



COMPETENCY ASSESSMENT

CANADIAN ENVIRONMENT COMPETENCIES GUIDE

FOR ENGINEERING APPLICANTS, TRAINEES,
VALIDATORS AND ASSESSORS

TABLE OF CONTENTS

INTRODUCTION	3
CANADIAN ENVIRONMENT COMPETENCIES	3
WORKING IN CANADA SEMINAR.....	4
INDICATORS	4
VALIDATORS	4
SUBMISSION OF CANADIAN ENVIRONMENT COMPETENCIES – FOR APPLICANTS	5
COMPETENCY SELF-ASSESSMENT	5
OVERVIEW OF KEY COMPETENCIES	5
PROVIDING COMPETENCY EXAMPLES FOR CANADIAN ENVIRONMENT COMPETENCIES	5
SELF-ASSESSED COMPETENCY LEVEL	6
ASSESSMENT OF CANADIAN ENVIRONMENT COMPETENCIES – FOR ASSESSORS	7
COMPETENCY ASSESSMENT	7
SUMMARY	7
ASSESSING THE CANADIAN ENVIRONMENT COMPETENCIES	7
ASSIGNING THE WORKING IN CANADA SEMINAR	8
PROVIDING A FINAL RECOMMENDATION	8
APPLICANT SATISFIES THE CANADIAN ENVIRONMENT COMPETENCY REQUIREMENT	8
APPLICANT DOES NOT SATISFY THE CANADIAN ENVIRONMENT COMPETENCY REQUIREMENT	9
UNABLE TO COMPLETE REVIEW OR MORE INFORMATION NEEDED	10
MORE INFORMATION	11
APPENDIX.....	12
WORKING IN CANADA SEMINAR: COURSE SYLLABUS	12
Unit 1: The Regulation and Practice of Engineering in Canada	12
Unit 2: Codes, Standards, and Regulations	12
Unit 3: Culture and Communication	12
Unit 4: Collaboration and Peer Review	12
ASSIGNMENT OF WORKING IN CANADA UNIT(S) FOR PARTIAL FULFILMENT OF CANADIAN ENVIRONMENT COMPETENCIES	13

INTRODUCTION

The purpose of this guide is to provide details on the Canadian environment competency requirement; how applicants can satisfy that requirement using a competency-based approach; and how assessors can satisfactorily evaluate it.

The intent of the Canadian environment competencies is to:

- Provide clear and transparent evaluation criteria for the determination of satisfactory engineering experience in a Canadian environment or equivalent.
- Allow applicants to satisfy the requirements of the Canadian environment competencies through experience gained in Canada or overseas (shown through equivalency).
- Align the assessment method of the Canadian environment competency requirement with the online [Competency Assessment System](#).

CANADIAN ENVIRONMENT COMPETENCIES

The Canadian environment competencies are a subset of 8 competencies from the existing 34 competencies of the competency framework that best demonstrate knowledge and experience of Canadian regulations, codes, standards, quality control, safety awareness, professional accountability, and communication.

The 8 Canadian environment competencies are:

Competency Category	Competency	Minimum Competency Rating
1. Technical		
Competency 1.1	Regulations, Codes, and Standards	3.0
Competency 1.6	Safety Awareness	3.0
Competency 1.9	Demonstrate Peer Review and Quality Control	3.0
2. Communication		
Competency 2.1	Oral Communication (in English/French)	3.0
Competency 2.2	Writing (in English/French)	3.0
Competency 2.3	Reading and Comprehension (in English/French)	3.0
5. Professional Accountability		
Competency 5.1	Code of Ethics	3.0
6. Social, Economic, Environmental and Sustainability		
Competency 6.2	Engineering and the Public	2.0

WORKING IN CANADA SEMINAR

The Working in Canada Seminar is an online, self-paced course designed to address key skills, competencies and customs commonly expected within the Canadian engineering workplace environment. The seminar provides useful and practical information for all who intend to practice professional engineering in Canada. The full course takes an estimated 56-64 hours to complete and consists of four units that address the Canadian environment competencies:

- Unit 1: The Regulation and Practice of Engineering in Canada
- Unit 2: Codes, Standards and Regulations
- Unit 3: Culture and Communication
- Unit 4: Collaboration and Peer Review

Note: The Working in Canada Seminar is not meant to replace Canadian environment experience – it is intended to be a supplemental option for assessors to recommend to applicants who have demonstrated strong knowledge and abilities in all areas but lack direct experience in a Canadian (or equivalent to Canadian) environment.

