

CPEng Assessment Guidance

Guide to your first-time registrationAugust 2025

Contents

Stand out from the competition as a Chartered Professional Engineer	r 3
Our process	3
Stage 1: Eligibility	4
Stage 2: Preparation	6
Stage 3: Apply online	9
Stage 4: Validation	17
Stage 5: Evaluation	18
Stage 6: Decision	20
Appendix 1: Referee declaration form	21
Referee details	21
Referee declaration	21
Appendix 2: How we define complexity	22
Appendix 3: CV template	24
Appendix 4: Online application form	2 5
Appendix 5: CPEng Competence Performance Indicators	40
Competency Standard Group 1: Engineering knowledge	40
Competency Standard Group 2: Managing Engineering work	41
Competency Standard Group 3: Professional acumen	42
Competency Standard Group 4: Developing technical solutions	43
Frequently asked questions	44

Stand out from the competition as a Chartered Professional Engineer

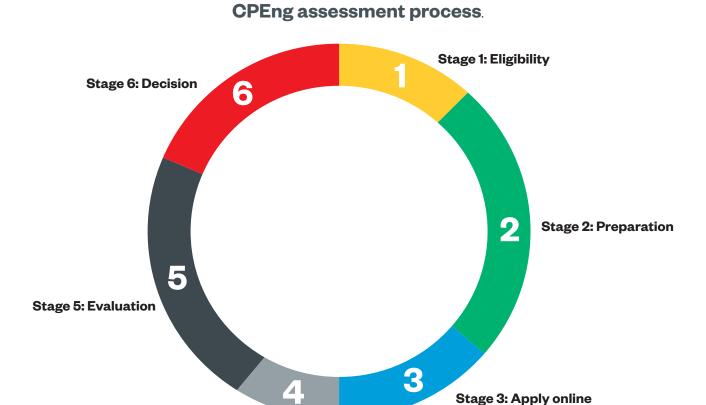
Registering as a Chartered Professional Engineer (CPEng) is the highest available technical credential for engineers. It is an indication of an engineer's ability to deal with complex engineering problems requiring expert technical knowledge. CPEng is a competency mark that is both nationally and internationally recognised and signifies a defined level of skill and professionalism.

Holding registration as a CPEng gives prospective employers and clients immediate respect and confidence in your abilities. Registering as a CPEng also opens the door to career progression, leadership development and opportunities to work overseas.

Chartered Professional Engineers are recognised by their peers and are held to high standards of professionalism and ethics through their commitment to the CPEng Code of Ethical Conduct. This is critical to maintaining and enhancing public trust and confidence in the profession.

Our process

If you're completing a Chartered assessment for the first time, your application will go through all six stages of our process:



Let's get you Chartered Page 3 of 48

Stage 4: Validation

Stage 1: Eligibility

The CPEng title is open to professional engineers who can demonstrate the required professional competence and commitment, as set out in the CPEng Rules. You don't need to be a member of Engineering New Zealand to apply. Individuals develop the required competence for CPEng through education, work experience, and ongoing professional development.

Education requirement

To be eligible to apply to be a Chartered Professional Engineer, you must have a Washington Accord-accredited qualification (In New Zealand this is an accredited 4-year Bachelor of Engineering (Honours)) or be able to demonstrate equivalent knowledge. You will need to demonstrate that you meet the education requirement in one of two ways:

CREDENTIAL CHECK

The credential check process is the first step to us recognising your eligibility for registration as a Chartered Professional Engineer (CPEng). We use the credential check process to check your academic qualification(s) and/or credentials against the global engineering educational standard defined through the Washington Accord.

It's important to note, credential checks are a way to recognise formal engineering qualifications and credentials that we are able to 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 CPEng. 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:

- 1. 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.

Let's get you Chartered Page 4 of 48

Competence requirement

To register as a CPEng, you will need to complete an assessment to demonstrate you meet the minimum standard for registration. 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 Supporting Documents section of your assessment (see Appendix 1).

Professionalism and ethics requirement

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

- » commit to the CPEng Code of Ethical Conduct
- » provide two referees who must be CPEng registered engineers 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 since your last CPEng assessment or university graduation.

Maintaining your registration

To maintain your CPEng registration you will need to:

- » maintain a current practicing certificate by paying the applicable annual registration certificate charge and completing the annual declaration
- » be reassessed at least every six years to demonstrate you meet the minimum standard for continued registration.

Please note: Once you have submitted your application to us and we have spent time reviewing it, we will not be able to issue you with a full refund if you decide to withdraw from the process. We can issue you with a 50% refund if your application has not yet been sent to an assessment panel. However, please note that once your application has been reviewed by a panel, no refund is possible.

Let's get you Chartered Page 5 of 48

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 Technician)) or an Engineering Technologist (CMEngNZ (Engineering Technologist)); a Chartered Engineer (CEng) registered with the Engineering Council in the UK.

Stage 2: Preparation

Defining the standard

It usually takes between four and six years to gain enough experience to be ready to apply for CPEng. To meet the minimum standard for registration, you need to demonstrate that you are able to 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 groups 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 professional 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 engineering problems in accordance with good practice for professional engineering
(1.2) Comprehend, and apply your knowledge of, good practice for professional engineering that is specific to New Zealand ²			
(1.3) Maintain the currency of your professional engineering knowledge and skills	(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
	(2.3) Manage part or all of one or more complex engineering activities in accordance 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		

Let's get you Chartered Page 6 of 48

² While the CPEng Rules (2025) do not specify a minimum requirement for New Zealand experience, we highly recommend including at least two work samples from New Zealand. This can help demonstrate your understanding and application of professional engineering practices relevant to the New Zealand context, which is one of the twelve competence elements you'll be assessed on. If you are applying from overseas, be sure to read the additional guidance document 3.0 – Mutual Recognition Assessments, which has more information for international applicants.

