure, including the functions and responsibilities of various key positions.

**Developing Team Skills:** The MIT will gain insight into the necessity of being part of a team and participate in team-building functions.

*Understanding Contracts:* The MIT will be instructed in the legal aspects of contracts.

*Understanding Ethics:* The MIT will achieve an understanding of professional and business ethics, and will practice in an ethical manner.

### 3.4 COMMUNICATIONS
TIME RANGE (5% - 10%)

MITs will be provided with opportunities to develop oral and written communications abilities:

*Oral Communications:* The MIT will report or make presentations to management or peers. This could include project status reviews, research or study reports and presentations at public forums. The MIT will establish public speaking skills through business and community activities. Discussion skills are to be developed through active participation in meetings.

*Written Communications:* The MIT will prepare technical reports which clearly describe the project and summarize results. This could include reporting on the MIT program. Effective writing skills are to be developed through the use of business letters and internal corporate communications (e.g. memos and/or letters).
3.5 SOCIAL IMPLICATIONS
TIME RANGE (2% - 10%)

The MIT will receive instruction in the following social implications of professional practice:

*Safeguards to the Public: The MIT will be instructed in the role and responsibilities of professional practice in the areas of physical entities, safety and the environment.

*Benefits to the Public: The MIT will be exposed to the benefits that the professions provide to the public.

*Regulation Agencies: The MIT will be provided with an appreciation and understanding of the roles and responsibilities of regulating agencies in his or her professional practice.
SECTION 4
MENTORING

4.1 MENTORING - GENERAL

Mentoring contributes to the development of well-rounded and successful professionals. This opportunity is afforded to both Mentors and MITs as each receive significant benefit from the relationship. In practice, mentoring is a structured pairing of a professional with greater experience and a member in training or professional with lesser experience. Key experiences to be transmitted include planning and attainment of career goals as well as meeting and surpassing professional and personal challenges.

For the MIT, the benefits of engaging in a mentoring relationship include:
- Personal discovery and improved goal setting and attainment.
- Awareness and negotiation of career and personal obstacles.
- Expanded awareness of technical and professional expectations in organizations.
- Greater knowledge of interpersonal and soft skills and strengthened professional relationships as a result.

Mentors will be experienced professionals. The criteria to be a mentor are:
- Professional registration with NAPEG and in good standing;
- At least seven (7) years experience as a professional;
- In the same discipline as the MIT or have direct knowledge of the job scope; and
- Not related to the MIT.

Although it is not recommended, a direct supervisor may serve as a Mentor, but only if all other avenues to identify a Mentor with the above criteria have been exhausted.

Upon registration, interested MITs will be invited to work with NAPEG towards selecting a suitable candidate. At this time other potential candidates identified by the MIT will also be considered, with the final pairing being facilitated by NAPEG. This opportunity is also available to any member of NAPEG who may wish to have a mentor. For example engineers or geoscientists who have recently moved north may wish to enter into a mentoring relationship in order to familiarize themselves with their new working environment.

The benefits for the Member-in-Training are:
- Receiving guidance
- Getting questions answered
- Having a professional engineer or professional geoscientist to talk to, out of the context of work
- Having a sounding board without feeling judged
- Having guidance for the early career years
- Starting to plan a path fulfilling future professional goals
4.2 MENTOR'S ROLE

Mentoring does not take the place of the employer's training. It is, in general, a complementary role to help guide, counsel, coach, motivate, support, advise, advocate, inspire and be a role model and a friend for the MIT. The following points define the mentor’s role and will be further expanded in NAPEG’s Mentor Guidelines currently under development:

1. Be a confidential sounding board for the MIT to express needs and help meet those needs without passing judgement on the MIT. Be an active listener and encourage open dialogue and feedback.

2. Help the MIT assimilate into the working environment by giving guidance on such matters as:
   - How to read/understand/communicate with others.
   - How to get things done.
   - How to sort out situations that have developed.
   - Coping with time pressures versus quality of work.
   - How to balance between personal time and work time.
   - How to manage interruptions.