Refer to the [Appendix](#) for more details regarding the Working in Canada Seminar and the relevant units that correspond to each Canadian environment competency.

INDICATORS

Indicators are defined as specific examples of actions, skills, or behaviours that an applicant could use to demonstrate the achievement of a competency. The system provides a list of indicators for each competency, which offers guidance to applicants about the types of examples they *may* consider using. Note that applicants are not restricted to the use of the listed indicators and are not required to address all the indicators – it is simply a reference or guide.

Indicators for each of the Canadian environment competencies contain specific references to the Canadian environment to guide applicants on submitting appropriate examples. There is additional guidance for applicants who may not have experience in Canada but wish to use their experience from international environments to partially, or fully, satisfy the Canadian environment competencies. The additional guidance provides suggestions on how applicants can provide the necessary information and detail to assist assessors in determining whether the example could be deemed equivalent.

VALIDATORS

Applicants are asked to provide the names and e-mail addresses of validators to confirm work experience examples and to provide overall feedback on their readiness for professional registration. For each of the Canadian environment competencies, if the example is not a Canadian example, validators will be asked to comment on how the international environment in which the example took place may be considered equivalent to a Canadian environment.

The requirements of validators remain the same as the requirements stated in the Competency Assessment Guide. Ideally, validators are professional engineers (or the equivalent). However, if this not possible, applicants should ensure that validators for the mandatory Canadian environment competencies are direct supervisors who are competent in the same area of practice and who can demonstrate an understanding of the competency requirements.

SUBMISSION OF CANADIAN ENVIRONMENT COMPETENCIES – FOR APPLICANTS

COMPETENCY SELF-ASSESSMENT

OVERVIEW OF KEY COMPETENCIES

Canadian environment competencies are denoted with a 🇨🇦 on the Competency Self-Assessment overview screen. This highlights to applicants (and to validators and assessors) that these competencies are used towards the assessment of Canadian (or equivalent to Canadian) environment experience.



PROVIDING COMPETENCY EXAMPLES FOR CANADIAN ENVIRONMENT COMPETENCIES

The format for submitting Canadian environment competencies will look familiar as it still relies on the Situation, Action, Outcome structure, but with some additions that provide guidance on how to report for the specified Canadian environment competency. The screenshot below shows that the header section will:

- Indicate that the selected competency is a mandatory Canadian environment competency;
- State the minimum required competency level;
- Provide a link to guidance on reporting for the specific Canadian environment competency.

Each Canadian environment competency has a guide that provides applicants with additional information on how to submit examples that addresses the Canadian (or equivalent to Canadian) environment. It also provides guidance for those who may not have direct Canadian environment experience and wish to use international examples. This may be helpful for applicants with limited or no experience within a Canadian environment. Using the guidance documents will assist assessors in determining satisfaction of the requirements and/or equivalency.

1.1 Regulations, Codes & Standards

Required Overall Level: 3

This competency is intended to demonstrate your knowledge and awareness of Canadian regulations, codes and standards. This includes local engineering procedures and practices as applicable. ?

This is a mandatory Canadian Environment competency. The minimum required competency score for this competency is 3.

For additional guidance, please see the guide for applicants on reporting for Mandatory Canadian Environment Competencies: 1.1 Regulations, Codes & Standards

Indicators:

1. Identify and comply with legal and regulatory requirements for project activities
2. Incorporate knowledge of codes and regulations in design materials
3. Prepare reports assessing project compliance with Canadian codes, standards, and regulations
4. Recognize the need to design for code compliance while achieving constructability
5. Identify Canadian, provincial/territorial, regional, indigenous codes, standards and/or practice guidelines that are applicable to your example. Briefly discuss how the Canadian codes, standards and/or guidelines would be applied in your example if it had taken place in Canada
6. Incorporate knowledge of Canadian, provincial, regional, indigenous codes, standards, regulations and/or practice guidelines in design materials
7. Recognize the important of respecting the regional traditions and indigenous regulations towards a project

Indicator Type

Generic

Employer *

Select an Employer

Your Division *

Save as Draft

Save as Complete

Cancel

To satisfy the Canadian environment experience requirement, applicants are required to achieve each of the Canadian environment competencies at the [minimum competency rating](#). If an applicant has not worked in a Canadian environment, it is their responsibility to provide sufficient examples to establish equivalency. Using international experience does not guarantee the competencies will be met.

