

# CHARTERED MEMBERSHIP.

Assessment guidance

**MAY 2025** 

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# Why join as a Chartered Member?

Becoming a Chartered Member of Engineering New Zealand is more than just a member class and credential – it's an internationally benchmarked quality mark that sets you apart as a leader in your field. It recognises your competence, professionalism, and dedication to engineering excellence, establishing your professional reputation and enhancing your credibility.

As a Chartered Member, you gain:

- **Industry recognition:** The Chartered Membership post-nominal (CMEngNZ) signals your professional standing and credibility, establishing you as a trusted expert and opening doors to career opportunities.
- **Employer confidence:** Chartered Membership is highly valued by New Zealand employers and enhances your prospects, especially if you're looking to advance your career or relocate to New Zealand.
- **Global opportunities:** Eligibility for the International Professional Engineer (IntPE) and APEC Engineers Register means your credentials are recognised worldwide, further enhancing your credibility and increasing access to international work opportunities.

As a member you'll also gain access to Engineering New Zealand's exclusive membership benefits including:

- Access to over 700 courses and events annually at discounted rates
- Opportunities for networking with your local <u>branch</u> and our broad array of interest groups
- Access to exclusive resources (remuneration surveys, best practice guidelines, design documents and more)
- Regular updates through our fortnightly newsletter, *Discover*, and quarterly *EG* magazine featuring the latest industry news and insights
- Advocacy, professional development and programmes to support your growth and success as an engineer.

#### **Chartered Membership classes**

Engineering New Zealand offers four Chartered Membership classes:

- Chartered Member (CMEngNZ): For those with a Washington Accord (4 year BE) or equivalence.
- Chartered Member (Engineering Technologist): For those with a Sydney Accord (3 year BEngTech) or equivalence
- Chartered Member (Engineering Technician): For those with a Dublin Accord (2 year NZDE) or equivalence
- **Chartered Member (PEngGeol):** For professionals with a recognised postgraduate qualification in Engineering Geology

This document provides comprehensive guidance to help you apply for Chartered Membership (CMEngNZ) and take the next step in your engineering journey. If you're interested in applying for Chartered Membership within one of the other membership classes, specific guidance documents are available on the <u>assessment guidance page</u>.

#### What is the difference between CMEngNZ and CPEng?

The table below outlines the difference between Chartered Membership with Engineering New Zealand (CMEngNZ) and registration as a Chartered Professional Engineer (CPEng).

Chartered Professional Engineer (CPEng) registration	Chartered Member of Engineering New Zealand (CMEngNZ)
Independent of Engineering New Zealand and governed by OPEng Act 2002.	Membership class of Engineering New Zealand.
Assesses engineering competence to an internationally recognised standard, with current New Zealand specific competence.	Assessed engineering competence to an internationally recognised standard. A quality mark of general competence and professionalism. New Zealand specific competence is not required.
Re-assessed at least every six years. Commits to the <a href="CPEng_Oode of Ethical Conduct">CPEng_Oode of Ethical Conduct</a> . Meets annual CPD requirements.	Assessed once. Commits to the Engineering New Zealand Code of Ethical Conduct. Meets annual CPD requirements.

Chartered Professional Engineer (CPEng) registration	Chartered Member of Engineering New Zealand (CMEngNZ)
Applicants must be able to demonstrate knowledge and application of accepted principles underpinning good practice for professional engineering that is specific to New Zealand.	More accessible for engineers practising overseas and provides direct entry for engineers who have been assessed in an equivalent overseas jurisdiction – eg CEng (UK), CPEng (Australia) or PEng (USA).
Must cover understanding of current New Zealand good engineering practice, as well as showing current competence.	You can be assessed for Chartered Member first and, if successful, complete a significantly shorter mutual
May be required if your work involves signing off consents, or certifying work under a New Zealand regulatory regime.  Most consenting authorities only allow CPEngs to sign  Producer Statements in New Zealand.	recognition assessment to apply for CPEng, once you have New Zealand engineering work experience.
Practising certificates issued annually (see fees here).  CPEng year is 1 January – 31 December.	Annual membership fee charged for the membership year from 1 October – 30 September.
	Membership grants you access to exclusive membership perks.

# How to apply

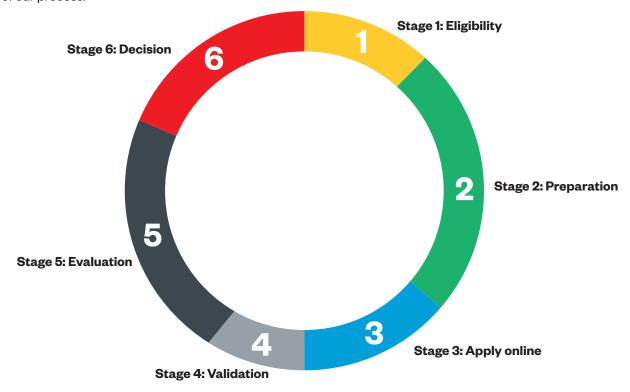
There are two pathways to gaining Chartered Membership with Engineering New Zealand – via mutual recognition, or via a competence assessment.

#### **Chartered Membership via mutual recognition**

If you hold a <u>recognised overseas professional engineering registration</u>, you may be eligible for Chartered Membership without any additional assessments. This process does not require an assessment – simply provide your overseas registration certificates for verification by our membership team.

#### **Chartered membership via competence assessment**

If you do not have an overseas registration eligible for mutual recognition into Chartered Membership, you can apply for Chartered Membership via competence assessment. You can choose to apply for CPEng at the same time if you have New Zealand engineering work experience. Your application will go through all six stages of our process:



# **Stage 1: Eligibility**

#### **Education requirement**

The education requirement for Chartered Membership is a Washington Accord accredited degree (in New Zealand this is an accredited 4-year Bachelor of Engineering (Honours)). If you do not have a Washington Accord accredited degree you must be able to demonstrate equivalent knowledge. You will need to demonstrate that you meet the education requirement via a credential check, or through a Knowledge Assessment.

#### CREDENTIAL CHECK

The credential check process is the first step to us recognising your eligibility for registration as a Chartered Member (CMEngNZ). We use the credential check process to verify your academic qualification(s) and/or credentials; and check them against the above eligibility requirements for assessment for Chartered Membership.

It's important to note, credential checks are a way to recognise formal engineering qualifications and credentials that we can benchmark through the Washington Accord or other bilateral and multilateral recognition agreements that we are signatories to. A credential check is not an assessment of your engineering knowledge and skill. If you are not granted Washington Accord recognition or equivalence through a credential check, it is because your education provider in your country, or the course you took, was not Washington Accord accredited.

If your credential check outcome does not meet the Washington Accord status – this does not mean that you are ineligible for CMEngNZ. It just means we were unable to determine the level of your engineering knowledge through our international benchmarking networks. If this is the case, you will have the option to complete a more detailed Knowledge Assessment to demonstrate the required level of engineering knowledge.

Find out more about credential checks

#### **KNOWLEDGE ASSESSMENT**

If you do not have the educational qualification or overseas registration we recognise as being of Washington Accord equivalence, we can assess if you have gained the equivalent level of knowledge.

To demonstrate that you've gained the equivalent level of knowledge, you'll need to complete our knowledge assessment. You'll need to show you have a level of technical knowledge and understanding gained through your work and learning that is equivalent to a Washington Accord-accredited qualification.

You will need to demonstrate equivalent knowledge in eight areas, known as elements. The elements are determined by the knowledge profile expected of a graduate of Washington Accord-accredited qualification. The elements are:

- Natural sciences knowledge
- 2. Mathematical knowledge
- 3. Engineering fundamental knowledge
- 4. Specialist engineering
- 5. Design process knowledge
- 6. Engineering practice knowledge
- 7. Engineering in society knowledge
- 8. Research based knowledge.

Find out more about knowledge assessments

#### **Competence requirement**

To register as a Chartered Member, you will need to complete an assessment to demonstrate you meet the minimum standard for membership. You will need to provide us with:

- · your work history (CV) demonstrating your involvement in complex engineering activities
- work samples with annotations explaining how the samples demonstrate your engineering competence
- a completed and signed <u>referee declaration form</u> uploaded to the CV section of your assessment.

#### PROFESSIONALISM AND ETHICS REQUIREMENT

Your assessment will also require you to provide evidence of your professional competence. You will need to:

- commit to the Code of Ethical Conduct
- · provide two referees who must be registered as CPEng, Chartered Member, or equivalent.
- demonstrate sufficient continued professional development (CPD) per year to show evidence that you
  have taken reasonable steps to maintain the currency of your professional engineering knowledge and
  skills within your current practice area in the last six years or since university graduation.

#### MAINTAINING YOUR CHARTERED MEMBERSHIP

To maintain your Chartered Membership, you will need to:

- · Pay the annual membership fee
- Make an annual commitment to the <u>Engineering New Zealand Code of Ethical Conduct</u>
- Complete 40 hours of continuing professional development per year.

# **Stage 2: Preparation**

#### **Defining the standard**

It usually takes between four to six years' post education work experience to gain enough experience to be ready to apply for Chartered Membership. To meet the minimum standard for Chartered Membership, you need to demonstrate that you can practice competently in your practice area to the standard of a reasonable professional engineer.

You will be assessed on 12 broad areas of engineering performance, known as elements. To streamline the application and assessment process, we've grouped these 12 elements into four areas in the application portal:

1. Engineering knowledge	2. Managing engineering work	3. Professional acumen	4. Developing technical solutions
(1.1) Comprehend, and apply your knowledge of, accepted principles underpinning widely applied good practice for professional engineering.	(2.1) Exercise sound engineering judgement.	(3.1) Conduct your professional engineering activities to an ethical standard at least equivalent to the code of ethical conduct.	(4.1) Define, investigate, and analyse complex problems in accordance with good practice for professional engineering.
(1.2) Comprehend and apply engineering knowledge that is specific to New Zealand, or your jurisdiction of practice.	(2.2) Be responsible for making decisions on part or all of one or more complex engineering activities.	(3.2) Recognise the reasonably foreseeable social, cultural, and environmental effects of professional engineering activities generally.	(4.2) Design or develop solutions to complex engineering problems in accordance with good practice for professional engineering
(1.3) Maintain the currency of your professional engineering knowledge and skills.	(2.3) Manage part or all of one or more complex engineering activities in line with good engineering management practice.	(3.3) Communicate clearly to other engineers and others that you are likely to deal with in the course of your professional engineering activities.	
	(2.4) Identify, assess, and manage engineering risk.		