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 registration as a CPEng is defined below:

Problem	Activity
Chartered Member and CPEng	

Complex engineering problems

Problems that include some or all of the following:

- » wide-ranging or conflicting technical, engineering, and other related issues
- » no obvious solution, which means an original method of analysis is needed.
- » can't be resolved without in-depth engineering knowledge
- » issues not often experienced
- » aren't covered by the standards and codes of practice for professional engineering
- » diverse groups of stakeholders with a wide range of needs
- » significant consequences in a range of contexts.

Complex engineering activities

Activities or projects that include some or all of the following:

- » diverse resources, eg people, money, equipment, materials and technologies
- » resolving critical problems that occur when a variety of technical, engineering and other related issues interact
- » new materials, techniques or processes, or the innovative use of existing materials, techniques, or processes
- » 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 member area online. 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 CPEng. Please ensure you track your CPD on the approved CPD Activity Report Template found in our <u>Supporting Documents</u>.

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 assessment guidance page.

Let's get you Chartered Page 7 of 48

ATTEND AN INFO SESSION

Engineering New Zealand will host information sessions for engineers preparing for their CPEng application throughout the year. Keep an eye on the Registration Authority 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 CPEng application. You will also need to find two referees who are a CPEng or CPEng 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 Supporting Documents section of the application.

READ THROUGH THE APPLICATION FORM

Appendix 4 provides an offline version of the online application to help you prepare. This will help ensure there are no surprises when you start completing your application online.

AI POLICY

Please ensure you read and comply with our Al policy in preparing your application.

Let's get you Chartered Page 8 of 48

³ 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 Technician)) or an Engineering Technologist (CMEngNZ (Engineering Technologist)); a Chartered Engineer (CEng) registered with the Engineering Council in the UK.

Stage 3: Apply online

a) Profile

If you are 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 or knowledge assessment to demonstrate you have a Washington Accord degree or can demonstrate equivalent knowledge.

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

b) Chartership and practice details

In this section you'll choose the membership and registrations for which you want to be assessed, describe your practice area and select your practice field.

Based on your engineering class, you'll be shown the membership and registrations you can apply for. You can apply for all relevant registers as part of a single process with the same fee.

INTERNATIONAL REGISTERS

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. There are three international registers you can apply for:

- » Professional Engineer: IntPE(NZ)/APEC Engineer
- » Engineering Technologist: IntET(NZ)
- » Engineering Technician: IntETn

Read more on international registers

DESIGN VERIFIERS

Under the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, a design verifier is a person employed or engaged by an accredited inspection body to verify equipment design. To apply for Design Verifier Registration, you'll need to meet the required Chartered Professional Engineering standard in a practice area that includes one or more of the categories of design verification work:

- » Pressure Equipment
- » Cranes
- » Passenger Ropeways

Guidance for design verifiers (guidance document 1.7) is available on our guidance page.

RECOGNISED ENGINEERS (DAM SAFETY)

The Government has approved dam safety regulations for the safe management of dams after construction, to reduce potential impacts to people, property, and the environment. The regulations commence in 2024.

Under the regulations, engineers will be registered to audit and certify potential impact classifications (PIC) and/or dam safety assurance programmes (DSAP). All Recognised Engineers must be Chartered Professional Engineers (CPEng).

Go to the Recognised Engineers page for more information and application guidance documents

Let's get you Chartered Page 9 of 48

ENGINEERING NEW ZEALAND MEMBERSHIP OPTIONS

You can choose to be a Chartered Member of Engineering New Zealand (CMEngNZ) as well as a CPEng.

Professional Engineer	Engineering Technologist	Engineering Technician	Engineering Geologist
Complex engineering problems and activities	Broadly-defined engineering problems	Well-defined engineering problems and activities	Complex engineering geological problems and activities
Washington Accord (four-year BE) or equivalence	Sydney Accord (three-year BEngTech) or equivalence	Dublin Accord (two-year NZDE) or equivalence	Recognised postgraduate qualification in Engineering Geology
Chartered Member IntPE(NZ)/APEC Engineer	Chartered Member (Eng. Technologist)	Chartered Member (Eng. Technician)	Chartered Member (PEngGeoI)
	IntET(NZ)	IntETn(NZ)	
CPEng			
Design Verifier (Passenger Ropeways)			
Design Verifier (Cranes)			
Design Verifier (Pressure Equipment)			
Recognised Engineer - Potential Impact Classification (RecEng PIC)			
Recognised Engineer – Dam Safety Assurance Programmes (RegEng DSAP)			

c) Practice area and practice field(s)

CPEng rules define practice area as follows:

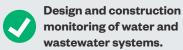
Practice area means an engineer's area of practice, as determined by – the area within which he or she has engineering knowledge and skills; and the nature of his or her professional engineering activities.

This is the area for which we'll assess your competence. A short description helps us assign the right assessment panel to your application.