3. Involve the MIT in professional and technical societies.

4. Regularly monitor the MIT's in-training experience, at least every three months, and identify gaps. Monitoring should involve a general discussion, not specific technical aspects of the MIT's work. The Mentor should work with the MIT towards defining and developing their professional goals.

5. Guide the MIT towards development of non-technical skills such as:
   - Communication
   - Interpersonal skills
   - Project management
   - Problem solving
   - Management
   - Business

*The mentor must not take responsibility, technical or otherwise, for the work of the MIT. The mentor's role is to encourage and guide.*
4.3 CHARACTERISTICS OF A MENTOR

The Member-in-Training should understand that optimizing benefits of the mentoring relationship is dependent on his or her level of dedication to it. The expression of the MIT’s experience and thoughts will allow the mentor to better tailor the support and guidance. The following points define the MIT’s role:

1. Discuss candidly issues, thoughts and concerns
2. Bring forward pertinent work experiences that will stimulate discussions
3. Update the mentor on recent experiences or professional growth
4. Seek advice regarding Professional Development opportunities from the mentor
5. Update the mentor on development of non-technical skills and seek guidance for future development of those skills

4.4 MIT/MENTOR CONTACT

The frequency of the mentor/MIT contacts does not have to be fixed; however, it is recommended that they meet on an informal basis, a minimum of once every three months. The mentor will maintain an open door policy to foster communication and the MIT is encouraged to enlist the mentor's help whenever necessary.

4.5 SUPERVISOR AND MENTORING

Distinct from the role of a mentor is the role of the supervisor. The supervisor's role, as it relates to the MIT, remains unchanged from that relative to any other employee who directly reports to him/her. When a supervisor also acts as a mentor they shall remain impartial such that their behaviour is no more or less preferential towards that MIT as it is towards any other employee who directly reports to him/her. They should be able to freely discuss any ethical or career challenges that the MIT has with a balanced point of view.

When a situation arises where an employer is unable to provide an MIT with “in-house” professional technical supervision, a contractual arrangement may be made with a registered Professional Engineer or Professional Geoscientist to provide technical supervision and review of the MIT’s work. In such cases it is preferred that the technical supervision and mentoring roles remain separate. If circumstance dictates that the mentor and supervisor are the same person then the roles must be clearly and separately defined and documented, including arrangements for fair remuneration. The relationships (supervisor to MIT and supervisor to employer) must be distinct from the mentor to MIT and must respect the Code of Ethics requirement: “Professional Engineers and Professional Geoscientists shall conduct themselves toward other professional engineers, professional geoscientists, employees and others with fairness and good faith.”
Some companies have in-house mentoring programs that are comparable to the NAPEG mentoring program. Caution should be used to ensure separation between the roles of supervisor and mentor, as well as ensuring that the MIT is able to freely discuss ethical issues or career choices. The NAPEG mentoring program is not intended to replace or supersede companies’ in-house programs but could be utilized in addition to them.

4.6 MENTOR APPOINTMENT

A mentor can be sought and selected by the MIT at any time after they have registered with NAEPG. They can work with NAPEG’s office to obtain a list of potential mentors, or may choose to find one through personal contact with an individual who meets the criteria as set in 4.1. The MIT will contact and arrange to meet with potential mentors to determine suitability by mutual agreement. The mentoring process may be formalized by a voluntary contract.

The nature of working in the North is such that it is possible that the MIT and potential mentors may be remote to each other. The relationship is still possible to have, but careful attention will have to be made to the means by which the relationship is maintained.

4.7 LETTER AGREEMENT/LEGAL AGREEMENT

The success of a mentoring relationship is determined largely by the commitment and characteristics of the MIT. There are several important characteristics the MIT should foster:

1. **Willingness to learn:** The MIT must be open-minded, willing to provide and receive feedback, and be receptive to guidance from the Mentor.