#### **Defining complexity**

It's important that you demonstrate you can carry out engineering work at a particular level of complexity. Our definition of complexity for Chartered Membership is defined below:

Problem	Activity
Chartered Member and CPEng	
Complex engineering problems	Complex engineering activities
Problems that include some or all of the following:	Activities or projects that include some or all of
<ul> <li>wide-ranging or conflicting technical, engineering, and other related issues</li> </ul>	<ul> <li>the following:</li> <li>diverse resources, eg people, money, equipment, materials and technologies</li> </ul>
<ul> <li>no obvious solution, which means an original method of analysis is needed.</li> </ul>	resolving critical problems that occur when
can't be resolved without in-depth engineering knowledge	a variety of technical, engineering and other related issues interact
issues not often experienced	new materials, techniques or processes, or the
<ul> <li>aren't covered by the standards and codes of practice for professional engineering</li> </ul>	innovative use of existing materials, techniques, or processes
diverse groups of stakeholders with a wide range of needs	significant consequences in a range of contexts.
significant consequences in a range of contexts.	



#### **TIPS FOR SUCCESS**

- If the work samples you provide as evidence could be completed by an Engineering Technician, they will not meet the level of complexity requirements for CPEng. Have a look at Appendix 2 for our full definition of complexity levels across different types of Chartership.
- Clearly explain the complexity of each of the work samples you provide as evidence in your application. To do this, think about what challenged you and how you solved those challenges.

#### **How to prepare**

#### **KEEP TRACK OF YOUR WORK AND CPD**

If you're a member of Engineering New Zealand, it's easy to keep track of your development by regularly recording your work and CPD in our online member area. If you're not a member, you'll need to ensure you save relevant work and CPD records and have them ready when you're ready to apply for Chartered Membership.

When uploading CPD in bulk, we recommend that you use our <u>CPD activity record spreadsheet</u>, available on our Assessment Guidance page. When using this tool, please log your CPD in one-year periods. If you log a cumulative total of hours for several years, our assessors will interpret those hours being for the first year recorded, and none for subsequent years.

#### **SELF ASSESSMENT TOOL**

We have developed a <u>self-assessment tool</u> which you can use throughout your career to track your progress against the elements and think about the evidence that you could use to demonstrate you meet the standard. We encourage you to check your self-assessment with your manager or mentor and discuss potential development areas to focus on as you prepare for your application.

The self-assessment tool groups the 12 competence elements into four groups to streamline the process for you. It contains detailed guidance on each of the elements and provides examples of performance indicators you can consider including in your application. You can download the self-assessment tool on our <u>assessment guidance page</u>.

#### ATTEND AN INFO SESSION

Engineering New Zealand will host information sessions for engineers preparing for their Chartered application throughout the year. Keep an eye on the Engineering New Zealand website – or if you're a member, sign up to our fortnightly newsletter, Discover, to make sure you don't miss out.

#### **MENTOR AND REFEREES**

We strongly encourage you to find a mentor who can support you as you prepare for your Chartered application. You will also need to find two referees who are a Chartered Member, CPEng, or equivalent to support your application. The sooner you start engaging with engineers who can support you through this process, the better. Please note you will need to select one of your referees to sight and sign off on your application portfolio. This referee must be provided with your application portfolio and complete the referee declaration form. The form must be uploaded with your application, in the CV section of the application.

#### READ THROUGH THE APPLICATION FORM

View Appendix 5 for an offline version of the application process to help you prepare. This will help ensure there are no surprises when you start completing your application online.

# Stage 3: Apply online

#### a) Profile

If you're not a member of Engineering New Zealand, you will first need to <u>sign up</u> for an account to be able to access the application portal. You will then need to upload your credentials and go through a credential check.

If you already have a profile in the member area of the Engineering New Zealand website, you'll need to check and update your information.

#### b) Chartership and practice details

In this section, you'll select the membership and registrations you wish to be assessed for.

You'll need to specify your practice field and provide a brief description of your practice area.

#### What is a practice area?

A practice area refers to an engineer's area of expertise, defined by:

- 1. The engineering knowledge and skills they possess.
- 2. The nature of their professional engineering activities.

This information is used to evaluate your competence and ensure the appropriate assessment panel is assigned to your application. A concise description of your practice area helps us match your expertise with the right panel.

For your Practice Area Description (PAD), you'll need to describe the area in which you have engineering knowledge and skills. Focus on your core current practice area. Your PAD should not exceed 15–25 words. Avoid using first-person pronouns such as 'l' or 'me', job titles or project names, company names, and any engineering activities not evidenced within your assessment.

Use the format: [Nature or actions] of/for/in [engineering knowledge or skills]. Some successful examples are:



Design and construction monitoring of water and wastewater systems.



Process engineering, operation and training for wastewater treatment plants.



Structural design and construction monitoring of low and medium rise structures.

1 CPEng equivalence means a qualification or title that the Registration Authority determines requires the holder to: (a) have demonstrated competence at least equivalent to the minimum standard for registration under these rules; and (b) be bound by a code of ethical conduct that is substantially equivalent to the code of ethical conduct under these rules. Examples of CPEng equivalence, therefore, include: A Chartered Member of Engineering New Zealand (CMEngNZ) who is not classified as an Engineering Technician (CMEngNZ (Engineering Technologist)) or an Engineering Technologist (CMEngNZ (Engineering Technologist)) or a Professional Engineering Geologist (CMEngNZ (PEngGeol)).

Note your practice area is not a full scope of your engineering practice or competence. You may practise in other areas or fields provided you work within your competence, as governed through self-regulation and your annual commitment to the Code of Ethical Conduct.

**Important:** The practice fields and Practice Area Description (PAD) are solely used by Engineering New Zealand to find an appropriate assessment panel to review your application. Only those registered as CPEng can use their practice fields for signing off producer statements.

#### **International registers**

You can add the IntPE(NZ)/APEC Engineer register to your Chartered Membership application. Joining an international register means your competence as an engineer is recognised to an international standard – building your credibility even more. It also provides opportunities and greater mobility around the world.

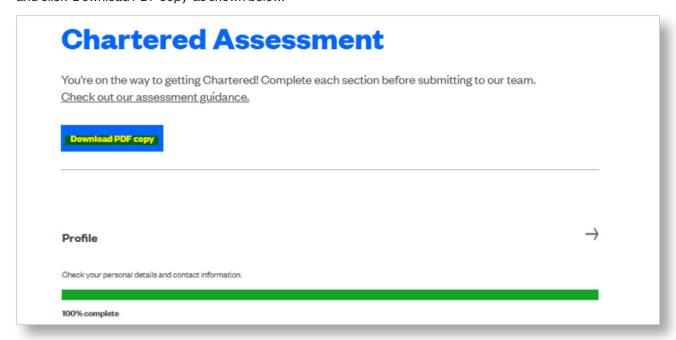
#### c) Referees

You will need to nominate two referees in order to complete your application to register as a Chartered Member. Your nominated referees will be sent an invitation to provide a reference for you. If they accept the invitation, they'll be asked to provide information about your professionalism and technical competence as a Professional Engineer. If a referee declines your request, you'll need to provide another person.

Important: You will not be able to submit your application until both referees have provided a reference for you.

#### Referee declaration form

When you have completed all sections of the application form and are ready to submit, your final step will be to ask one of your referees to review your application portfolio and complete the referee declaration form. This form must be uploaded with your application, in the CV section. To do this, go to your complete application and click 'Download PDF copy' as shown below:



Send the copy of your complete application together with the referee declaration form, to your chosen referee, and then upload the signed form to the CV area of your application, before submitting to us.



#### WHAT IS AN EXAMPLE OF A GOOD REFEREE?

Both referees need to be registered with a professional engineering body. Your referee must be familiar with your technical and professional capabilities and be able to confidently provide a reference. They should also be competent in the practice area for which you applying and familiar with your technical skills.

- Two referees should be provided.
- $\checkmark$  Ideally at least one of your referees does not work within the same company as you. This referee could be someone who has peer reviewed work samples or been involved in a collaborative project with you.
- A referee who is not familiar with your technical skills related to being a professional engineer.
- x Referees who are conflicted; for example, through a close personal relationship with you or having a financial interest in the outcome of the assessment.



#### **TIPS FOR SUCCESS**

Finding referees can be a particular challenge for people in small companies. We recommend you consider who may act as your referee well in advance of your application, and ensure this person has sufficient familiarity with your professional engineering work.

#### REFEREES WILL BE ASKED THE FOLLOWING QUESTIONS:

#### General

Please provide details of your relationship to the applicant. Please also confirm that you can provide a reference based on an understanding of the applicant's work within their practice area. If you're unable to provide a technical reference in the practice field of the applicant, please decline this request for a reference.

#### **Engineering competency**

Please comment on the technical engineering competence (specifically in analysis and design/problem solving) of the applicant to practice within their practice area. Do you consider the engineer to be competent in the engineering work that they do? Do you think they demonstrate knowledge and application of current practice in their field and an ability to develop safe and effective engineering solutions? Why or why not?

#### **Professional**

What aspects of professionalism do you believe the applicant brings to their work? Please include detail of their relationships with stakeholders, compliance with legislation, and health and safety compliance, where appropriate. Is there anything about the practice of the applicant that would raise a potential concern? Do you support their registration as a Chartered Engineer?

#### d) CPD Guidance

Continued Professional Development (CPD) should be completed to show evidence that you have taken reasonable steps to maintain the currency of your professional engineering knowledge and skills since your graduation or since the past six years.



#### **DEFINING ACCEPTABLE CPD**

You need to have done at least 40 hours of CPD per year over the past six years or since graduation. If applying for more than one practice field, you will need an additional 15 hours per year of technical CPD for each additional practice field.