Please remember:

- ☒ If any of the 8 Canadian environment competencies are assessed below the minimum competency rating, regardless of the overall category rating, applicants will be reassigned the competency and asked to revise their example.

SELF-ASSESSED COMPETENCY LEVEL

The applicant is to indicate the level on the [Competency Rating Scale](#) that they believe is demonstrated in their example, taking into account the [minimum competency ratings](#) for each Canadian environment competency. Once all competencies have been submitted and the self-assessment completed, it will be sent for validation and assessment.

ASSESSMENT OF CANADIAN ENVIRONMENT COMPETENCIES – FOR ASSESSORS

COMPETENCY ASSESSMENT

SUMMARY

When reviewing an applicant's competency report, assessors will see a "Canadian Competencies" section on the Competency Assessment Summary screen. All 8 Canadian environment competencies will be listed under the "Canadian Competencies" section to provide a quick overview. The Canadian environment competencies will also appear in their respective categories.

COMPETENCY ASSESSMENT SUMMARY

Category	Applicant	Validator	Assessor	Required
Technical Competence	3.0	3.0	4.0	3.0
KEY COMPETENCIES +				
Canadian Competencies	3.0	3.0	4.0	
KEY COMPETENCIES -				
1.1 Regulations, Codes & Standards	3.0	3.0	4.0	3.0

ASSESSING THE CANADIAN ENVIRONMENT COMPETENCIES

The screenshot below shows that the header section will:

- Indicate that the selected competency is a mandatory Canadian environment competency;
- State the minimum required competency level;
- Provide a link to guidance on reporting for the specific Canadian environment competency.

1.1 Regulations, Codes & Standards Required Overall Level: 3

This competency is intended to demonstrate your knowledge and awareness of Canadian regulations, codes and standards. This includes local engineering procedures and practices as applicable.

This is a mandatory Canadian Environment competency. The minimum required competency score for this competency is 3.

For additional guidance, please see the guide for applicants on reporting for Mandatory Canadian Environment Competencies: 1.1 Regulations, Codes & Standards

Indicators:

1. Identify and comply with legal and regulatory requirements for project activities
2. Incorporate knowledge of codes and regulations in design materials
3. Prepare reports assessing project compliance with Canadian codes, standards, and regulations
4. Recognize the need to design for code compliance while achieving constructability
5. Identify Canadian, provincial/territorial, regional, indigenous codes, standards and/or practice guidelines that are applicable to your example. Briefly discuss how the Canadian codes, standards and/or guidelines would be applied in your example if it had taken place in Canada
6. Incorporate knowledge of Canadian, provincial, regional, indigenous codes, standards, regulations and/or practice guidelines in design materials
7. Recognize the importance of respecting the regional traditions and indigenous regulations towards a project

Indicator Type: Generic

Employer: Select an Employer

Your Decision:

Save as Draft Save as Complete Cancel

As an assessor reviewing the Canadian environment competencies, the assessor should:

- Review the applicant's example to ensure the information provided is sufficient in breadth, depth and quality to determine competency. The guidance documents and indicators can also provide assessors with the appropriate guidance.
- Understand that applicants may submit international examples for Canadian environment competencies; however, the applicant has the responsibility to establish equivalency. It is possible for an example to take place outside of Canada and satisfy the Canadian environment competency as long as the information the applicant has provided is sufficient to establish equivalency.

ASSIGNING THE WORKING IN CANADA SEMINAR

All applicants are required to meet a [minimum competency rating](#) for each of the Canadian environment competencies. If an applicant has achieved the minimum required rating for all Canadian environment competencies, the applicant will be considered to have satisfied the Canadian environment competency requirement.

