



ENGINEERS  
AUSTRALIA



ENGINEERING  
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AUSTRALIA

An Engineers Australia Business

# Participant Guide

Scope and Commission Rail Track Maintenance Micro-credential

Assessment Pathway only – validation of prior capability

RELEVANT / FLEXIBLE / TRUSTED

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## ABOUT ENGINEERS AUSTRALIA

Engineers Australia is the national forum for the advancement of engineering and the professional development of its members. With over 100,000 members embracing all disciplines of the engineering team, Engineers Australia is the largest and most diverse professional body for engineers in Australia.

The professional development of its members is underpinned by Engineers Australia's professional competency frameworks which have been honed over several decades to keep pace with advances in higher education, industry training reforms and a global push by employers to focus on applied experience, standards of performance and employability rather than simply academic qualifications.

## ABOUT ENGINEERING EDUCATION AUSTRALIA

Engineering Education Australia (EEA) is a fully owned subsidiary of Engineers Australia (EA). We work with leading experts in engineering, education, and business to provide learning opportunities to enable engineers to maintain and further develop their professional standards as well as providing opportunities to gain and maintain a competitive edge.

EEA know engineers are delivering projects that benefit all of society and we build their skills to do that. We have been training engineers for over 30 years, tailoring our courses to meet the needs of engineers for jobs of today and preparing engineers for the jobs of the future.

EEA courses are industry recognised supporting the need for engineers to always be upskilling and reskilling in both technical and non-technical areas of practice.

## MICRO-CREDENTIALS

EEA also provides micro-credentials which are short learning and/or experience recognition opportunities in a range of technical and non-technical capability areas. EEA will continue to release new micro-credentials to support industry to bridge the growing skill gap.

**“Micro-credentials are a formal validation that the skills, knowledge and personal attributes acquired through learning and experience have been successfully obtained to an agreed standard of practice.”**

*—Professor Marcus Bowles, Macquarie University, Centre for Workforce Futures 2016*

Engineers can upskill and reskill when they want, how they want, in the area of expertise they need, anytime and anywhere.

EA awards micro-credentials to recognise the achievement by the engineer of experience and learning gained through applied practice in their profession.

EA's micro-credentials provide evidence of an engineer's professional capability and competency in scope and commission rail track maintenance works.

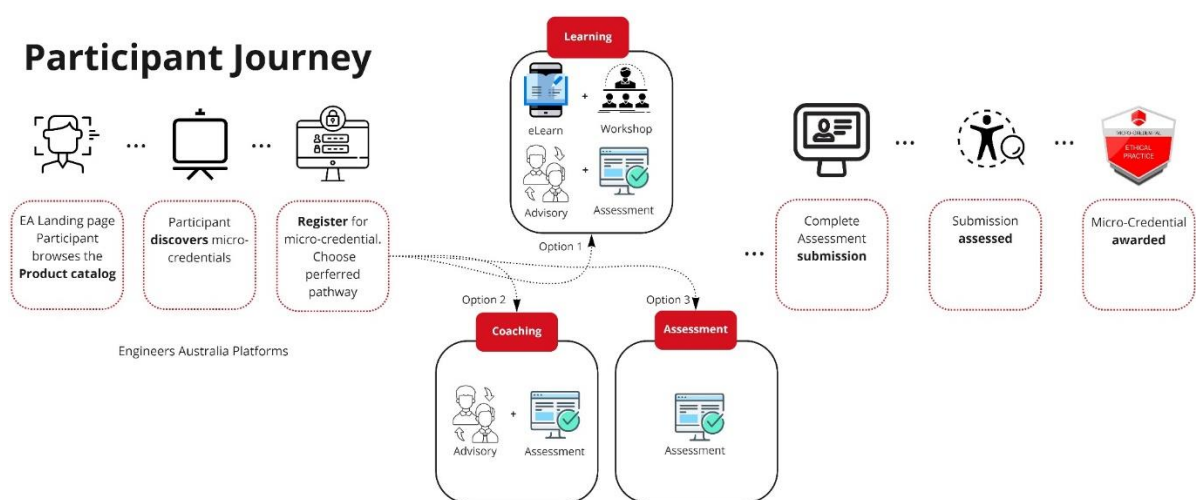
EA develops micro-credentials in consultation with industry. We work with industry to identify skill needs, skill shortages and future trends to enable engineers to be future-ready today and tomorrow. All Engineers Australia's micro-credentials align to one or more, frameworks including Stage two chartered competencies, Specialist knowledge in an area of practice or Engineers Australia's Capability Framework.

Whilst aligning to a specific framework, micro-credentials criteria is used to develop explicit content for learning and assessment creation. The criteria shape the assessment requirements. The criteria provide direction regarding the type of evidence required for the portfolio of work and the questions covered during the interview.