- ✓ Evidence of learning linked to the application of contemporary knowledge of the engineer's practice area 3 CPD activities across different categories (we recommend at least 15 hours related to each of their practice fields, a few hours addressing risk management and business processes, courses on professional ethics, cultural competency and then a range of activities across career interests).
- ✓ CPD can be tertiary courses, short courses, workshops, seminars, discussion groups, conferences, technical inspections, and technical meetings that are non-routine and contribute to your development as an engineering professional. Private study and service to the engineering profession can also be counted towards CPD.
- √ Where applicable, relevant seminars hosted by a Collaborating Technical Society (CTS).
- ✓ Please provide detail in your Continuing Professional Development (CPD) and ensure you include specific learning outcomes. Highlight the skills or knowledge gained and how it applies to your professional practice.
- × Vague or generic CPD descriptions will not be accepted.
- 40 hours of 'on the job reading'.
- × 40 hours of 'mentoring'.

If you've been on a <u>career break</u> that we need to know about, please make this clear in the self-assessment area of your application.

#### WHAT COUNTS TOWARDS CPD?

CPD can be tertiary courses, short courses, workshops, seminars, discussion groups, conferences, technical inspections, and non-routine technical meetings that contribute to your development as an engineering professional. Self-learning, which could comprise a mixture of self-reading, self-research, watching technical informative videos, can also be counted towards CPD – but this should be no more than 50% of your total CPD for each year.



#### WHAT IS AN EXAMPLE OF GOOD CPD?

A good mix of CPD is a requirement and your CPD activities must demonstrate your new learnings in your chosen practice area. The table below sets out the ideal mix of CPD for CMEngNZ applications:

CPD Areas	Recommended hours
Technical	
Attending recognised technical group meetings, external or internal technical training courses and/or technical conference papers	No upper limit on number of hours  Minimum 15 hours of technical
Developing new technical standards or revising technical codes	CPD activities per practice field
Preparing and presenting papers at conferences, and presenting technical training courses	
Professionalism	Minimum 2 hours
eg courses on professional ethics, cultural competency, climate, sustainability and others.	(5% of total)
Business/Leadership	
eg Commercial Training Project Management, 3910 Contracts, business management skills, managerial training	Maximum 20 hours (no more than 50% of your total)

CPD Areas	Recommended hours
Professional engineering engagement/contribution to the profession	
eg mentoring, guiding, assessment of others, service on branch committees, accreditation panels	Maximum 8 hours (no more than 20% of total)
Training courses in Health and Safety	
including requirements of the Act, First Aid, Site Safe, restricted access training.  Delivering such courses. Development of Health and Safety procedures	Maximum 5 hours (no more than 13% of total)



#### WHAT ARE ASSESSORS LOOKING FOR?

#### **CPD** review questions

- Is there evidence of a planned approach to continuing professional development?
- Has the engineer completed 40 hours of CPD each year? Are the CPD records provided diverse and broad?
- Is the CPD relevant to the engineer's practice area?
- Is the CPD considered sufficient for the engineer to have maintained currency of knowledge?
- Have all areas in CPD records been completed? (ie learning outcomes have been populated).

#### e) Work history (CV) guidance

Your work history must be provided in the form of an up-to-date CV and should allow an assessor to see your experience relevant to your application as a professional engineer.

In this area of the application form, you must also upload your completed Referee Declaration Form, together with a valid ID document.



#### WHAT IS AN EXAMPLE OF GOOD WORK HISTORY?

Your work history should describe the projects you have been involved with, and your role in each project. It should outline what your responsibilities were for the project and what challenges were presented by the project. Where possible, please keep your CV under three pages.

- ✓ Provide the name and location of employing organisations, as well as the dates and duration of employment, the title of your position, details of your role and how your work demonstrates your competency as a professional engineer.
- ✓ Provide sufficient work history to demonstrate the broad scope of competency required for membership as a Chartered Member.
- √ Clearly describe key projects you were involved in, and your role in the work, with a particular focus on the
  period since your last assessment/ or since graduation/ or in the last 6 years.
- x A list of projects you have worked on with no information on your roles and responsibilities.

An editable OV template is available on the assessment guidance page and is also shown in Appendix 4.



#### WHAT ARE ASSESSORS LOOKING FOR?

#### Work history review questions

- Has the engineer provided work history for the period since their graduation?
- Does their work history align with their practice area?
- · Does the work history detail the projects they have been involved with?
- Does the work history detail their role and responsibilities in each project?
- Does their work history demonstrate successful completion of complex engineering work?
- · Does their work history demonstrate ongoing involvement in the profession?

#### **ID VERIFICATION REQUIREMENTS**

To enhance security measures and safeguard against identity fraud, you must provide us with a valid photo identity document together with your application, which should be loaded in the CV area of the application form. The image quality should be clear enough for assessors to read all the information on the ID.

We accept these forms of ID:

- New Zealand Passport
- New Zealand Driver's Licence
- New Zealand Firearms Licence.

The following documents are also accepted if they include your full name, date of birth, and photo:

- Overseas Passport
- · National Identity Card.

During the interactive session, the Lead Assessor will verify the provided information, so you should have your ID readily available. Please also ensure you have a functional webcam turned on throughout the interactive assessment.

#### f) Self-assessment

In this section you need to provide statements of self-review explaining how you meet the standard for Chartered Membership. If you've used our Self-Assessment Tool, the work you've already done will help you complete this section easily. If you're starting from scratch, have a look at Appendix 6, which provides you with performance indicators for each competency group, and helps clarify how you may be able to demonstrate that you have met the standard. Make sure you reference your work samples, including specific sections and page numbers, to back up your statements. Aim for approximately 500 words per competency group.



#### WHAT ARE ASSESSORS LOOKING FOR?

Assessors are seeking evidence of your competencies and professional engineering experience, which means they need to understand the complexity of the engineering work you personally undertook as opposed to overall project complexities. They require clarity as to the work you personally were responsible for, how you incorporated new learnings and good practice into the solutions you developed and how you addressed matters of complexity.

When writing your self-assessment, think about each of the 12 competence elements, and write about how you identify, define, investigate, and analyse complex engineering problems in line with good practice for professional engineering and how you'd design or develop solutions to complex engineering problems in line with good practice for professional engineering.

#### g) Evidence: work samples

This part of your application is key to demonstrating your current technical competence. You'll be able to choose from your existing work and CPD records or add new ones. For each record you choose, you'll need to explain how that record supports your assessment application. When you apply for membership as a Chartered Member, an assessor needs to confirm that the provided work samples clearly demonstrate competency in relation to the 12 elements.

You will need to provide sufficient evidence to demonstrate competence as a Chartered Member. For most candidates, this is 4–6 work samples. If evidence is missing, incomplete, or can't be clearly interpreted by an assessor, you'll be advised and further information requested.



#### DEFINING ACCEPTABLE WORK SAMPLES

Works samples that are provided should be clear and professionally presented so that an assessor can clearly confirm you are competent.



#### WHAT IS AN EXAMPLE OF A GOOD WORK SAMPLE?

- Evidence statements clearly state how files provided are relevant to the assessment, and which competency group they relate to.
- ✓ Explanations as to how the work samples demonstrate complex work.
- √ The work samples provided clearly show this as being your own work.
- Drawings or calculations only, with no supporting documentation.
- Pages of printed spreadsheets, with unclear calculations or derivations.



#### **TIPS FOR SUCCESS**

- When writing up your submission, remember to talk about yourself using 'I', 'me' or 'my'. The assessors don't want to know what the team did as part of the project, they are only interested in your involvement.
- Record your work samples as you go you don't want to have to go looking for work you did 4, 5 or 6 years ago.
- · Exercise judgement and submit your best evidence, not everything you think might be relevant. The assessors will always come back to you if they find any gaps in your evidence and will give you the opportunity to provide further evidence. You should all be showing evidence of multiple competency groups and complexity in the majority of the projects that you are working on.
- Remember, it is up to you to demonstrate you are competent not up to the assessors to interrogate you to ascertain your competency.



#### What are assessors looking for?

- Has the engineer provided four to six work records?
- Do evidence statements clearly state how files provided are relevant to the assessment, and which competency group they relate to?
- Has the engineer explained how the work samples demonstrate complex work?

#### h) Declarations

Before you can submit your application, you will be asked to:

- · Declare any criminal convictions
- Declare your commitment to the Code of Ethical Conduct
- Declare any disciplinary proceedings
- Declare any declined applications
- Consent for your name to be published on the Engineering New Zealand website for up to 21 days, allowing the public to provide evidence on whether or not you meet the required standard.

### Stage 4: Validation

The next step is to submit your application to our team for validation. One of our Competence Assessment Advisors will look after your application from start to finish. Your advisor will check the information you've provided and will aim to give you feedback within 10 working days. They'll let you know if you need to make any changes before your application is sent to an Assessment Panel. Note that our advisors are checking the completeness of your application and are not qualified to evaluate the content of the information you provide. Therefore, you may still be asked to submit additional information by your assessment panel at the next stage of your assessment.

If your Advisor asks you to make changes, it is in your best interests to get them done as soon as possible and then resubmit for validation. If you take longer than two weeks to do so, your application is likely to be delayed.

### **Stage 5: Evaluation**

Once your application is finalised, an assessment panel will be assigned to you. This usually comprises a Lead Assessor and Practice Area Assessor with knowledge or experience relevant to your practice area.

They'll review your application over 8–10 weeks and as part of this, may meet with you to discuss it as well. This is called an 'Interactive' and is normally held via videoconference.

The panel will use the evidence you submit and the information from your Interactive to complete a report and recommendations on your application. They might also ask for further evidence to support your application.

Once they've got all the information they need, the panel will make a recommendation to the Competency Assessment Board (CAB) about whether to approve your application. The CAB will consider the panel's recommendation and make a decision on your application at their monthly meeting. Occasionally the CAB asks for additional information. Your advisor will let you know if that happens.

#### How to prepare for the Interactive

The Interactive lets your assessment panel find out more about the projects in which you've been involved. It's a professional conversation, not an interrogation. It is an opportunity to demonstrate your understanding of the engineering behind the competency examples submitted in your application. Be ready to talk your panel through the work samples you've provided in relation to your practice area, and think about how you might answer questions around the following:

- Outline of the project (what was involved, when was it done and who was involved)
- How the project demonstrates your work on complex engineering problems and activities
- · Challenges you faced
- Lessons you learned
- · Ethical dilemmas/issues you dealt with.

Please note that all interactive assessments are conducted via videoconference and will require you to have a working webcam. Interactive assessments are also recorded for quality assurance purposes. Recordings are securely stored on Engineering New Zealand's server for a period of three months, or until the assessment process is concluded.

