

COMPETENCY ASSESSMENT GUIDE

FOR ENGINEERING APPLICANTS AND TRAINEES



Revised: April 2024

TABLE OF CONTENTS

INTRODUCTION	
THE COMPETENCY-BASED ASSESSMENT (CBA) FRAMEWORK	
KEY TERMINOLOGY	3
COMPETENCY CATEGORIES	
KEY COMPETENCIES	
COMPETENCY RATING SCALE INDICATORS	
ROLES AND RESPONSIBILITIES	6
COMPETENCY DOCUMENTATION AND INSTRUCTIONS	7
EDUCATION	7
CONFIRMATION OF EDUCATION	7
COMPONENTS FOR EXPERIENCE REPORTING	7
EMPLOYMENT HISTORY	7
COMPILING AN EMPLOYMENT HISTORY	
VALIDATORS	8
SELECTING VALIDATORS	8
SUPPORTING DOCUMENTS	8
COMPETENCY SELF-ASSESSMENT	
PROVIDING COMPETENCY EXAMPLES	
SELECTING, DRAFTING, AND SAVING EXAMPLES	
THE VALIDATION AND ASSESSMENT PROCESS WHAT HAPPENS AFTER I SUBMIT MY COMPETENCY SELF-ASSESSMENT	
MORE INFORMATION	

INTRODUCTION

This guide is intended to assist you in accessing the <u>Competency Assessment System</u> for the reporting and evaluation of engineering work experience using the Competency-Based Assessment (CBA) Framework. The CBA Framework supports applicants in self-assessing their professional level of competence by using demonstrated examples obtained over the course of their engineering career and submitting those examples for online validation and assessment.

<u>Please note:</u> Applicants for professional registration must also meet other requirements (such as passing the National Professional Practice Examination) in addition to the experience requirement - these requirements may vary depending on the applicants' regulator. Please visit your regulator's website for a complete list of requirements for registration.

THE COMPETENCY-BASED ASSESSMENT (CBA) FRAMEWORK

KEY TERMINOLOGY

COMPETENCY CATEGORIES

The CBA Framework for engineering includes 7 competency categories:

Competency Category	Minimum Category Rating
1. Technical	3.0
2. Communication	3.0
3. Project and Financial Management	2.0
4. Team Effectiveness	3.0
5. Professional Accountability	3.0
6. Social, Economic, Environmental and Sustainability	2.0
7. Personal Continuing Professional Development	3.0

Each competency category contains a subset of key competencies. Applicants must meet the minimum category rating in each competency category to meet the experience requirement for professional registration.

KEY COMPETENCIES

<u>Key Competencies</u> are identified skill sets that can be demonstrated through an applicant's work experience. The 34 key competencies in the CBA Framework are observable and measurable skills, knowledge, abilities, motivations, or traits required for professional registration that are demonstrated through the actions and behaviours of the applicant. This framework supports assessors in having a clear picture of your knowledge and experience in all areas essential to safe, ethical, and effective engineering practice.

The **<u>Competency Rating Scale</u>** is a six-point rating scale from 0 to 5. It is used to evaluate each of the:

- 34 Key Competencies
 - Individual key competencies are evaluated with the same rating scale. The ratings are then averaged within each competency category.
- 7 Competency Categories
 - Each of the 7 categories has a <u>minimum category rating</u> that all applicants must meet to satisfy the experience requirements.

Please remember:

As an applicant for professional registration, you are required to **meet the minimum** category rating for each category. You are **not** expected to be working at an advanced or professional level (rating 4/5).

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.

<u>Generic indicators</u> are common to all engineering disciplines, but discipline-specific indicators are also available for several engineering disciplines or practice areas. More information about the generic indicators and discipline/practice-specific indicators can be found on the <u>Competency Assessment System</u> website.

Please remember:

✓ If you are a professional engineering applicant, please <u>do not</u> select the **Professional Licensee** indicator – this is for professional licensee engineering applicants **only**.

CANADIAN ENVIRONMENT COMPETENCIES

The Canadian environment competencies are a subset of 8 competencies from the existing 34 competencies of the competency framework that best demonstrates 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		

To satisfy the Canadian environment experience requirement, you are required to achieve each of the Canadian environment competencies at the minimum competency rating. If you have not worked in a Canadian environment, it is your responsibility to provide sufficient examples to establish equivalency. Using international experience does not guarantee the competencies will be met.

For more information, please refer to the <u>Guide to Canadian Environment Competencies</u>.

Please remember:

☑ If any of the 8 Canadian environment competencies are assessed below the minimum competency rating, regardless of the overall category rating, you will be reassigned the competency and asked to revise your example.