PRACTICE AREA DESCRIPTION (PAD)

Describe the area in which you have engineering knowledge and skills. Focus on your core current practice area. Your practice area description (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:







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

Let's get you Chartered Page 10 of 48

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.



Tip for success: The assessment process is evidence-based. The evidence you provide must support all of the words in your PAD and this evidence needs to meet the CPEng complexity requirements.

PRACTICE FIELD

Engineering practice fields are loosely defined terms used to indicate the nature of engineering work carried out by engineers in a certain field.

Selecting your practice field will also help us assign the right assessment panel to your application. Choose the one that best aligns with your practice area. You may choose an additional field if your practice is across more than one. Please note that adding additional fields increase the amount of CPD and work samples required. Please visit our website for practice field descriptions.

d) Referees

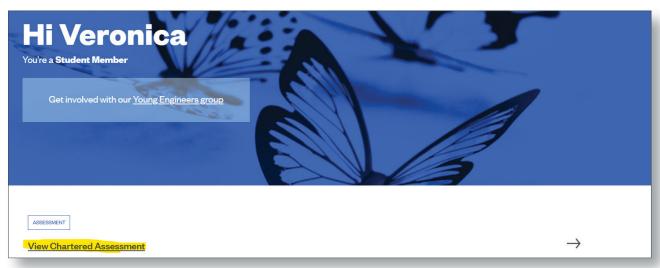
You will need to nominate two referees for your application to become a Chartered Professional Engineer. We will send an invitation to your referees to provide a reference for you. If they accept the invitation, they'll be asked to provide information about your technical competence and professionalism. 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 <u>referee declaration form</u>. This form must be uploaded with your application, in the Supporting Documents section.

To do this, go to your complete application and click 'Download PDF Copy' as shown below:



Let's get you Chartered Page 11 of 48

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>



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 Supporting Documents area of your application, before submitting to us.



DEFINING ACCEPTABLE REFEREES

Both referees need to be current CPEng or <u>equivalent</u>⁴. 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 provided. In accordance with the Rules, these must be CPEng registered engineers or equivalent.
- ✓ Ideally at least one referee who does not work within the same company as you.
- √ The 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
- X Referees who are conflicted in that they have a personal relationship with you or have a financial interest in the outcome of the assessment.



Tip for success: Finding referees can be challenging for people in small companies. We recommend you consider your referees well before applying for CPEng reassessment, and ensure these people have sufficient familiarity with your work. We encourage you to develop your professional network by actively engaging with the local Engineering New Zealand branch and/or relevant technical interest groups.

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 Professional Engineer?

Referees will also be contacted by assessors to confirm your engineering knowledge and skill. Please ensure the contact information you provide for your referees is up to date.

Let's get you Chartered Page 12 of 48

⁴ 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 Technician)) or an Engineering Technologist (CMEngNZ (Engineering Technologist)); a Chartered Engineer (CEng) registered with the Engineering Council in the UK.

e) Continued Professional Development (CPD)

CPD must be completed 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 over the past six years or since graduation.



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. For example if your apply for two fields you require 55 hours of CPD (40 hours + 15 hours for the additional field).

- ✓ Evidence of learning linked to the application of contemporary knowledge of the engineer's practice area
- ✓ 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)
- 40 hours of 'on the job reading'
- 40 hours of 'mentoring'

If you have 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 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 CPEng applications:

CPD Areas	Recommended hours
Technical *** Attending recognised technical group meetings, external or internal technical training courses and/or technical conference papers *** Developing new technical standards or revising technical codes *** Preparing and presenting papers at conferences, and presenting technical training courses **Professionalism** No upper limit on number technical or number technical codes **Professionalism** **No upper limit on number technical or number technical codes **Professionalism** **No upper limit on number technical codes **Professionalism** **Prof	
Professionalism eg courses on professional ethics, cultural competency, climate, sustainability and others.	Minimum 2 hours (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)
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 COUNTS TOWARDS MY 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.

Let's get you Chartered Page 13 of 48

CPE	D review questions
\bigcirc	Is there evidence of a planned approach to continuing professional development?
\bigcirc	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)

Have all areas in CPD records been completed? (le learning outcomes have been populated

f) Self-assessment

In this section you need to provide statements of self-review explaining how you meet the standard for registration. 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 5, 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 records or add new ones, and will need to explain how each supports your assessment application. When applying for CPEng, an assessor needs to confirm that the provided work samples clearly demonstrate competency in relation to the 12 elements⁵.

You will need to provide sufficient evidence to demonstrate competence in your practice area. For most candidates, this is around 4 to 6 work samples.

We recommend providing quality over quantity. If evidence is missing, incomplete, or can't be clearly interpreted by an assessor then you'll be advised and further information requested.

O 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.

5 Engineering New Zealand reserves the right to verify your work experience.

Let's get you Chartered Page 14 of 48

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.
- ✓ New Zealand specific examples been provided or knowledge of the New Zealand context demonstrated.
- Explanations as to how the work samples demonstrate complex work.
- √ The work samples provided clearly show this as being the engineer's work.
- ✓ Each work sample should be support by 1–6 files showing your role in the project. Assessors will always ask you for further documentation if this is required.
- ✓ Work samples are recent meaning they are from the past 6-years or since graduation.
- 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 'l', 'me' or 'my'. The assessors don't want to know what the team did as part of a project they're 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 four, five or six years ago!
- » Exercise judgement and submit your best evidence, not everything you think might be relevant. Try to show multiple competency groups and complexity in the majority of the projects you are working on.
- » Remember, it is up to you to demonstrate you are competent. Although the assessors will come back to you if they find any gaps in your evidence and give you the opportunity to provide further evidence, it is not their role to interrogate you to determine your competency.
- » Clearly explain the complexity in each of your work samples. To do this, think about what challenged you and how you resolved these challenges.
- » Ensure that you provide work samples to support your application in all of the fields you applying for. Your evidence must support all of the words in your PAD.