The recording of interactive sessions serves to uphold the integrity of our assessment procedures and provides essential evidence in the event of an appeal. Engineering New Zealand is committed to adhering to the regulations outlined in the Privacy Act 2020 throughout this process.

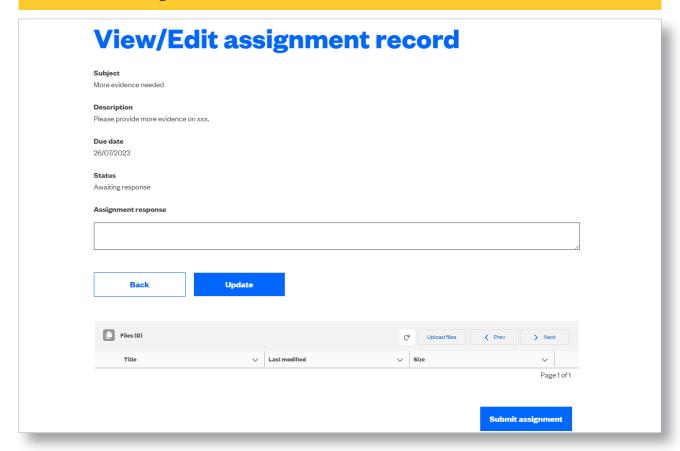
#### **Requests for Information (RFI)**

If your Assessment Panel requires more information, they will send you a Request for Information through the online portal. You will receive an email notifying you of this.

Log into your portal, then go to Menu > Career > Assessments > Current Assessments > View. Then click on 'Further Evidence' as shown below.

Chartered Assessment	
You're on the way to getting Chartered! Complete each section before submitting to our team. <u>Check out our assessment guidance.</u>	
Download PDF copy	
Further evidence	$\rightarrow$
Provide further information requested from your assessment panel.	
0% complete	

Complete the RFI by adding a response and uploading relevant files requested by the Assessment Panel. Then click 'Submit assignment':



# **Stage 6: Decision**

Your advisor will let you know the proposed outcome of your application. If successful, your name will appear on our <u>Find an engineer</u> public database. If your application is unsuccessful or the CAB made an alternative decision, you will have the opportunity to respond. Your advisor will talk you through your options.

# **Appendix 1: Referee Declaration Form**

An editable Word version of this form is <u>available for download</u> on the Engineering New Zealand website.

Name of applicant	
Membership number or date of k	birth
Referee details	
Name	
Job title	
Company name	
Email	
Relationship to applicant	
Referee declaration	I
O I confirm that I have sighted of the applicant's work expe	I the portfolio of evidence and, to the best of my knowledge, this is a true account erience.
I understand that Engineering the applicant's evidence or	ng New Zealand may contact me directly if they have any questions regarding my verification of it.
	understand and acknowledge that my report will be used and retained d for assessment purposes.
Referee signature	Date

# **Appendix 2: How we define complexity**

You'll need to show you can carry out engineering work at a particular level of complexity.

Are parts of, or systems within, complex engineering

Problem	Activity
Chartered Member and CPEng	
Complex engineering problems	Complex engineering activities
Problems that include some or all of the following:	Activities or projects that include some or all of the following:
<ul> <li>Wide-ranging or conflicting technical, engineering, and other related issues</li> </ul>	Diverse resources, eg people, money, equipment, materials and technologies
<ul> <li>No obvious solution, which means an original method of analysis is needed.</li> </ul>	Resolving critical problems that occur when a variety of technical, engineering and other related issues interact
Can't be resolved without in-depth engineering knowledge	New materials, techniques or processes, or the innovative
Issues not often experienced	use of existing materials, techniques, or processes
Aren't covered by the standards and codes of practice for professional engineering	Significant consequences in a range of contexts.
Diverse groups of stakeholders with a wide range of needs	
Significant consequences in a range of contexts.	
Chartered Member (Engineering Technologist)	
Broadly-defined engineering problems	Broadly-defined engineering activities
Problems that include some or all of the following:	Activities or projects that include some or all of the following:
A variety of factors that may create conflicting constraints	A variety of resources, eg people, money, equipment,
Can be solved by applying proven analysis techniques	materials, information and technologies
<ul> <li>Knowledge of principles and applied procedures or methods</li> </ul>	Resolving occasional interactions between limited technical, engineering and other related issues where only a few conflict
Belong to groups of familiar problems that are solved in well-accepted ways	Using new materials, techniques or processes
<ul> <li>May be partly outside problems covered by standards or codes of practice</li> </ul>	in innovative ways  Consequences that are very important locally,
Several groups of stakeholders with differing needs	<ul> <li>but may have wider implications</li> <li>Knowledge of normal operating procedures and</li> </ul>
that occasionally conflict	processes.

Problem	Activity
Chartered Member (Engineering Technician)	
Well-defined engineering problems	Well-defined engineering activities
Problems that include some or all of the following:	Activities or projects that include some or all of
<ul> <li>Several issues, but only a few that result in conflicting constraints</li> </ul>	<ul><li>the following:</li><li>Limited range of resources, eg people, money,</li></ul>
Can be solved using a systematic approach	equipment, materials, information and technologies
<ul> <li>Resolved with limited theory but extensive practical knowledge</li> </ul>	Resolving interactions between limited technical and engineering issues where wider issues have little or no impact
<ul> <li>Frequently experienced and so familiar to most practitioners in the practice area</li> </ul>	Using existing materials, techniques or processes in new ways
<ul> <li>Covered by standards and/or documented codes of practice</li> </ul>	Consequences that are important locally but aren't far-reaching
Limited range of stakeholders with differing needs	Knowledge of practical procedures and practices
<ul> <li>Consequences that are important locally but aren't far-reaching</li> </ul>	for widely applied operations and processes.
Discrete components of engineering systems.	
Chartered Member (PEngGeol)	
Complex engineering geological problems	Complex engineering geological activities
Problems that include some or all of the following:	Activities or projects that include some or all of the following
<ul> <li>Wide-ranging or conflicting engineering, engineering geological and other related issues</li> </ul>	Diverse resources, eg people, money, equipment, materials and technologies
<ul> <li>Not easily recognised, understood or solved, which means an original method of analysis is needed</li> </ul>	Recognising, understanding and resolving significant problems when wide-ranging or conflicting engineering, engineering geology and/or other related issues interact
<ul> <li>A wide range of issues that might be in an unfamiliar setting</li> </ul>	New techniques or processes, or the innovative use of existing techniques or processes.
<ul> <li>Aren't covered by guidelines, standards and codes of practice for professional engineering geology</li> </ul>	
Diverse groups of stakeholders with a wide range     of needs	

• Significant consequences in a range of contexts.

# **Appendix 3: Practice field descriptions**

Engineering practice fields are loosely defined terms and are used as an indication of the nature of engineering work carried out by engineers in a certain field.

#### **AEROSPACE ENGINEERING**

Aerospace engineering is the design, development, and production of aircraft (aeronautical engineering), spacecraft (astronautical engineering) and related systems. Aerospace engineers may specialise in aerodynamics, avionics, structures, control systems or propulsion systems. It may involve planning maintenance programmes, designing repairs and modifications and exercising strict safety and quality controls to ensure airworthy operations.

#### **BIOENGINEERING**

Bioengineering draws heavily on the Chemical engineering discipline and involves the engineered development of raw materials to produce higher value products, using biological systems (biological catalysts). The description also encompasses the general application of engineering to biological systems to develop new products or solve problems in existing production processes. As examples, bioengineers are found in medical research, genetic science, fermentation industries and industries treating biological wastes.

#### **BUILDING SERVICES**

Building Services engineering is the application of mechanical or electrical engineering principles, and an understanding of building structure, to enhance all aspects of the built environment from air conditioning and mechanical ventilation, electrical light and power, fire services (eg sprinklers and alarms), water and waste services, data and communications, security and access control, vertical transportation, acoustics and energy management.

#### **CHEMICAL ENGINEERING**

Chemical engineering is concerned with the ways in which raw materials are changed into useful and commercial end products such as food, petrol, plastics, paints, paper, ceramics, minerals and metals. Often these processes are carried out at large scale plants. Research of raw materials and their properties, design and development of equipment and the evaluation of operating processes are all part of chemical engineering.

#### **CIVIL ENGINEERING**

Civil engineering is a broad field of engineering concerned with the, design, construction, operation and maintenance of structures (buildings, bridges, dams, ports) and infrastructure assets (road, rail, water, sewerage). The Civil engineering discipline underpins several engineering fields such as Structural, Mining, Geotechnical and Transportation engineering, in which civil engineers often specialise. General Civil engineers are likely to be competent to undertake work that relates to one or more of these areas.

#### **CONSTRUCTION ENGINEERING**

Construction engineering is a specialty field of civil engineering concerned with the oversight and management of largescale infrastructure and building projects. Construction engineers coordinate design, plan, schedule and apply cost control oversight to complex projects to ensure environmentally sound, safe and efficient construction.

#### **ELECTRICAL ENGINEERING**

Electrical engineering is the field of engineering which deals with the practical application of electricity. It deals with the aspects of planning, design, operation and maintenance of electricity generation and distribution, and use of electricity as a source of energy within major buildings, industrial processing complexes, facilities and transport systems. It includes the associated networks and the equipment involved such as switchboards, cabling, overhead lines/catenaries, earthing, control and instrumentation systems.

Areas of specialisation within the wider electrical engineering discipline, such as electronics and telecommunications are usually concerned with using electricity to transmit information rather than energy. For this reason, electronics and radiocommunications/telecommunications are captured under the field of Information engineering.

#### **ENGINEERING ACADEMIC**

The Academic practice field is defined for engineering academic staff members from tertiary education including engineering researchers.

In tertiary education, academic staff members may be involved in engineering activities in various roles, from building engineering prototypes, to contributing to knowledge in engineering. Engineering academic staff members may not be directly involved in the engineering design process but undertaking cutting edge engineering research to lead and enhance engineering activities. Examples of work samples of engineering academic staff members may be their authored quality assurance publications in engineering disciplines, and/or their authored quality assurance engineering reports at NZQA level 7, 8, 9 or 10 (gradate or postgraduate level). Academic staff members who are teaching an engineering programme without quality assurance publications in engineering disciplines or quality assurance engineering reports, may not qualify for academic practice field.