The following is an overview of the roles and responsibilities of each participant in the Competency Assessment system.

Applicant

- Provides work experience details through the Competency Assessment System, including work experience chronology and specific examples to address each key competency.
- Provides self-assessed competency rating for each key competency according to the Competency Rating Scale.
- Provides contact information for a minimum of 4 individuals to act as validators and verify and provide feedback on their competency assessment.
- Provides further information in supporting documents, as requested.

Validator

- •A Supervisor, employer, colleague/client/consultant – ideally a P.Eng. supervisor
- Confirms the work experience information of which they have direct, first-hand, personal knowledge.
- Provides competency ratings for key competencies to which they are assigned by applicants (if applicable).
- Provides overall feedback on the applicant's readiness for professional registration.
- Requests revisions from the applicant if the reported experience does not meet the minimum competence rating.

Assessor

- Qualified Professional Engineer volunteers in the applicant's area of practice
- Reviews applicant's submission as well as validators' feedback.
- Provides competency ratings for each key competency.
- •Requests revisions from the applicant if the reported experience does not meet the minimum competency rating.
- Makes a recommendation on applicant's readiness for professional registration.

EDUCATION

CONFIRMATION OF EDUCATION

This section includes the academic information you provided to the regulator you are applying with. It cannot be edited. Please contact your regulator directly if you require anything to be changed.

COMPONENTS FOR EXPERIENCE REPORTING

There are 3 main components that applicants must complete in the Competency Assessment System:

- 1. A chronological **employment history** providing an overview of the applicant's experience from graduation to the present day. It can also include pre-graduation (co-op, summer work, etc.) to post-graduation work experience, along with gaps in employment where non-engineering work was undertaken.
- 2. A **minimum of 4 validators** that cover at least four years of experience: their names, current email addresses, relationship to the applicant, etc.
- 3. A **competency self-assessment** using examples drawn from work experience to demonstrate achievement of each key competency and competency category.

EMPLOYMENT HISTORY

COMPILING AN EMPLOYMENT HISTORY

All applicants must complete an **employment history** summary through the Competency Assessment System. The employment history section creates a chronological overview of an applicant's experience, including details regarding their responsibilities in each position. This summary can be edited at any time before an applicant submits their final competency self-assessment.

Please remember:

- ☑ Briefly explain any gaps or overlaps in time periods.
- ☑ Demonstrate evidence of progression of experience and responsibility throughout your career.
- ☑ Under the "Overview of Major Responsibilities and Projects" section, provide a detailed outline of the major projects you worked on in each position, including a description of your role and the project scope.

SELECTING VALIDATORS

Through the Competency Assessment System, applicants are asked to provide the names and e-mail addresses of a **minimum of 4 validators**. The validators confirm your work experience examples and provide overall feedback on your readiness for professional registration. Ideally, all validators will be professional engineers or equivalent who have direct knowledge of your work. If you are unable to find professional registrants to validate each of your 34 competencies, please consult with your regulator. One validator must be your supervisor and share the same or related discipline of practice that you are applying for. Consider whom you report to or who signs off on your work when listing validators. Colleagues, clients, and consultants may count as validators if they have direct, first-hand knowledge of your work.

As you complete your Competency Self-Assessment, you will assign each example to a validator with direct knowledge of the work described. This validator will be asked to provide a competency rating for the example and will have the option of providing a comment. All validators are also asked to provide overall feedback on your experience and readiness for professional registration. There is no requirement to assign all validators to key competencies; validators not assigned to any key competencies will be asked to complete a feedback form. For example, co-op supervisors who do not need to validate any examples may be included as validators to provide overall feedback, which allows them to comment on and confirm your experience during the co-op period.

Please remember:

- If your validator doesn't receive a link to login to the system, please use this link to resend it to them.
- ☑ Consult with your validators to ensure you both agree the example you are submitting meets the minimum rating required.
- ☑ Consult with your validators to ensure they feel you are at a professional level and ready to assume responsibility as a professional engineer.

SUPPORTING DOCUMENTS

This section is to include additional documentation to supplement your application; it is optional. Documents you may wish to include, if applicable:

- Additional context for a specific competency example.
- A summary of why you have chosen to include non-professional engineer validators.
- ☑ Diagrams, charts, or tables.

COMPETENCY SELF-ASSESSMENT

PROVIDING COMPETENCY EXAMPLES

The Competency Self-Assessment section is divided into the 7 categories of the Competency-Based Assessment Framework. Under each category heading – such as Technical – the required **key competencies** are listed. An example must be provided for all key competencies prior to final submission. Each competency category must <u>achieve the</u> <u>minimum category rating</u>.