## YOUR GUIDE

This guide provides you with a step-by-step summary of the journey to a micro-credential via the learning pathway. Your journey commences with determining what micro-credential is best suited for you at this point in your career. Are you looking for future focus capabilities, for completing a micro-credential that provides you with skills you need now? Explore your options at [eea.org.au/micro-credentials-engineers](http://eea.org.au/micro-credentials-engineers)

The image below shows the assessment pathway as option three. Before we get to what you need to do, let us look at the participant journey.



## WHAT DO I DO?

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You can choose from several capabilities targeted to assist engineers at various points in their career journey. For example, 'Risk Management' and 'Ethical Engineering Practice' micro-credentials are for those engineers who may wish to commence the journey towards chartered, or as a stand-alone credential addressing specific needs. The criteria for both these credentials align with the requirements of a Chartered application; however, they are only a component of the requirements under the holistic assessment format.

You may wish to use the micro-credentials to showcase your acquired skills, knowledge, or capabilities gained in the workplace and apply for an assessment of their experience. The assessment aligns with the endorsed criteria to ensure consistency and rigor of assessment outcomes.

## DECIDING WHICH CREDENTIAL

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You will have a choice. You can choose a capability area to develop, how you consume learning, and whether you want to be recognised for skills already achieved. You, as the engineer will drive your individual development.

## REGISTERING FOR A CREDENTIAL

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If a micro-credential sounds like it's for you, visit us at either micro-credentials for engineers or go directly to our communication micro-credential to register and take that step.

## ENGLearn

You will receive a course invitation from **instructure** which is our Learning Management System EngLearn. Click on 'accept course invitation', this will take you to EngLearn login page, your account has automatically been setup, however you will need to reset your password by using 'forget password' and follow the instructions received via email to activate your account.

### Scope and Commission Maintenance Works Micro-credential

Assessment Only

#### Welcome

*Hi Michelle, and welcome to 'Scope and Commission Maintenance Works Micro-credential - Assessment Only'.*

Engineers Australia's micro-credentials are a demonstration of specific competency or skill. They're a tick of approval that says you do what you say you can do to an industry standard.

With a \$155 billion pipeline of work over the next 15 years, qualified rail engineers are in high demand. Get recognised in critical technical skills for a diverse and booming industry. Rail micro-credentials are measured against the Rail Track Specialisation Standard of Practice. Unlock big impact in as little as a few weeks, with the credibility of an Engineers Australia micro-credential and supercharge your CV or workforce today.

Engineers Australia Micro-credential in Scope and Commission Maintenance Works is an assessment pathway that reflects and recognises your ability to develop and prepare maintenance scope documents, condition reports, inspection reports, scope and plan work, along with contract and tender documents that demonstrate the depth of experience, knowledge and expertise in Scope and Commission Maintenance Works.

To get started, select the tile below for the first module, 'Welcome to EngLearn'. This will familiarise you with the Learning Management System (LMS) EngLearn, and demonstrate its features and benefits. As you complete each module, the tiles below will display a green tick.

## ASSESSMENT SUBMISSION

You submit your body of evidence, including a reflective explanation on why the evidence examples fulfil the micro-credential criteria, along with your micro-credential checklist, including evidence key. **Please note:** all submissions must be in English.

1. Develop rail track maintenance plans for a section of track in a serviceable condition that includes.
  - a. The scope of the maintenance works
  - b. Clear work packages
  - c. Appropriate documentation of rail track condition, tolerances and other relevant quality information to the scope of works
  - d. Timeframes, quality, safety and environmental requirements
  - e. Requirements for reconditioning track in a serviceable condition e.g., rail profiling or re-railing (in the same or different projects)
2. Prepare contract and/or tender documents for maintainers to conduct the works include specification of required scope, specification of works and relevant safety and quality requirements.
3. Evaluate maintenance contract submissions and provide feedback to applicants
4. Monitor the engagement and conduct of maintenance works and ensure works are performed to required standards
5. Inspect and evaluate a section of track and document the condition of the track and formation including ballast and drainage conditions

**Step 1:** You must describe at least two different work examples relating to the micro-credential topic. Prior to choosing work examples, it is highly recommended that you familiarise yourself with the criteria listed below:

*If participants have any queries or would like to seek clarification, submit an email to [microcredentials@eea.org.au](mailto:microcredentials@eea.org.au) and include, the Micro-credential and which criteria and clarification is being sought.*

Once you have familiarised yourself with the criteria and chosen your work examples, you are required to collate the body of evidence. You are required to have at least one piece of evidence align to each criterion. One piece of evidence may address more than one criterion. It is suggested that you ideally seek to provide holistic examples which address a range of criteria when compiling evidence for your submission.