2. **Willingness to self-evaluate:** The MIT should be willing to re-evaluate and update their career and mentoring relationship goals as they evolve.

3. **Confidentiality:** It is important that sensitive topics discussed during the course of the mentoring relationship remain in the confidence of the MIT and the Mentor alone.

4. **Self-confidence:** The MIT must possess the self-confidence to approach, engage, and maintain the Mentor – MIT relationship.

5. **Initiative to maintain and advance the mentoring relationship:** The MIT is primarily responsible for driving the mentoring relationship through a continued interest in their personal development.

6. **Career goals:** The MIT has a responsibility to form goals and plans for their career; these should be discussed with the mentor so that the mentor can provide input on attaining these goals.

In addition to those characteristics listed above the MIT has a responsibility to form goals and plans for both their career and the mentoring relationship. Methods for developing and refining these goals are outlined in the following section.
4.8 IMPLEMENTATION

1. Overall Relationship Framework and Career Goals

It is expected that the mentoring relationship will go through three phases: start-up, mentoring, and close out. It is important to determine at the outset how each phase will play out in terms of time, and how to determine when a phase is over. Considerations at the start up include: selection of the mentor/MIT, determining the frequency and structure of meetings, and finally, how the relationship should progress. At this stage, goals should be outlined for both the MIT and the mentor, so it is clear what both participants would like to gain from the mentoring process. In particular, goals for the MIT should be especially clear and well developed. These are the short, mid, and long-term personal and career goals that the MIT wishes to work on with the aid of their mentor. Mentoring represents the most significant phase as it includes regular meetings over an indefinite period.

The closeout phase of the relationship represents the planned or unplanned termination of the mentoring agreement. Ideally this occurs as the result of the MIT achieving their goals and naturally achieving independence, however in other cases it may occur more suddenly. Either person may be forced to end the relationship for a variety of reasons including relocation, new employment or employment responsibilities, or, more generally, for personal reasons.

2. Frequency and Structure of Meetings

The frequency at which meetings will take place should be determined, and re-evaluated continually. The structure of the meetings should also be determined. While it is recommend that meetings be at least every three months, individual preferences will likely dictate how often meetings should occur. It is important to re-evaluate throughout the mentoring process to determine if meetings should take place more or less frequently.

The structure of the meeting is important, and must be tailored to the individuals involved. At opposite ends of the spectrum would be meetings where an agenda is set, and items discussed, versus informal chats about whatever topics happen to come up. The individuals will need to determine how structured the mentor/MIT relationship will be. In setting the structure, it is essential to remember that there is an end goal in mind, and this is the process to ensure that both the MIT and the mentor achieve their goals. As with the rest of the mentoring process, regular re-evaluation of the meeting structure should take place.

3. Ongoing Evaluation of the Relationship and Career Goals

As with any project, constant monitoring should take place to ensure that the goals that were outlined in the start-up phase are being worked towards. It is also important to periodically reconsider those goals to see if perhaps they need to be changed.

4. Topics of Discussion
What is discussed between the mentor and the MIT will be left up to the individuals. There are however, several areas that should be covered:

- Evaluate the MIT’s progress in attaining their goals, with a re-focusing if necessary
- Personal or professional challenges faced by the MIT. Examples are numerous but may include discussion of personality conflicts, ethical questions of engineering or geoscience conduct, and/or work/life balance and time management strategies.
- Discussion on technical topics of uncertainty or interest
- Community service and volunteering
- Career progression, trajectory and opportunities
- Professional obligations, duty to society & social implications
- Soft or non-technical skills

5. Avoiding Mentor/MIT Relationship Pitfalls

There are many ways in which a mentoring relationship can fail to provide one or both members with the outcome that they would like. The best way to avoid these problems is to regularly and openly evaluate the state of the relationship and discuss any potential or existing issues.