SELECTING, DRAFTING, AND SAVING EXAMPLES

When filling in the Competency Self-Assessment, use both the competencies and their indicators as guidelines to identify suitable and relevant projects and activities from your engineering experience that will best **demonstrate your achievement of each key competency**. Be specific about your individual actions and contributions. For each example, you are asked to identify a self-assessed competency rating that you believe you have demonstrated. The examples you select should reflect activities or projects in which you had responsibility and must be in the discipline of engineering indicated on your application.

For each key competency you have the option of viewing different types of indicators from the "indicator type" dropdown list; the generic indicators are recommended for most situations, but discipline-specific indicators are also available in several areas of practice for category 1. You do not need to demonstrate all indicators listed. Indicators are **examples to guide you in determining the type of work that would satisfy each key competency and what assessors are looking for**. You can save a draft of your example to complete later if you wish.

Note that the use of Artificial Intelligence (AI) and third parties to create or embellish workplace examples is strictly prohibited. Any applicant caught submitting a fraudulent application could face investigation and disciplinary action by their regulator.

Each example includes the following sections:

Employer and Position: Your employer and position at the time of the work described in the example.

Validator: The professional engineer (or equivalent) who you are asking to validate this example. This is ideally a supervisor but may also be a colleague or client, with direct knowledge of your work.

Start Date and End Date (Month/Year): The period covered by your example.

Situation: A brief overview of a specific situation or problem. The same situation can be used to cover multiple key competencies.

Action: The actions that you took in response to the situation, including engineering judgments made or solutions found. This section is typically the longest portion of the example and should explain in detail the actions that you took that demonstrate completion of the key competency. Point form is permitted.

Outcome: The impact that your actions, solutions, or judgments generated.

Canadian Environment Example (Yes/No): This indicated whether the example took place in a Canadian or an international environment.

Self-Assessed Competency Rating: The level on the competency rating scale you believe you demonstrated in the example.

Please remember:

- Always write in the first-person. Use "I" statements as opposed to "we" even if you were working as part of a group. It is important to identify things for which you took responsibility.
- For experience to be considered valid ensure, where possible, that your workplace examples are from within the last 7 years. Contact your regulator to verify their currency of experience requirements.

- Be specific about your contributions when describing your experience. Avoid general terms such as "participated in" or "involved with". State your exact duties and contributions.
- Assessors cannot rely on 'implied evidence' they can only use evidence **you** provided. For this reason, it is important to identify specific examples that best demonstrate your competence.
- Avoid giving yourself a rating below the minimum required rating. If you do not feel you meet the minimum required rating for a competency, speak with you supervisor and complete additional satisfactory experience.
- Depending on the key competency, it is recommended to include the significance of the project (e.g. size), your role in the project and the key issues and outcomes. Make the technical or managerial complexity of the project clear. Be specific about your role and level of responsibility.
- You are required to provide sufficient information with enough detail to enable straightforward verification of your evidence by assessors, and not to leave assessors with substantive questions or information gaps that require further investigation before they can verify that the required competency rating has been met.
- ☑ Interim Validation allows specific key competencies to be validated before submitting the final competency self-assessment. If you possess more than the required four years of experience, you should **not** use this function.

THE VALIDATION AND ASSESSMENT PROCESS

WHAT HAPPENS AFTER I SUBMIT MY COMPETENCY SELF-ASSESSMENT

Once you have submitted your Competency Self-Assessment, your examples will be validated by the validators assigned to each competency. You can log back into the system at any time to track your validators' progress (see below). This information will be available in the Competency Self-Assessment section of the system. After all examples have been validated and the feedback forms have been submitted, the assessment stage begins and involves assessors from the regulator who review all the competency examples and validator comments. If an assessor does not feel your example meets the minimum competency rating, they may request you to submit revised examples or additional information.

Technical Competence ?	Self Assessment	Validator Name	Validator Assessment	
1.1 Regulations, Codes & Standards 🍁	Submitted	Validator One, P.Eng./ing.	Complete	Edit
1.6 Safety Awareness 🍁	Submitted	Validator Two, P.Eng./ing.	Validation Pending	View
1.9 Peer Review and Quality Control 🍁	Submitted	Validator One, P.Eng./ing.	Complete	Edit
Required Overall Level: 3.0 Current Overall Level: 3.0				

MORE INFORMATION

For more information regarding competency assessment, please see the <u>Competency Assessment System</u> website.

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

For questions which have not been answered here, please see the <u>FAQ section</u> on the competency assessment website.