Should an applicant achieve a rating lower than the minimum required rating, the applicant may be:

- Re-assigned the Canadian environment competencies that have not yet been met at the satisfactory rating and asked to revise their example.
- Required to complete the corresponding unit(s) of the [Working in Canada Seminar](#) to supplement their knowledge of the Canadian environment competencies (if appropriate);
 - Assessors will have the option to assign the [Working in Canada Seminar](#) as a supplement to experience if an applicant has demonstrated some awareness and/or minimal practical experience in one or more of the Canadian environment experience competencies (typically achieving a score of 1 or 2). This option is available if, after reviewing the applicant's submission and validator comments, the assessor believes the applicant has met all technical requirements but that the applicant is only missing Canadian environment experience. **That is, there should be no concerns regarding the applicant's overall technical knowledge or abilities for the Working in Canada Seminar to be assigned as a supplement to experience.**

PROVIDING A FINAL RECOMMENDATION

Assessors are asked to provide their recommendation regarding the Canadian environment competencies. A series of additional questions appears depending on the options selected.

APPLICANT SATISFIES THE CANADIAN ENVIRONMENT COMPETENCY REQUIREMENT

If the applicant satisfies the Canadian environment competency requirement, select 'Yes'.

Assessors are then asked whether the applicant has met all competencies and categories at the appropriate level for registration. Assessors can address and provide comment on the applicant's overall readiness for professional registration.

In your opinion, does the applicant meet the Canadian Environment requirement as specified in [Mandatory Canadian Environment Competencies Guidance Document](#)? *

- ☒ Yes
☐ No
☐ Unable to complete review
☐ More information needed

Do you believe this applicant has met the competencies at the appropriate level for registration? *

- ☐ Yes
☐ No

If yes or no, please comment

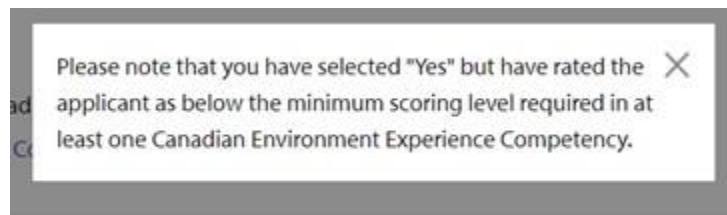
Please provide any additional overall comments regarding this application, if applicable.

◀ Previous

Save Feedback

Submit Assessment

An alert will appear if the assessor indicates that the applicant has met Canadian experience requirement, but at least one Canadian environment competency is below the minimum required rating:



APPLICANT DOES NOT SATISFY THE CANADIAN ENVIRONMENT COMPETENCY REQUIREMENT

If the applicant does not satisfy the Canadian environment competency requirement, select 'No'.

Assessors are then asked whether they recommend assigning the Working in Canada Seminar (not applicable to APEGS assessors).

Assessors can also recommend the assignment of additional experience, if necessary.

In your opinion, does the applicant meet the Canadian Environment requirement as specified in Mandatory Canadian Environment Competencies Guidance Document? *

☐ Yes
☒ No
☐ Unable to complete review
☐ More information needed

Do you recommend the assignment of relevant Working in Canada Seminar units? *

☒ Yes
☐ No

Do you recommend the assignment of additional experience? *

☐ Yes
☒ No

If yes or no, please comment

Please provide any additional overall comments regarding this application, if applicable.

Please remember:

- ☑ Assessors do not need to be concerned with the individual units of the seminar. Staff will assign units based on which competencies are re-assigned (see [Appendix](#)).
- ☑ If you require more information or for certain competencies to be revised, please select 'More information needed' rather than 'No'.

UNABLE TO COMPLETE REVIEW OR MORE INFORMATION NEEDED

If the assessor is unable to complete the review for any reason, they can select 'Unable to complete review' and provide a brief explanation, for example, a conflict of interest.

In your opinion, does the applicant meet the Canadian Environment requirement as specified in Mandatory Canadian Environment Competencies Guidance Document? *

☐ Yes
☐ No
☒ Unable to complete review
☐ More information needed

Please provide a reason why you are unable to complete the review *

Please provide any additional overall comments regarding this application, if applicable.

If more information is required to proceed with the assessment, the assessor can select 'More information needed'. Assessors are then asked to provide details on the information request.

The screenshot shows a web form for a competency assessment. It contains three main sections: a radio button selection for the assessment outcome, a text area for specific information requests, and a larger text area for overall comments. At the bottom are three navigation buttons: 'Previous', 'Save Feedback', and 'Submit Assessment'.