Some points to consider when establishing the mentoring relationship in order to avoid pitfalls are:

- Set up regular times for contact;
- Discuss expectations/regularity, mode and technology preferences for communication;
- Discuss confidentiality (even more important when communicating via email);
- Have a framework and plan for discussions;
- Regular review of the relationship (at least every three months);
- Use the mentoring guidebook as a support tool (currently under development);
- Where possible, and if opportunity permits, plan a visit to mentor’s office or jobsite;
- Have an agreement beforehand on how you will dissolve the relationship if it is not working

4.9 ADDITIONAL RESOURCES

Strategies for Success in Mentoring: A Handbook for Mentors and Protégés
http://www.apegga.org/members/Mentoring/handbook/index.htm

Articles and Resources on Mentoring as Suggested by APEGGA
http://www.apegga.org/members/Mentoring/resources.htm

APEGBC Mentoring Program Documents and Resources
http://www.apeg.bc.ca/services/mentoring.html

APEGNB Mentoring Page
SECTION 5
EXPERIENCE RECORD

5.1 EXPERIENCE RECORD - GENERAL

Note: The Board of Examiners will only accept experience records on a specific form. It is available on the NAPEG web site as an Excel Spreadsheet www.napeg.nt.ca (under Apply). To learn more information about the format for reporting, you should also review the information on the APEGGA web site www.apegga.org (under Applicants).

This section of the MIT Guideline is under review.

The Experience Record format will be comprised of a series of loose-leaf pages which incorporates the MIT's record of work experience, comments on the documented work experience by his or her supervisor, and the mentor's comments and observations.

When the MIT applies for professional registration, all elements of the Experience Record may be reviewed by the Board of Examiners. It is anticipated that when professional registration is granted by the Association, the Experience Record would be returned to the new professional member as a permanent record of in-training experience.

The Experience Record will be used for documenting assignment or project experience. Each assignment or project should be documented in sufficient detail to provide evidence that the in-training elements are achieved. The MIT's supervisor will have separate pages which will include cross-references to each of the individual assignments, projects or other training elements documented as experience by the MIT. The mentor's comments will be on separate pages. The frequency of mentor review may not parallel the time frame for the individual assignments or projects.

The Experience Record will be flexible enough to reflect the nature of individual assignments and the experience gained in other in-training elements. Generally, entries will describe significant work experiences. The entries in the formal record should be in sufficient detail to identify the specific application of theory and other prescribed in-training elements.

In the Experience Record the MIT will summarize his or her training during each six month segment of the MIT period. Each six month summary will be brief (generally 300 to 500 words) and will provide an overview of the extent and nature, both qualitative and quantitative, of the assignments carried out and the experience gained during the applicable training segment. Each summary will be prepared within one month of the completion of the respective six month period and will be based on the detailed entries on the applicable pages of the Experience Record. At the end of the MIT period an overall training period summary (not exceeding 400 words), based on the combined six month summaries, will be prepared by the MIT. At the end of the MIT period all the summary pages will be inserted at the beginning of the Experience Record. The overall summary should be first, followed by all the six month summaries in chronological order, to provide a readily accessible overview of the MIT's training.
EXHIBIT "A"
SAMPLE LETTER BETWEEN
MENTOR AND STUDENT

110 Franklin Avenue
Yellowknife, NT X1A 3L1

December 29, 2009

Ms. Jennifer Smith
322 Johnson Crescent
Yellowknife, NT
X1A 8T5

Dear Jennifer;

Let me first congratulate you on receiving such good marks on your final exams in Civil Engineering at the University of Alberta. I know that the course requires full attention at all times. Also congratulations on finding employment with the ABC Development Corporation.

When you spoke to me on May 10, 2009 about becoming your "Mentor", during your NAPEG Professional Development Conference, I must say that I was most intrigued. During the past few days I have reviewed the NAPEG Guidelines for a Structured Program for Members-in-Training, in particular the obligations and responsibilities of the Mentor. Several thoughts and considerations occurred to me and we should set them out so that we both know and understand what we expect of each other as well as any obligations we are assuming. Firstly, I am setting these points out because I have never knowingly been a "Mentor" before, and secondly, so that we will not have any serious misunderstandings or other conflicts.