4		١.	١
U	\sim	⟨	,
١		ŭ	7

WHAT ARE ASSESSORS LOOKING FOR?

\bigcirc	Has the engineer provided between 4-6 work records?
\bigcirc	Do evidence statements clearly state how files provided are relevant to the assessment, and which competency group they relate to?
\bigcirc	Have New Zealand specific examples been provided or knowledge of the New Zealand context mentioned?

Has the engineer explained how the work samples demonstrate complex work? (See Appendix 2)

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.

Let's get you Chartered Page 15 of 48

i) Supporting Documents

In this section you need to provide:

- » Your work history⁶ in the form of an up to date CV (Appendix 3)
- » Your completed referee declaration form (Appendix 1)
- » A copy of a valid ID document

You should load your CV in the Supporting Document area, you must also upload your completed Referee Declaration Form (Appendix 1), together with a valid ID document.

0

DEFINING ACCEPTABLE WORK HISTORY

Where possible, your CV should be no more than three pages and should allow an assessor to see your area of practice since you graduated.

- ✓ 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 your practice area.
- Clearly describe projects you were involved in, and your role in the team, with a particular focus on the period since your last assessment.
- ✓ Provide a recent photograph of yourself so that assessors can confirm your identity at the interactive interview.
- × A list of projects you have worked on with no information on your roles and responsibilities.

WHAT IS AN EXAMPLE OF A GOOD CV?

See Appendix 3 for CV templates you can use to document your work history.



WHAT ARE ASSESSORS LOOKING FOR?

Work history review questions

	Has the engineer provided work history for the period since their last assessment/graduation?
\bigcirc	Does their work history align with their practice area?
\bigcirc	Does the work history detail the projects they have been involved with?
\bigcirc	Does the work history detail their role and responsibilities in each project?
\bigcirc	Does their work history demonstrate successful completion of complex engineering work in their practice area?
\bigcirc	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 Supporting Document area of the application form. The image quality should be clear enough for assessors to read all of the information on the front and back of the ID.

Accepted IDs include:

- » New Zealand Passport
- » New Zealand Drivers License
- » New Zealand Firearms License

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.

6 Engineering New Zealand reserves the right to verify your work history.

Let's get you Chartered Page 16 of 48

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 (evaluation).

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.

When going through your application, Competence Assessment Advisors go through the following validation checklist.

VA	LIDATIONTIEMS
\bigcirc	Verified Washington Accord Equivalence
\bigcirc	All personal details are completed – this includes employer, submission date, location, technical group membership
\bigcirc	Practice area statement is clear and concise
\bigcirc	Work samples have been provided and are acceptable
\bigcirc	Evidence statements clearly state how files provided are relevant to the assessment, and which competency group they relate to.
\bigcirc	Are the work samples provided from overseas? If so, does the application demonstrate knowledge of the New Zealand context?
\bigcirc	CPD requirements have been met (minimum 40 hours per year; broad and diverse)
\bigcirc	Acceptable referees have been provided
\bigcirc	Completed and signed referee declaration form
\bigcirc	Valid photo ID has been provided
\bigcirc	Have any concerns been raised with Engineering New Zealand by a third party?
\bigcirc	Is there a disciplinary order or complaint against the candidate?
	Any previous declined CPEng applications?

Let's get you Chartered Page 17 of 48

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.

Requests for Information (RFI)

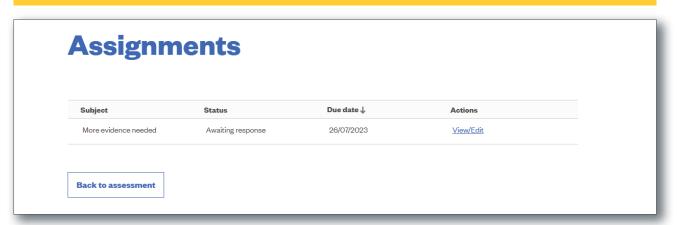
If your Assessment Panel requires more information, they will send you a Request for Information through the online portal. You will receive an email notifying you of this.

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

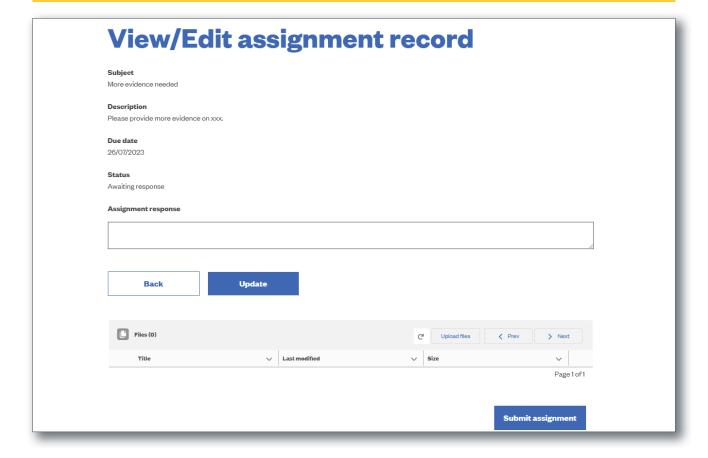
Chartered Assessment	
You're on the way to getting Chartered! Complete each section before submitting to our team. Check out our assessment guidance.	
Download PDF copy	
Further evidence	\rightarrow
Provide further information requested from your assessment panel.	
0% complete	

Let's get you Chartered Page 18 of 48

Click 'View/Edit' as shown below:



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



Let's get you Chartered Page 19 of 48

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 is a professional conversation, rather than 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; 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.