**Step 2:** Collate your workplace evidence and align to each criterion, break down each criterion into smaller sections to ensure you are addressing all requirements.

You may wish to provide evidence which demonstrates multiple criteria with an example such as a project report and explain using the section provided on how it aligns to the criteria identified. Refer to step 3.

**Please note:** Workplace examples and supporting evidence must be within the last 24 months. If examples are older, relevance must be demonstrated within the reflection explanation.

**Document upload note:** When uploading your evidence, you must upload pdf documents under 500MB in size. If you wish to submit larger documents, either compress files or please provide a link to a free viewing platform so assessors can access your documents.

**Step 3:** In this step you must provide a reflection on how and why the evidence relates to the criteria, and address the following questions:

- Identify the criteria you are addressing with the piece of evidence
- Provide context of this example? Describe the context, this may include, environment, stakeholders, contractual arrangements etc.
- What was your contribution to the example provided? Reflection should describe what you contributed to the examples – i.e., Author, Reviewer, Contributor, team member etc.
- How does this example demonstrate your capability? Reflection should provide an explanation of how the example aligns to one or more criteria.
- Did you achieve what you expected in the example provided? Reflection on the outcome of the example provided whether the outcome was expected or unexpected – what was the lessons learned.

**Step 4:** Once the workplace portfolio of evidence has been submitted, you will be required to attend a video interview, during this interview you will be required to verbally answer around 6 questions in 30-40 mins.

**Step 5:** Your final step is to check all submission requirements have been met, using the Submission Checklist provided at the end of this guide. The Submission Checklist is to be submitted along with all evidence for assessment.

## Work portfolio submission



## Video submission





## ASSESSMENT TIMELINES

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- Submission:** Participants have 8-10 weeks from date of access to the assessment module to submit all evidence for assessment.
- Assessment:** You will be notified of your assessment outcome 10 business days after submission.
- Outcome:** You will either be notified successful or resubmit. If successful a digital badge will be issued as part of the notification.
- Resubmit:** If you are required to resubmit. You will need to address the feedback provided by the assessor and provide further evidence or clarify further in your written reflection. You will have 10 business days to resubmit, and the assessor will have a further 5 business days to assess the additional information provided.

## AWARD

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Once an assessment is complete, participants will receive their results, feedback and link to their digital badge. The digital badge can then be shared on social media platforms or included in an electronic CV.



# Micro-Credential Submission Checklist

|                  |  |
|------------------|--|
| Participant Name |  |
| Micro-Credential |  |

*For participant use only*

| Criteria   | Submission detail and reflection |                          |
|--|----------------------------------|--------------------------|
| <p>Criteria 1 – Develop rail track maintenance plans for a section of track in a serviceable condition that includes:</p> <ul style="list-style-type: none"> <li>a. The scope of the maintenance works</li> <li>b. Clear work packages</li> <li>c. Appropriate documentation of rail track condition, tolerances and other relevant quality information to the scope of works</li> <li>d. Timeframes, quality, safety and environmental requirements</li> <li>e. includes (in one or more plans) Re-railing and rail profiling, a section of track.</li> <li>f. Rail Profiling and Re-railing (in the same or different projects)</li> </ul> | <p>Evidence submitted</p>        | <input type="checkbox"/> |
|  | <p>Explanation (500Word max)</p> | <input type="checkbox"/> |
| <p>Criteria 2 - Prepare contract and/or tender documents for maintainers to conduct the works include specification of required scope, specification of works and relevant safety and quality requirements.</p>  | <p>Evidence submitted</p>        | <input type="checkbox"/> |
|  | <p>Explanation (500Word max)</p> | <input type="checkbox"/> |

|   |                              |                          |
|---|------------------------------|--------------------------|
| Criteria 3 - Evaluate maintenance contract submissions and provide feedback to applicants   | Evidence submitted           | <input type="checkbox"/> |
|   | Explanation (500Word max)    | <input type="checkbox"/> |
| Criteria 4 - Monitor the engagement and conduct of maintenance works and ensure works are performed to required standards                             | Evidence submitted           | <input type="checkbox"/> |
|   | Explanation (500Word max)    | <input type="checkbox"/> |
| Criteria 5 - Inspect and evaluate a section of track and document the condition of the track and formation including ballast and drainage conditions. | Evidence submitted           | <input type="checkbox"/> |
|   | Explanation (500Word max)    | <input type="checkbox"/> |
| Completed employer endorsement form   | Signed by Manager/Supervisor | <input type="checkbox"/> |

|                             |               |  |
|-----------------------------|---------------|--|
| Video testimonial/Interview | Date complete |  |
| Date Submitted              |               |  |