#### **ENGINEERING MANAGEMENT**

Engineering Management is a field of practice where engineers from any technical engineering background exercise engineering judgement in making decisions on the application and optimisation of physical, human and financial resources to achieve engineering outcomes in related processes or business activities. Engineering Managers may not be directly involved in the engineering design process.

**General management** – where engineering knowledge is of benefit or essential and covering many engineering disciplines.

- Qualifies as Management practice field.
- Example: Chief Executive or Director of an engineering or construction company.

**Engineering management** of a multi-disciplinary team where engineering knowledge is essential but specific discipline knowledge is not essential.

- · Qualifies as Management practice field.
- Example: Engineering manager of a local authority or manufacturing company. A judgement may be necessary, but err towards including the management field the candidate is appropriate for both management and discipline fields. (Note: an example grey area is the general manager of a lines company where electrical engineering knowledge may be essential for the role).

**Management or leadership of a team**, however large, where the candidate must have engineering knowledge to do the job competently. This management is part of the skills and knowledge of the discipline.

- Would not normally qualify as Management practice field.
- Example: Chief structural engineer of a large consultancy or compliance authority. A judgement may be necessary but err towards including the management field if management activities are beginning to dominate the candidate may be appropriate for both management and discipline fields.

**Part time management of a small practice or branch** of a consulting practice managing budgets and staff and clients while carrying out frontline engineering or being the responsible person signing off compliance certificates.

• Would not normally qualify for the Management practice field, as a certain amount of management is part of the engineering function, and is 'business as usual' for an engineer in this situation. (Note: Grey area accepted as to the boundary between 'business as usual' and the management becoming dominant. As an acid test, ask "could they give up their discipline practice field?". If not, then Management should not apply. If so, then in theory they need to go through a full review to justify the change in practice field/area description. A balanced decision may lead to having the two practice fields).

**Full time engineering role** where the applicant claims that they "do management", as well as advising clients, planning other workloads, training staff etc.

Would not qualify for the Management practice field, as management is part of their normal engineering
activity. This includes project management, unless it is dominant, in which case the practice field is still their
engineering knowledge (discipline), and project management is written into the practice area description
(ie they use their discipline skills to do project management).

#### **ENVIRONMENTAL ENGINEERING**

Environmental engineering draws on the Civil and Chemical engineering disciplines to provide healthy water, air and land to enhance human habitation. Environmental engineers devise, implement and manage solutions to protect and restore the environment, within an overall framework of sustainable development. The role of the environmental engineer embraces all of the air, water and soil environments, and the interactions between them.

#### FIRE ENGINEERING

Fire engineering draws on knowledge from the range of engineering disciplines to minimise the risk from fire to health and safety and damage to property through careful design and construction. It requires an understanding of the behaviour of fires and smoke, the behaviour of people exposed to fires and the performance of burning materials and structures, as well as the impact of fire protection systems including detection, alarm and extinguishing systems.

#### **GEOTECHNICAL ENGINEERING**

Geotechnical engineering involves application of knowledge of earth materials in the design of structures, such as foundations, retaining walls, tunnels, dams and embankments. Geotechnical engineers assess the properties and performance of earth materials such as their stability and strength, and the impact of groundwater.

#### INDUSTRIAL ENGINEERING

Industrial engineering is the application of mechanical and electrical engineering principles to the design and operation of production equipment, production lines and production processes for the efficient production of industrial goods. Industrial engineers understand plant and procedural design, the management of materials and energy, and human factors associated with worker integration with systems. Industrial engineers increasingly draw on specialised knowledge of robotics, mechatronics, and artificial intelligence.

#### **INFORMATION ENGINEERING**

Information engineering is based on the Electrical engineering discipline but also draws heavily from Computer Science. Three areas of further specialisation can be identified:

**Software engineering** – the development and operation of software-intensive systems that capture, store and process data.

**Telecommunications engineering** – the development and operation of systems that encode, transmit and decode data via cable systems (including fibre optics) and wireless systems (radiocommunications).

**Electronics engineering** – the design, development and testing of electronic circuits and networks that use the electrical and electromagnetic properties of electronic components integrated circuits and microprocessors to sense, measure and control processes and systems.

#### **MECHANICAL ENGINEERING**

Mechanical engineering involves the design, manufacture and maintenance of mechanical systems. Mechanical engineers work across a range of industries and are involved with the design and manufacture of a range of machines or mechanical systems, typically applying principles of hydraulics (fluid control), pneumatics (air pressure control) or thermodynamics (heat energy transfer). Mechanical engineers may specialise in the Building Services or Industrial engineering field.

#### **MECHATRONICS ENGINEERING**

Integrates specialist knowledge in mechanics, electronics and computer systems to design and develop integrated automated systems, such as chassis-stabilising systems, anti-lock brakes, engine control units, disk drives, cameras, service and surgical robots and medical devices. Often these systems are largely mechanical in nature but could not function without their essential electronic and computer control system components.

#### **MINING ENGINEERING**

Mining engineering involves extracting and processing minerals from the earth. This may involve investigations, design, construction and operation of mining, extraction and processing facilities.

#### **PETROLEUM ENGINEERING**

Petroleum engineering is a field of engineering relating to oil and gas exploration and production. Petroleum engineers typically combine knowledge of geology and earth sciences with specialised Chemical engineering skills, but may also draw on Mechanical engineering expertise to design extraction and production methods and equipment. Petroleum engineering activities are divided into two broad categories:

**Upstream** – locating oil and gas beneath the earth's surface and then developing methods to bring them out of the ground.

**Downstream** – the design and development of plant and infrastructure for the refinement and distribution of the mixture of oil, gas and water components that are extracted.

#### **SOFTWARE ENGINEERING**

Software engineers apply the process of analysing user needs and designing, constructing, and testing end user applications that will satisfy these needs through the use of software programming languages. A fundamental aspect is the application of engineering principals to software development. In contrast to simple programming, software engineering is used for longer and more complex software systems, which are used as critical systems for business and organisations.

#### STRUCTURAL ENGINEERING

Structural engineering is a specialised field within the broader Civil engineering discipline that is concerned with the design and construction of structures. Structures might include buildings, bridges, in-ground structures, footings, frameworks and space frames, including those for motor vehicles, space vehicles, ships, aeroplanes and cranes, composed of any structural material including composites and novel materials.

#### TRANSPORTATION ENGINEERING

Transportation engineering is a specialised field of practice in the civil engineering discipline relating to the movement of goods and people by road, water, rail and air.

A transportation engineer might specialise in one or more of: pavement design, asset maintenance/management, construction/project management, traffic operations and control, transportation planning and systems analysis, freight transportation and logistics, road safety, railways or public transport systems.

#### **WATER ENGINEERING**

Water engineers specialise in water based projects; many will have a civil engineering or environmental background. Water engineers generally deal with the provision of clean water from sources or treatment plants, return of waste water and treated sewage to the environment and the handling of stormwater including the prevention of flood damage. Asset management may be a major part in a water engineer's job. This involves design, operation, maintenance and construction of infrastructure for water resources as well as planning for the maintenance and replacement of three waters assets to maintain performance and minimise whole of life costs. These can include but are not limited to pipes, treatment devices, pump stations and reservoirs.

### Appendix 4: CV template

**Please Note:** The purpose of the CV included with your submission is to provide the assessment panel with the information needed to confirm that your work examples are representative of the work being undertaken by you and align with the proposed practice field and practice area description. We do not require a marketing or job seeking CV however you can use an existing CV if it includes all of the information listed below. We recommend no more than 3 pages for your CV. This template is <u>available for download</u> on our website.



# [FIRSTNAME LASTNAME] [Location-City, Country]

[Current employer, role, and area of expertise]

#### **Profile**

Tell us a bit about yourself – your area of expertise and this should align with your practice area description (PAD) but this can be expanded. This should be around 50-100 words.

#### Qualifications

Include all degrees and diplomas and professional qualifications (eg CPEng or equivalent). Including overseas accreditations. **Do not** include short courses – these should be listed in your CPD (eg Site Safe Passport).

[Qualification, Tertiary institution, [Qualification, Tertiary institution, [Qualification, Tertiary institution, Year]

Year]

Year]

#### **Career summary**

Preferably include all roles since graduation. Please explain any gaps within the period being assessed (eg sabbaticals, parental leave, long-term illness, etc). More experienced candidates can summarize early career experience.

#### Job title, company, location, dates (from - to) eg:

Senior Engineer, District Council, Jan 2018 – present Engineer, Consulting firm, Nov 2012 – Jan 2018

#### **Professional affiliations**

#### eg

- · New Zealand Chartered Professional Engineer (CPEng)
- Engineering New Zealand Chartered Member (CMEngNZ)
- · Transportation Group Member

#### **Professional experience**

- 1. List in descending date order (most recent first)
- 2. It is important to distinguish what you personally undertook or managed as opposed to work done by others in the department/team.
- 3. Where your experience comprises numerous small projects, list the projects that challenged you most within these groups and which are representative of the projects that you undertake within that group that you are typically undertook. You must highlight details demonstrating competence in your field and complexity.
- 4. We only require the last 6 years or the history in the period since last assessment.

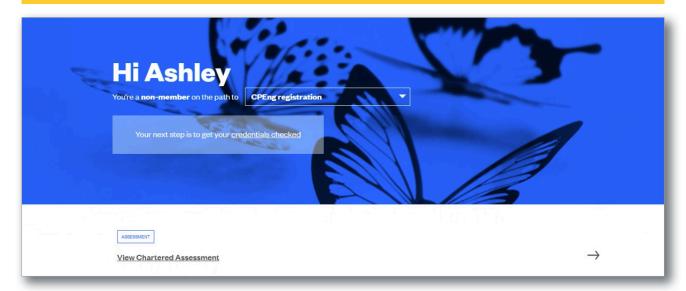
eg

• [Project name, duration of involvement, job title]

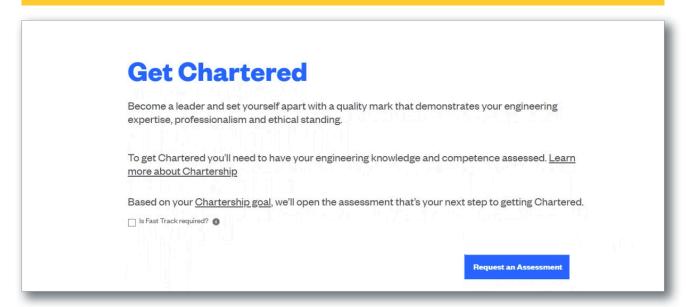
50-70 words describing the project, your involvement and what you brought to the table.