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 a registered engineer</u> public register. 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.

Let's get you Chartered Page 20 of 48

Appendix 1: Referee declaration form

A downloadable version of this form is available on our website.					
Name of applicant					
Membership number or date of birt	h				
Referee details					
Name					
Job title					
Company name					
Email					
Relationship to applicant					
of the applicant's work experied I understand that Engineering the applicant's evidence or my	e portfolio of evidence and, to the best of my knowledge, this is a true account ence. New Zealand may contact me directly if they have any questions regarding verification of it. derstand and acknowledge that my report will be used and retained				

Date __

Referee signature ___

Let's get you Chartered Page 21 of 48

Appendix 2: How we define complexity

Depending on the type of Chartership you're applying for, you'll need to show you can carry out engineering work at a particular level of complexity.

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:
w Wide renaing an earflicting technical angine aring	y. Diverse recovered as records recovery equipment rectaries

- » Wide-ranging or conflicting technical, engineering, and other related issues
- » No obvious solution, which means an original method of analysis is needed.
- » Can't be resolved without in-depth engineering knowledge
- » Issues not often experienced
- » Aren't covered by the standards and codes of practice for professional engineering
- » Diverse groups of stakeholders with a wide range of needs
- » Significant consequences in a range of contexts

- » Diverse resources, eg people, money, equipment, materials and technologies
- » Resolving critical problems that occur when a variety of technical, engineering and other related issues interact
- » New materials, techniques or processes, or the innovative use of existing materials, techniques, or processes
- » Significant consequences in a range of contexts

Chartered Member (Engineering Technologist)

Broadly-defined engineering problems

Problems that include some or all of the following:

- » A variety of factors that may create conflicting constraints
- » Can be solved by applying proven analysis techniques
- » Knowledge of principles and applied procedures or methods
- » Belong to groups of familiar problems that are solved in well-accepted ways
- » May be partly outside problems covered by standards or codes of practice
- » Several groups of stakeholders with differing needs that occasionally conflict
- » Consequences that are important locally but may have wider implications
- » Are parts of, or systems within, complex engineering problems

Broadly-defined engineering activities

Activities or projects that include some or all of the following:

- A variety of resources, eg people, money, equipment, materials, information and technologies
- » Resolving occasional interactions between limited technical, engineering and other related issues where only a few conflict
- » Using new materials, techniques or processes in innovative ways
- » Consequences that are very important locally, but may have wider implications
- » Knowledge of normal operating procedures and processes

Chartered Member (Engineering Technician)

Well-defined engineering problems

Problems that include some or all of the following:

- » Several issues, but only a few that result in conflicting constraints
- » Can be solved using a systematic approach
- » Resolved with limited theory but extensive practical knowledge
- » Frequently experienced and so familiar to most practitioners in the practice area
- » Covered by standards and/or documented codes of practice
- » Limited range of stakeholders with differing needs
- » Consequences that are important locally but aren't far-reaching
- » Discrete components of engineering systems

Well-defined engineering activities

Activities or projects that include some or all of the following:

- » Limited range of resources, eg people, money, equipment, materials, information and technologies
- » Resolving interactions between limited technical and engineering issues where wider issues have little or no impact
- » Using existing materials, techniques or processes in new ways
- » Consequences that are important locally but aren't far-reaching
- » Knowledge of practical procedures and practices for widely applied operations and processes

Let's get you Chartered Page 22 of 48

Chartered Member (PEngGeol)

Complex engineering geological problems

Problems that include some or all of the following:

- » Wide-ranging or conflicting engineering, engineering geological and other related issues
- » Not easily recognised, understood or solved, which means an original method of analysis is needed
- » A wide range of issues that might be in an unfamiliar setting
- » Aren't covered by guidelines, standards and codes of practice for professional engineering geology
- » Diverse groups of stakeholders with a wide range of needs
- » Significant consequences in a range of contexts

Complex engineering geological activities

Activities or projects that include some or all of the following:

- » Diverse resources, eg people, money, equipment, materials and technologies
- » Recognising, understanding and resolving significant problems when wide-ranging or conflicting engineering, engineering geology and/or other related issues interact
- New techniques or processes, or the innovative use of existing techniques or processes

Let's get you Chartered Page 23 of 48

Appendix 3: 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 5 pages for your CV. A downloadable version of this template is available 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,Year][Qualification, Tertiary institution,Year][Qualification, Tertiary institution,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.

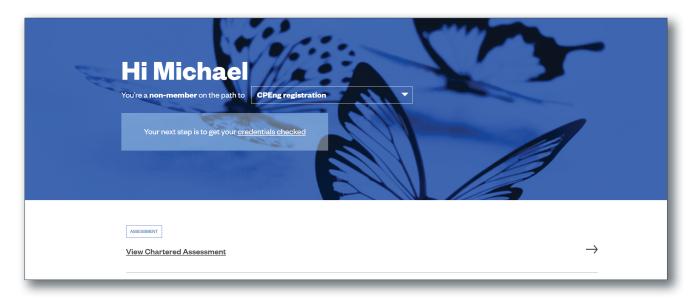
eg

• [Project name, duration of involvement, job title] 50–70 words describing the project, your involvement and what you brought to the table.