In your opinion, does the applicant meet the Canadian Environment requirement as specified in Mandatory Canadian Environment Competencies Guidance Document? *

☐ Yes
☐ No
☐ Unable to complete review
☒ More information needed

Please let us know what information you need (e.g. more detailed examples for some - please list specific numbers - or all of the competencies) *

Please provide any additional overall comments regarding this application, if applicable.

◀ Previous Save Feedback Submit Assessment

MORE INFORMATION

For more information regarding competency assessment, please see the [Competency Assessment System](#) website.

For specific information regarding registration requirements, please contact your regulator.

For questions which have not been answered here, please see the [FAQ section](#) on the competency assessment website.

Unit 1: The Regulation and Practice of Engineering in Canada

This unit explores the engineering regulatory framework in Canada, the expectations of a professional engineer, and the Code of Ethics. Engineering is not a self-regulated profession in many parts of the world; therefore, internationally trained engineers need to have a thorough understanding of the legislation that governs engineering in Canada, the role of the regulatory bodies, and the primary responsibilities of professional engineers. After completing the unit, participants will be able to work in accordance with legislation and the key principles of professionalism.

Unit 2: Codes, Standards, and Regulations

This unit explores the regulatory requirement for professional engineers to design engineering solutions according to the codes, standards, and regulations of Canada and its provinces and territories. The materials are designed to raise significant awareness of the purpose and variety of codes, standards, and regulations. After completing the unit, participants will know how to search for codes, standards, and regulations in the Canadian workplace, and have a strong understanding of the expectations for complying with them.

Unit 3: Culture and Communication

This unit explores the role of culture and communication in the engineering environment in Canada. As with many other professions, the engineering workforce in Canada is both culturally and linguistically diverse. As such, people need to understand the cultural norms of the Canadian engineering environment. They also need to know how to interpret and respond to the behaviors and communication styles of people from cultural origins outside of Canada. At the end of the unit, participants will be more aware of how to adapt their behaviors and communication as necessary in a multicultural Canadian engineering context.

Unit 4: Collaboration and Peer Review

This unit explores collaboration and peer review as they refer to working in teams and having work reviewed by others to ensure the engineer is not an isolated practitioner. Engineering in Canada often requires working with engineers from different disciplines, working in teams, and participating in peer review. At the end of the unit, participants will be able to work more collaboratively and participate more openly and respectfully in peer review and in a team environment.

ASSIGNMENT OF WORKING IN CANADA UNIT(S) FOR PARTIAL FULFILMENT OF CANADIAN ENVIRONMENT COMPETENCIES

Canadian Environment Competency		Minimum Competency Rating	Working in Canada Seminar Unit for Partial Fulfilment (Knowledge Component: Maximum Score 2 out of 3) of Competency
Competency 1.1	Regulations, Codes, and Standards	3.0	<ul style="list-style-type: none"> WCS Unit 1 – The Regulation and Practice of Engineering in Canada WCS Unit 2 – Codes, Standards and Regulations
Competency 1.6	Safety Awareness	3.0	<ul style="list-style-type: none"> WCS Unit 1 – The Regulation and Practice of Engineering in Canada WCS Unit 2 – Codes, Standards and Regulations
Competency 1.9	Demonstrate Peer Review and Quality Control	3.0	<ul style="list-style-type: none"> WCS Unit 1 – The Regulation and Practice of Engineering in Canada WCS Unit 2 – Codes, Standards and Regulations WCS Unit 4 – Collaboration and Peer Review
Competency 2.1	Oral Communication (in English/French)	3.0	<ul style="list-style-type: none"> WCS Unit 3 – Culture and Communication WCS Unit 4 – Collaboration and Peer Review
Competency 2.2	Writing (in English/French)	3.0	<ul style="list-style-type: none"> WCS Unit 3 – Culture and Communication WCS Unit 4 – Collaboration and Peer Review
Competency 2.3	Reading and Comprehension (in English/French)	3.0	<ul style="list-style-type: none"> WCS Unit 3 – Culture and Communication WCS Unit 4 – Collaboration and Peer Review
Competency 5.1	Code of Ethics	3.0	<ul style="list-style-type: none"> WCS Unit 1 – The Regulation and Practice of Engineering in Canada
Competency 6.2	Engineering and the Public	2.0	<ul style="list-style-type: none"> WCS Unit 1 – The Regulation and Practice of Engineering in Canada