# **Appendix 5: Online application form**

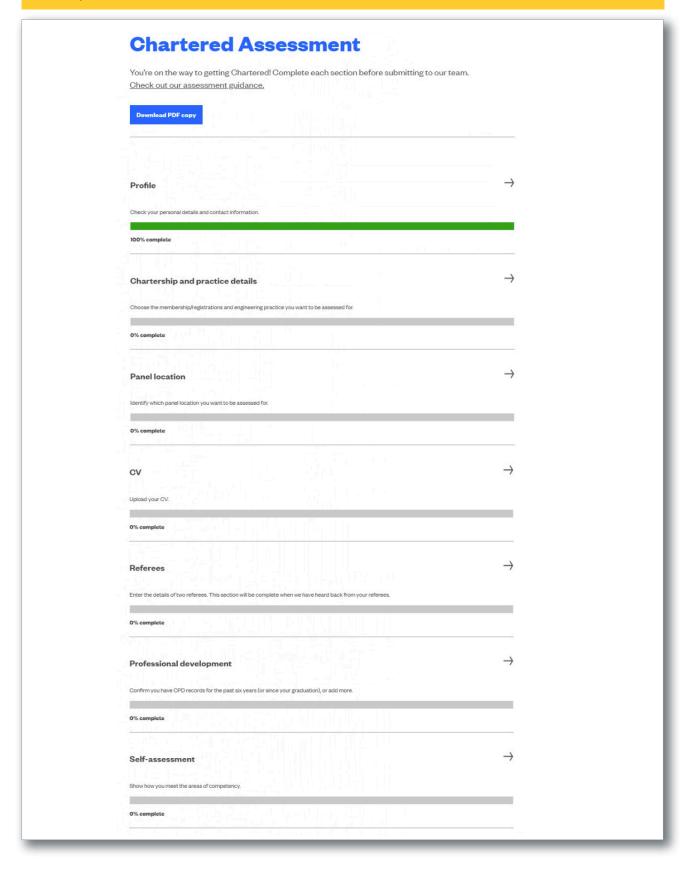
The system automatically detects your current status with Engineering New Zealand. It states which application you are eligible to complete.



Click 'Request an Assessment'. The assessment team will then open an assessment for you and an automated email will be sent with a link to get started

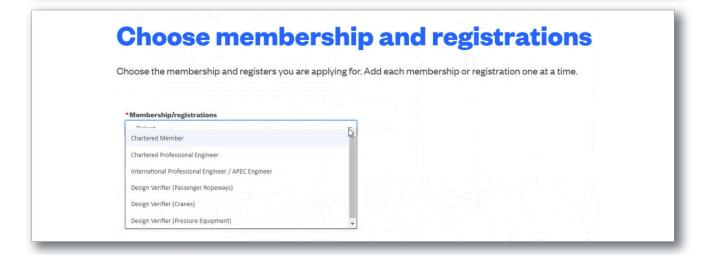


Work your way through each section individually. You'll be unable to submit your application until all sections are completed.

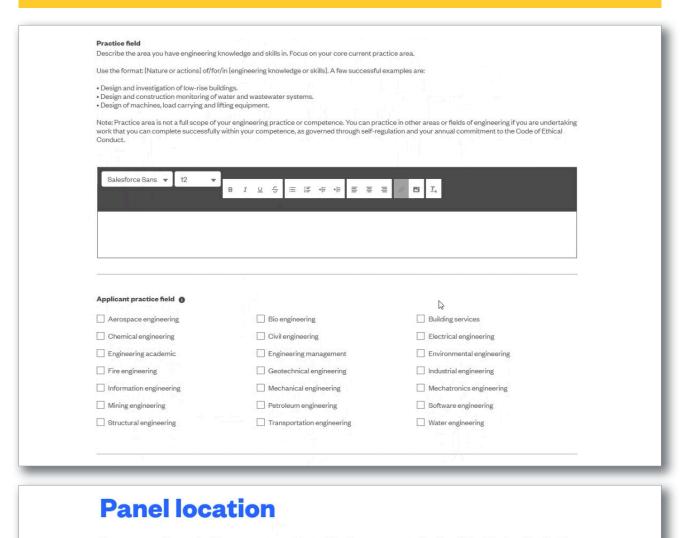




# Chartership and practice details Tell us the membership/registrations and engineering practice you want to be assessed for. Membership/registrations Choose the membership and registers you are applying for. Add each membership or registration one at a time. Your selection will show in the table below. Membership/registration Actions You haven't selected a membership or any registers yet.



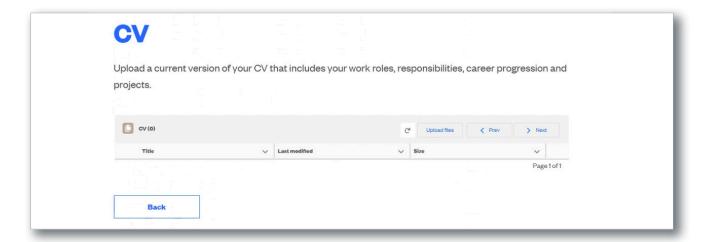
Select your practice field. You will also need to add your Practice Area Description (PAD). This should consist of no more than 15 words.



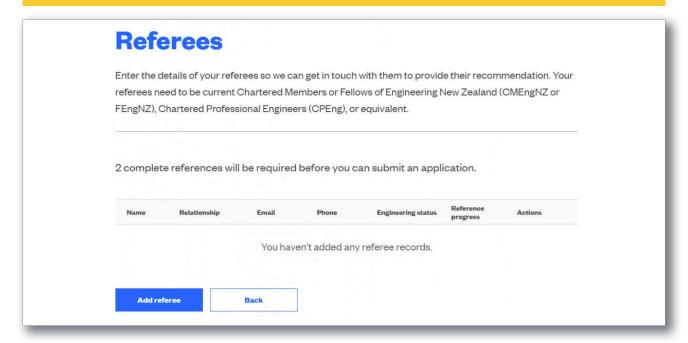
You may need to meet with your assessment panel to discuss your application. Select the location that is most convenient for you.

# Panel location --None- --None- Wellington Auckland Christchurch No preference

Your CV needs to be PDF format. You should also upload your completed referee declaration form and a valid form of ID in this area.



Nominate two referees are familiar with your technical and professional capabilities. Refer to the referee guidelines for more information.



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*Relationship		
ENGRANGE.	, we had	
*Email	0.000	
	(U C   111 C C C C C C C C C C C C C C C C	
*Phone		
Engineering status		
A FOR MITTER	mile mile	

Once you click 'Save and invite', your referee will receive the email below. Please ask them to check their Junk folder.



Kia ora,

You were recently asked to be a referee for the assessment of Enid Rainbow. This assessment looks at their competence to become Chartered as an engineer.

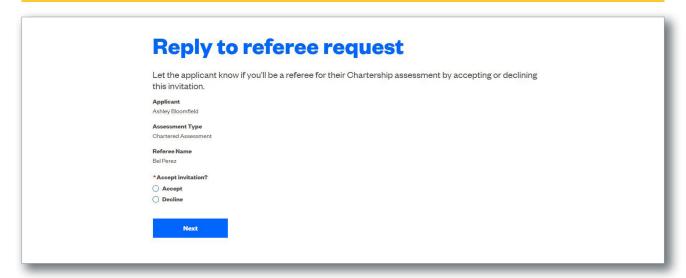
To be a referee, you'll need to complete a recommendation. We haven't heard from you yet and their application can't be progressed until you complete your recommendation.

If you're unable to be their referee, please let us know by declining the request.

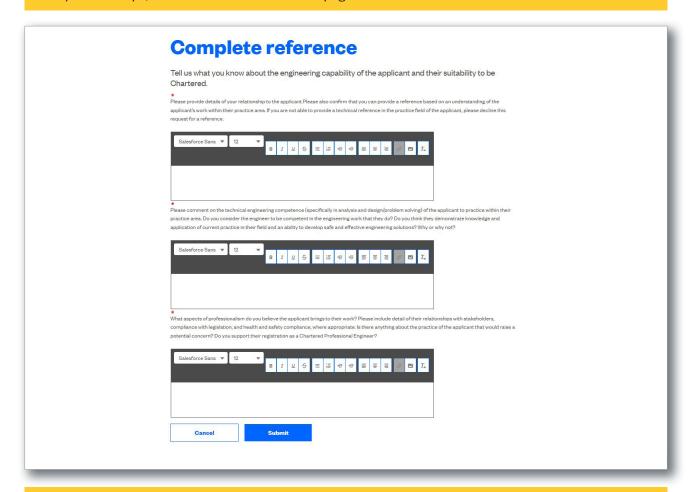
**Review request** 

Engineering New Zealand

You referee will need to click 'Review request' in the email sent. They will then be directed to this screen where they will need to accept or decline the invitation to act as your referee:



If they click 'accept', referees will be directed to the page below:

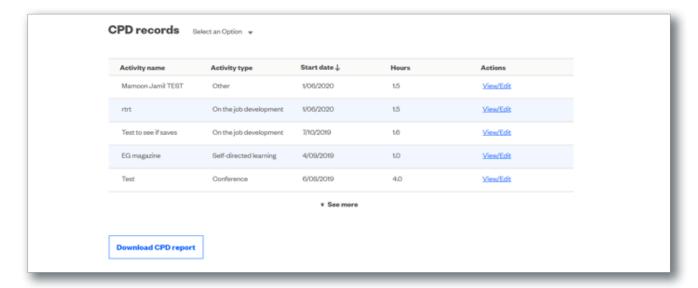


When a referee completes their response and clicks 'submit', you will receive an email notifying you of this. It is up to you to follow up with your referees. You won't be able to submit your application until both of them have submitted their responses.

The next section of the application requires you to confirm you have provided CPD records for each of the past 6 years. While we would prefer all applicants to use the online portal to upload CPD records, we recognise that some applicants may require a mechanism for bulk CPD uploading. If this is the case, please use the correct template for this and ensure it is properly completed.