Let's get you Chartered Page 24 of 48

Appendix 4: 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

Get Chartered

Become a leader and set yourself apart with a quality mark that demonstrates your engineering expertise, professionalism and ethical standing.

To get Chartered you'll need to have your engineering knowledge and competence assessed. <u>Learn more about Chartership</u>

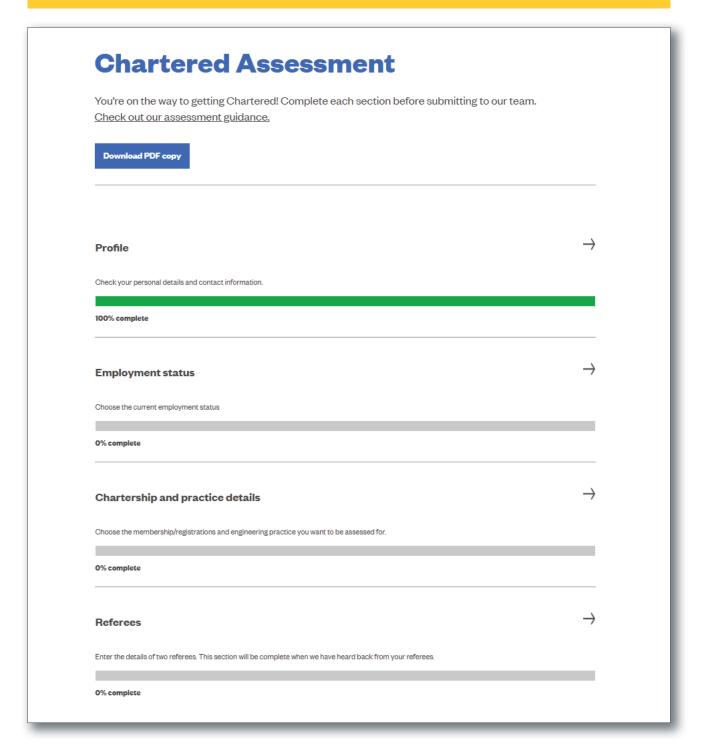
Based on your <u>Chartership goal</u>, we'll open the assessment that's your next step to getting Chartered.

Is Fast Track required? (1)

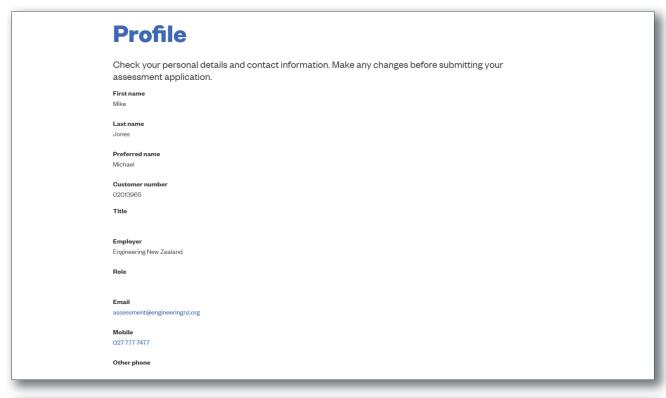
Request an Assessment

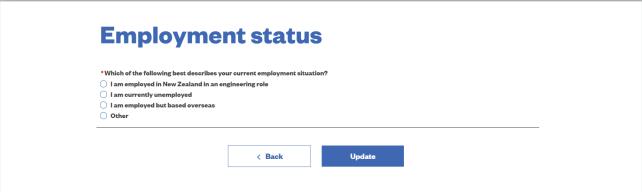
Let's get you Chartered Page 25 of 48

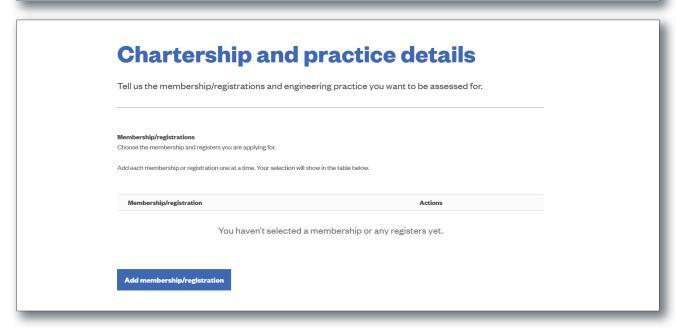
Work your way through each section individually. You will be unable to submit your application until all sections are completed.