I understand that the "Mentor" is to provide advice and guidance on a voluntary basis and during your MIT period. I will use my best efforts to help you to understand those things you need to know to become a true professional, but as we discussed and I must repeat, I cannot and must not advise you or assume any responsibility for technical work that you are responsible for except where the work involves common knowledge or information which you should recall from your university training.

We discussed and we should repeat that during any of our conversations or communications, you will consciously guard against divulging to me in any manner, confidential information of your employer no matter in what form it exists. We also need to agree that if it should occur that at a later time you find that you have accidentally inadvertently or otherwise given me any such information, you will immediately advise me of the situation so that we may take any necessary action so as to not compromise ourselves, our professional organization or your employer to any further degree. We also
discussed that although I look forward to helping you in any manner in which I am capable, particularly in keeping a watch with your assistance that you are receiving the type and amount of experience described in the NAPEG MIT GUIDELINES. I cannot guarantee that the help and advice which I am able to give you will lead professional registration; although I will undertake to do my utmost to give you at all times the best information and help that I am able in the circumstances. The GUIDELINE does state that the onus is on the MIT to ensure that his qualifications meet the requirements of the Board of Examiners in accordance with the Act.

I look forward to being your "Mentor" as much as you receiving me to that position. I trust that we will have a mutually enjoyable and profitable relationship from which a long friendship will result. We should understand that if for any reason whatsoever we may both discontinue or terminate this agreement upon one giving written notice to the other through our regular means of communication.

If this sets out our mutual understanding of the NAPEG "Mentor-MIT" relationship, please sign and date a copy of this letter which is enclosed and return it to me. Also please notify your supervisor of this relationship at the earliest possible date.

I look forward to giving you the help I am able during your MIT period. I look forward to seeing you enjoy a rewarding career and I am sure that I will be the real beneficiary.

Sincerely,

Susan Brown, P.Eng.

I understand that the above letter from Ms. Susan Brown dated May 29, 2009 sets out the understanding of the NAPEG MIT-MENTOR relationship and I will undertake to uphold my responsibilities as best I am able.

______________________________  _______________________
Jennifer Smith, MIT                  Date
EXHIBIT "B"
SAMPLE AGREEMENT OF UNDERSTANDING

BETWEEN:

(Hereinafter called the "Mentor")

-And-

(Hereinafter called the "Member-in-Training")

We the undersigned, agree that the Mentor will provide advice and guidance on a voluntary basis to the Member-in-Training in order to assist the Member-in-Training in his/her development as a professional member of the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories.

It is specifically agreed between the Member-in-Training and the Mentor that:

1. The Mentor will use his best efforts to assist the Member-in-Training in the Member-in-Training's development as a professional.

2. The Mentor does not assume professional or technical responsibility for the work of the Member-in-Training.

3. The Mentor will at all times keep in strict confidence the affairs and business of the Member-in-Training, his employer, and his employer's clients.

4. The Member-in-Training acknowledges that the Mentor assumes no responsibility for and does not guarantee that his assistance will lead to professional registration, the onus being on the Member-in-Training to ensure that his qualifications for registration meet the requirements of the Board of Examiners in accordance with the Engineering and Geoscience Professions Act, Regulations and Bylaws.

5. The Member-in-Training will inform his/her supervisor that this mentoring relationship exists.

6. This agreement may be terminated for any reason whatsoever upon giving notice to the other party through the regular means of communications between the Mentor and the Member-in-Training.

DATED at _________________, in the Northwest Territories/Nunavut, This ______ day of ______, AD 20__.

PROFESSIONAL MEMBER/MENTOR
Per: ______________________

MEMBER-IN-TRAINING
Per: ______________________