# Professional development As part of this assessment, you need to have recorded a minimum of 40 hours of continuing professional development (CPD) every year for the past six years (or since your graduation), to keep your knowledge and skills up to date. Track this in your CPD records I confirm I have provided CPD records for each of the past six years (or since my graduation).

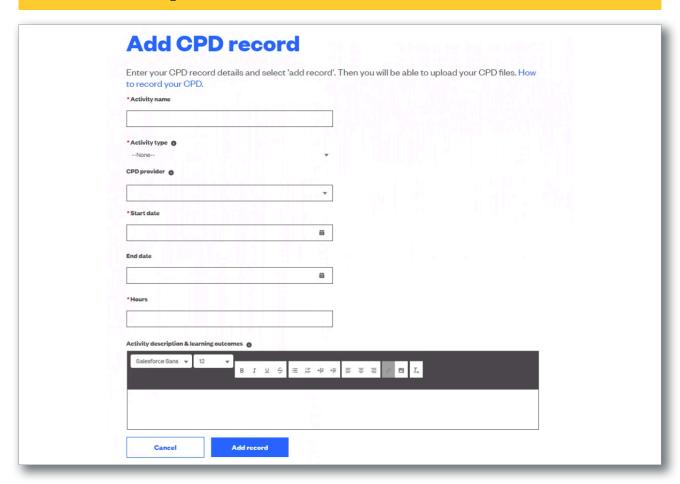
You can have a look at the CPD records you have already saved to your profile, and can also download a CPD report which will provide you with a summary of the hours you have completed each year.



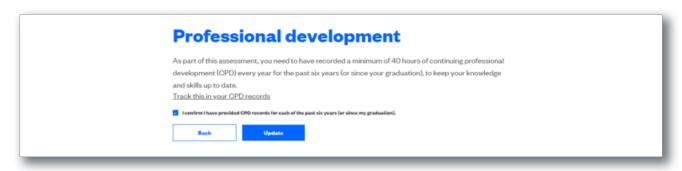
The report gives you a summary with the information shown below. If you haven't added enough CPD, you can add or amend your records.



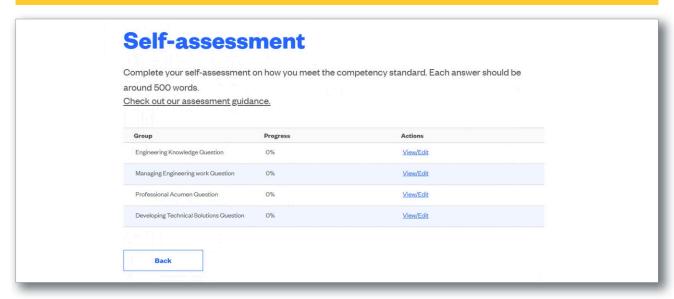
You will need the following information to add new CPD records.



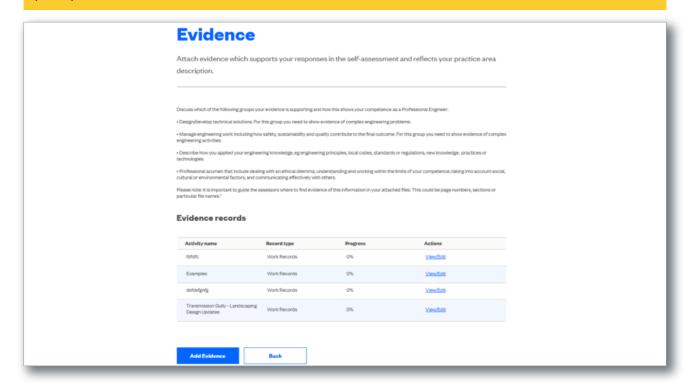
Once you've completed the CPD section, select the 'tick box' confirming you've provided your records, and click 'Update'.

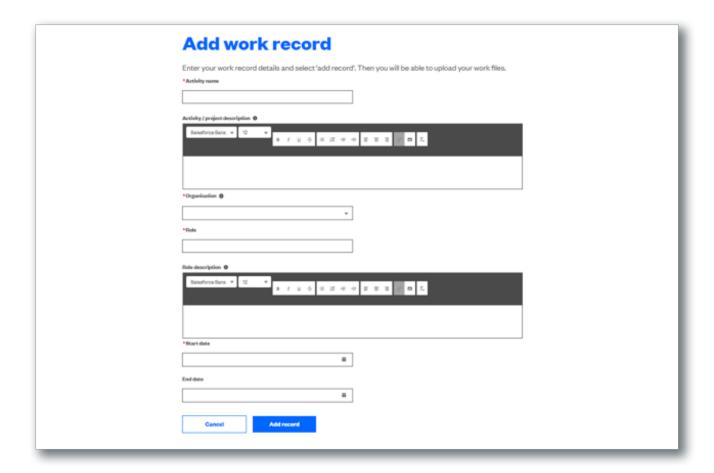


Explain how you meet each competency standard in your self-assessment.

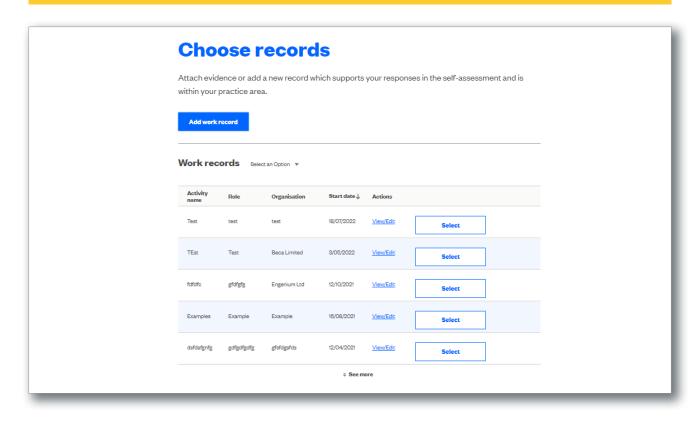


In this section, you'll be required to add work records with supporting evidence. Attachments can be work plans, photos etc. Select the 'Add evidence' button to add a new record.



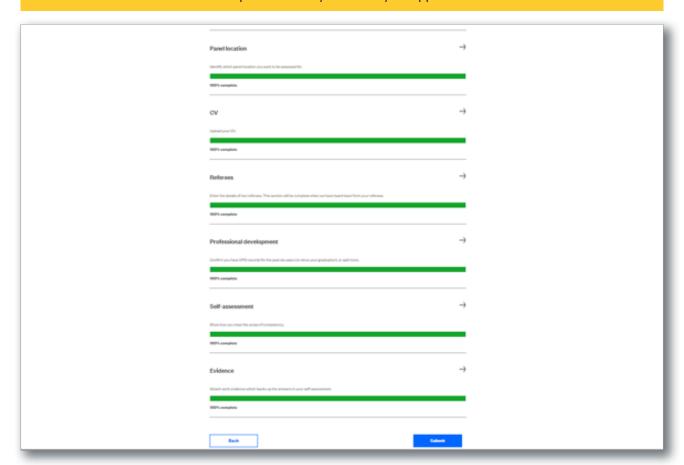


Once you've added your work records, select 4–6 work samples to submit with your application. View or edit your work record to add a sentence describing how this relates to the competence standards.



	_
View work record	
Activity name totals	
Activity / project description glg/dg/fg/dg/f	
Organisation Engenium Ltd	
Rede strates	
State description dystydagingi	
Start date 12/10/2021	
End date 27/0/2021	
Tell us how this record supports your assessme	ent application.
Evidence statement	
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	Page 1

Make sure all sections are 100% completed before you submit your application.



You'll be asked to confirm your commitment to professionalism, complete the declarations and confirm your billing details.

# 

# **Declarations** Declare any criminal convictions Have you been convicted of any offence where the offence was punishable by imprisonment of six months or more? (Having convictions won't necessarily impact your assessment but you need to tell us about them. We need to know about offences which are punishable by a term of imprisonment of six months or more, whether or not you actually received such a penalty. If you're not sure, declare it below.) O Yes O No Declare any disciplinary proceedings Are you currently or have you ever been the subject of any complaints to or disciplinary proceedings by Engineering New Zealand? (This won't necessarily impact your assessment but you should tell us about it, even if the matter was dismissed. If you're not sure, declare it below.) O Yes O No Declare any declined applications Have you ever had an application to be a Chartered Professional Engineer declined at any stage in the process? (This won't necessarily impact your assessment but you should tell us about it.) O Yes O No Next

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# Ways to pay Pay today by credit card and we'll email you a receipt. Or choose to to pay by invoice and we'll email it to you. I want to pay by Credit card Invoice

Once you've paid. you should receive an automated email to confirm receipt of your application and what to expect next.

# Appendix 6: Chartered Membership Competence performance indicators

To meet the minimum standard for Chartered Membership, you must demonstrate that you are able to practice competently in your practice area to the standard expected of a reasonable professional engineer. The extent to which you are able to perform each of the following numbered elements in your practice area must be considered when determining whether you meet the overall standard. You'll also need to show you can carry out engineering work at a particular level of complexity (see Appendix 2).

Each competency standard is described below, together with performances indicators which help clarify how you may be able to demonstrate that you have met the standard. Note that as these are indicators, you do not need to provide evidence on every indicator – in fact, your area of work may have completely different indicators and that's ok. The indicators are there as a guide.

#### Competency Standard Group 1: Engineering knowledge

A solid foundation in engineering knowledge is necessary for any engineer. Within your practice area, we'd like you to demonstrate your ability to understand and apply your knowledge of accepted principles that support:

# 1. Comprehend and apply knowledge of accepted principles underpinning widely applied good practice for professional engineering

Performance indicators include:

- Has a Washington Accord degree or recognised equivalent qualification or has demonstrated equivalent knowledge and is able to:
- · Identify, comprehend and apply advanced engineering knowledge.
- · Work from first principles to make reliable predictions of outcomes.
- Understand assumptions and constructs of mathematical or theoretical models and is able to determine the relevance of their use in given situations.
- Seek advice, where necessary, to supplement own knowledge and experience. Read literature, comprehend, evaluate and apply new knowledge.