Let's get you Chartered Page 26 of 48

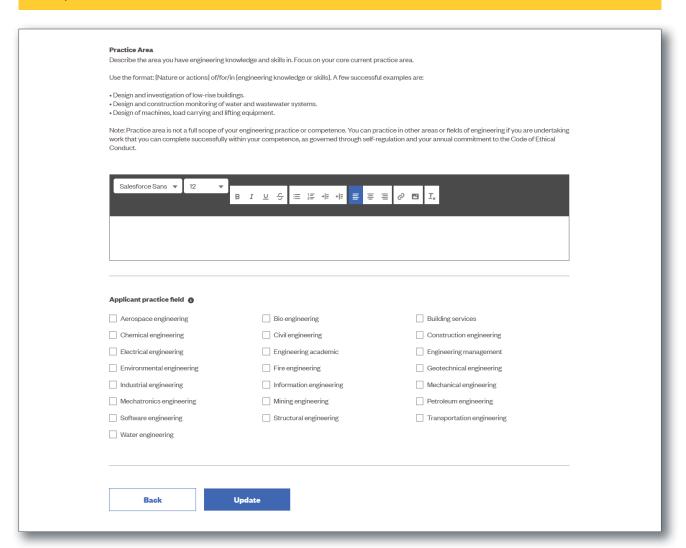






Let's get you Chartered Page 27 of 48

Select your practice field(s). There is no limit on how many you can select. You will also need to add your Practice Area Description (PAD). This should consist of no more than 15 words.



Let's get you Chartered Page 28 of 48

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

Enter the details of your referees so we can get in touch with them to provide their recommendation. Your referees need to be current Chartered Members or Fellows of Engineering New Zealand (CMEngNZ or FEngNZ), Chartered Professional Engineers (CPEng), or equivalent. 2 complete references will be required before you can submit an application. Name Relationship Email Phone Engineering status Reference progress Actions You haven't added any referee records.

Add referee		
Addicicies		
*Name		
*Relationship		
*Email		
*Phone		
*Registration number ①		
*Registration body and country details ①		
*Referee practice field details ()		
Cancel Back to assessments	Save and invite	

Let's get you Chartered Page 29 of 48

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.

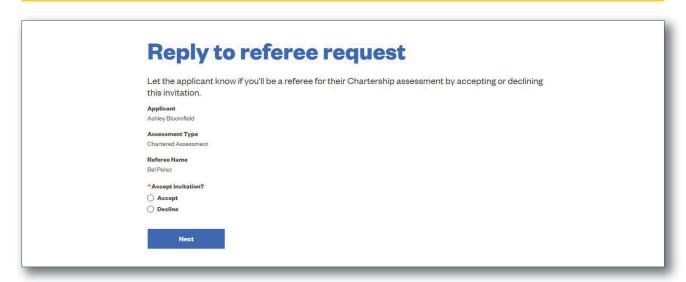
To be a referee, you'll need to complete a recommendation. We haven't heard from you yet and their application can't be progressed until you complete your recommendation.

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

Review request

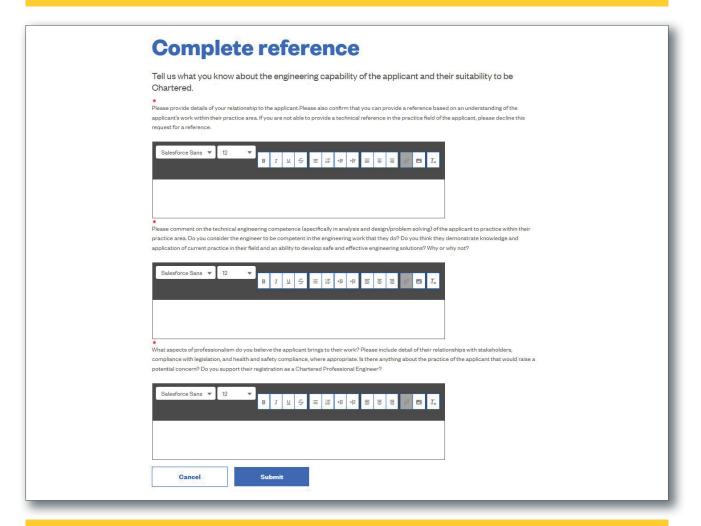
Engineering New Zealand

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:



Let's get you Chartered Page 30 of 48

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.

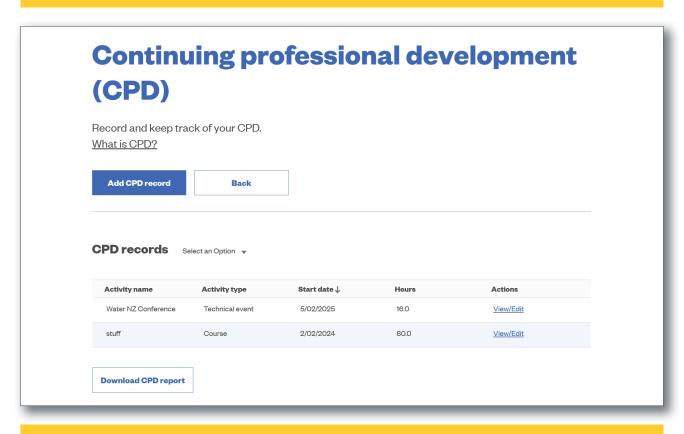
The next section of the application requires you to confirm you have provided CPD records for each of the past 6 years.

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). Back Update

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 <u>template</u> for this and ensure it is properly completed.

Let's get you Chartered Page 31 of 48

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.