# 2. Comprehend and apply knowledge of accepted principles underpinning good practice for professional engineering that is specific to New Zealand, or the jurisdiction of practice (for Chartered Membership)

Performance indicators include:

- · Understands and operates within the legal and regulatory framework in the jurisdiction.
- Understands and applies appropriately the special engineering requirements operating within the jurisdiction.
- Understands and applies codified knowledge such as standards, practice notes, codes of practice etc.

#### 3. Maintain the currency of professional engineering knowledge and skills

Performance indicators include:

- Demonstrating a commitment to extending and developing knowledge and skills.
- Undertake CPD activities to maintain and extend competencies and enhance the ability to adapt to emerging technologies and the ever-changing nature of work.
- Participating in education, training, mentoring or other programmes contributing to his/her professional development.
- Adapting and updating knowledge base in the course of professional practice.
- Demonstrating collaborative involvement with professional engineers (New Zealand engineers for CPEng assessments).
- Awareness and application of recent developments within own practice area.

#### **Competency Standard Group 2: Managing Engineering Work**

Managing people and projects is an integral part of being an engineering professional. To understand your approach to managing engineering work we need you to demonstrate, within your practice area, how you:

# 1. Take responsibility for making decisions (all or part of) on one or more complex engineering activities

Performance indicators include:

- · Taking accountability for their own outputs and for those for whom they are responsible.
- · Accepting responsibility for their engineering activities.

# 2. Manage (all or part of) one or more complex engineering activities in line with good engineering management practice

Performance indicators include:

- Recognise complexity and assess alternatives in light of competing requirements and incomplete knowledge. Exercise sound judgement in the course of all complex activities.
- Planning, scheduling organising and monitoring progress of projects or activities to deliver specified outcomes within time constraints.
- Applying appropriate quality assurance techniques.
- Bring about continuous quality improvement and promote good practice.
- Business acumen and an understanding of the key elements of business fundamentals.
- Managing resources, including personnel, finance and physical resources.
- · Managing conflicting demands and expectations.
- · Managing in multi-disciplinary and multi-cultural environments.

#### 3. Make sound professional engineering judgement

Performance indicators include:

- · the ability to identify alternative options.
- · the ability to choose between options and justify decisions.
- · Peer recognition of ability to exercise sound professional engineering judgement.

#### 4. Identify, assess, and manage engineering risk

Performance indicators include:

- · Identifying risks which impact on people, property and the environment.
- Communicating the potential risks and benefits of engineering projects to clients, stakeholders, and the public.
- Developing risk management policies, procedures and protocols to manage safety and hazards during construction/ fabrication and product life cycles.
- Managing risks through 'elimination, minimisation and avoidance' techniques.
- Designing for safety during construction/fabrication, operation, maintenance and de-construction/decommissioning.
- Informing decision makers of significant consequences from not following advice (eg relating to risks, safety etc).

#### **Competency Standard Group 3: Professional acumen**

Professionalism builds trust and instils confidence in the people you come into contact with during your engineering activities. Within your practice area, please demonstrate how you:

# 1. Carry out your professional engineering activities to an ethical standard, at least equivalent to the code of ethical conduct

Performance indicators include:

- Understanding the Engineering New Zealand and/or the CPEng codes of ethics.
- Behaving in accordance with the relevant code of ethics even in difficult circumstances (this includes demonstrating an awareness of limits of capability; acting with integrity and honesty and demonstrating self-management).

# 2. Recognise the likely general social, cultural, and environmental effects of professional engineering activities

Performance indicators include:

Social	Cultural	Environmental
Demonstrates awareness of potential social impact of engineering activities eg human	Giving special consideration of Te Tiriti o Waitangi – and the consequent responsibilities.	Recognising the impact and long-term effects of engineering activities on the environment.
rights, sustainability, health, etc.  Demonstrates personal and social skills and awareness of diversity and inclusion issues.		Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice and apply them in their work.
		Creates a shared understanding of climate change impacts with clients and works to transition to zero carbon.
		Understands and applies longer-term resilience and adaptation considerations in engineering practice.
		Considering long term issues and impact(s) of own engineering activities, such as use of materials, waste during fabrication/ construction, energy efficiency during use, obsolescence and end-of-life issues.

- Recognising foreseeable economic effects of complex engineering activities and seek to achieve sustainable and resilient outcomes.
- Considering and taking into account possible social, cultural and environmental impacts and consulting with stakeholders where appropriate.
- · Recognising foreseeable effects and where practicable seeking advice to reduce adverse effects.

#### 3. Communicate effectively with engineers and others

Performance indicators include:

- Using oral and written communication to meet the needs and expectations of their audience > Communicate and collaborate using multiple media clearly and inclusively with a broad range of stakeholders in the course of all activities.
- Communicating effectively in multi-disciplinary and multi-cultural settings > Treating people with respect
   > Developing empathy and using active listening skills when communicating with others > Operating effectively as a team member.

#### **Competency Standard Group 4: Developing technical solutions**

Applying engineering principles to develop technical products or solutions that benefit society is a vital part of being an engineer. Within your practice area, please demonstrate how you:

# 1. Define, investigate, and analyse complex engineering problems in line with good practice for professional engineering

Performance indicators include:

- Identifying and defining the scope of the complex problem using data and information technologies where applicable.
- · Investigating and analysing relevant information using quantitative and qualitative techniques.
- Testing analysis for correctness of results.
- · Conducting any necessary research.
- Reaching substantiated conclusions using evidence-based and theoretical principles for example those derived by mātauranga Māori (in New Zealand).

# 2. Design or develop solutions to complex engineering problems in line with good practice for professional engineering

Performance indicators include:

- Developing technical solutions that are safe, resilient and sustainable.
- Consideration of a variety of perspectives and taking account of stakeholder views.
- Identifying needs, requirements, constraints and performance criteria, including as appropriate the need to design for safety, constructability, maintainability etc.
- · Developing concepts and recommendations that have been tested against engineering principles.
- · Consulting with stakeholders, including Mana Whenua and Tangata Whenua (in New Zealand).
- · Evaluating options and selecting solutions that are best matched to needs, requirements and criteria.
- Planning and implementing effective, efficient and practical systems or solutions.
- · Evaluating outcomes against original specification or design brief.
- Developing solutions that are informed by appropriate consideration for societal, health, safety, legal and cultural issues, the rights of Tangata Whenua (in New Zealand), and environmental factors.

### Frequently asked questions

#### WHAT DOES MY APPLICATION STATUS MEAN?

Assessment in progress	your assessment is being reviewed by the panel (6 to 8 weeks).	
Assessors being assigned	we're finding your assessment panel (2 to 6 weeks).	
Board assigned	Competency Assessment Board has been assigned.	
Complete	outcome of assessment finalised and shared with you.	
Editing	additional information required before being passed to an assessment panel (it is in your best interests to submit the required information within 2 weeks, to avoid any delays in the process).	
Payment pending	awaiting payment by credit card or invoice.	
Pending Board	waiting for a Competency Assessment Board to be available (the CAB meet once a month).	
Started	you're compiling your assessment application.	
Submitted	with our team for checking and validation (2 to 3 weeks).	
Withdrawn	application has been withdrawn.	

# I CAN'T ATTACH ANY DOCUMENTS BECAUSE MY WORK IS HIGHLY CONFIDENTIALV OR THE PROPERTY OF MY EMPLOYER. WHAT SHOULD I DO?

We take confidentiality seriously and have put processes in place to protect your application.

Engineering New Zealand assessors sign a confidentiality agreement prohibiting them from disclosing any aspect of your assessment to anyone except the relevant Practice Area Assessors, Knowledge Assessors, Competency Assessment Board members or Engineering New Zealand staff.

We accept Work Record files that have been redacted to protect confidential information.

You'll be given the opportunity to review who we've assigned to your assessment panel. If you have any concerns, we'll be happy to assign an alternative panel member.

#### WHAT IF I DON'T HAVE ANY FILES TO ATTACH TO MY WORK RECORDS?

Because our competence assessments are evidence-based, you need to provide files as evidence of your experience. Email correspondence can be used as evidence.

#### **HOW MANY EVIDENCE FILES CAN I ATTACH?**

Our general guidance is quality over quantity. One to four files are usually enough to provide sufficient evidence of your work. Give your assessors only the relevant information and be specific about where your evidence is in the Work Record files. For example, specify page numbers, sections, calculations, photograph titles, chart details etc.

#### HOW MUCH DOES ASSESSMENT, MEMBERSHIP AND REGISTRATION COST?

You can find the latest prices on the Engineering New Zealand website. There's a one-time charge for Chartered assessments and knowledge assessments. The fee for CPEng reassessment is included in your annual registration fee.

# IF I'M SUCCESSFUL, WHEN WILL MY NAME APPEAR ON THE 'FIND AN ENGINEER' SEARCH ONLINE?

Your name will be added to the relevant register as soon as possible after the Competency Assessment Board has approved your application.

#### I DON'T HAVE TWO REFEREES THAT MEET THE CRITERIA. CAN I STILL APPLY?

Your referees need to be current Chartered Members or Fellows or Engineering New Zealand (CMEngNZ or FEngNZ), Chartered Professional Engineers (CPEng), or equivalent. If you're struggling to find referees, try attending Engineering New Zealand events and branch meetings and start networking now.

# WHAT'S THE DIFFERENCE BETWEEN CHARTERED MEMBERSHIP AND CHARTERED PROFESSIONAL ENGINEER REGISTRATION (CPENG)?

Chartered Members belong to Engineering New Zealand and get all the perks of being part of our community. CPEng is different from membership and is a registration under the CPEng Act 2002.

CPEng is only open to professional engineers, who must demonstrate an ability to deal with complex engineering problems and activities. Chartered Membership is also available to professional engineers, but additional categories provide recognition for engineering technologists, engineering technicians and engineering geologists.

Both require a similar assessment. The competence standard for both are effectively the same, but CPEng registration requires evidence of New Zealand-specific good practice and reassessment at least once every six years. This makes Chartered Membership more accessible for engineers practising overseas, and provides direct entry for engineers who have been assessed in an equivalent overseas jurisdiction, eg CEng (UK) or CPEng (Australia). Chartered Membership isn't reassessed because you'll be doing ongoing professional development to stay current.

Both CPEng and Chartered Membership are underpinned by the same Code of Ethical Conduct and a fair, robust and proportionate complaints and disciplinary process.



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