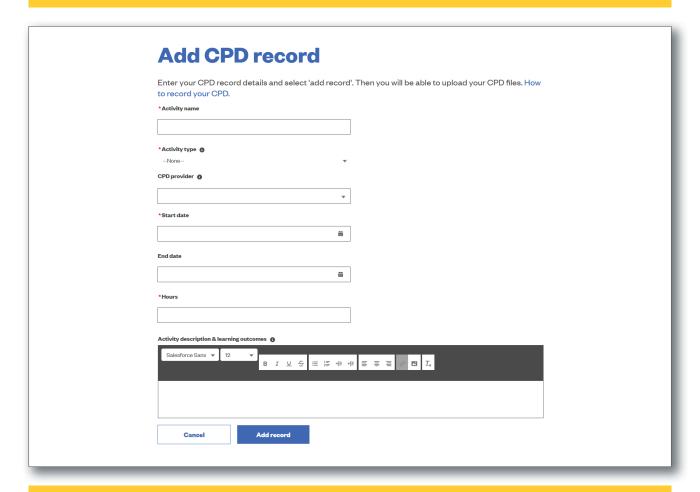


The report gives you a summary with the information shown below. If you haven't added enough CPD, you can add or amend your records.

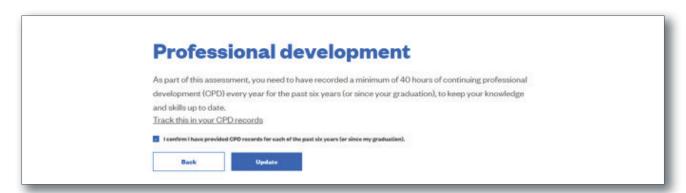


Let's get you Chartered Page 32 of 48

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

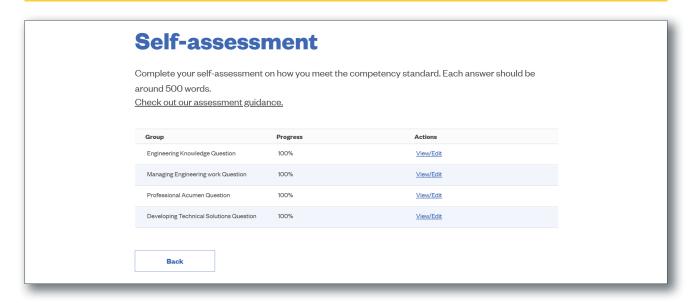


Once you've completed the CPD section, select the 'tick box' confirming you've provided your records, and click 'update'.

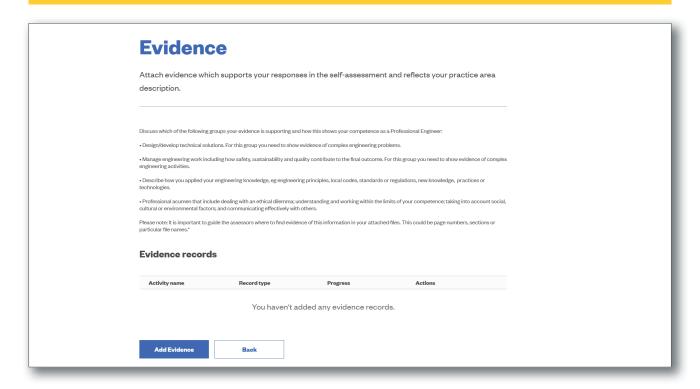


Let's get you Chartered Page 33 of 48

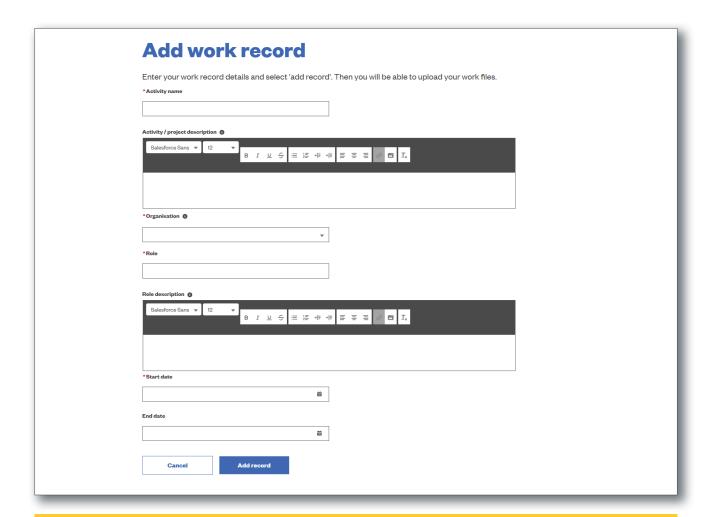
Explain how you meet each competency standard in your self-assessment.



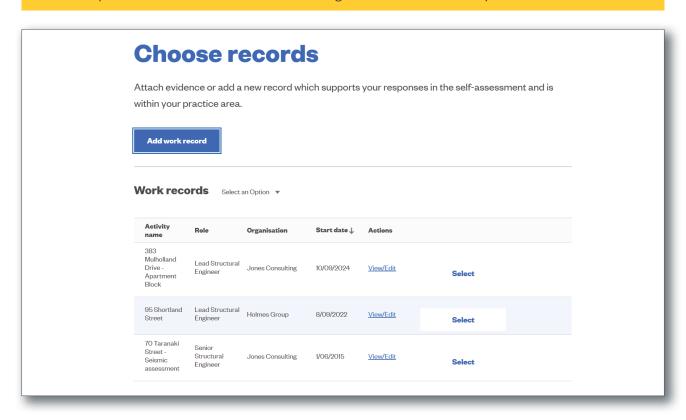
In this section, you'll be required to add work records with supporting evidence. Attachments can be work plans, photos etc. Select the 'Add evidence' button to add a new record.



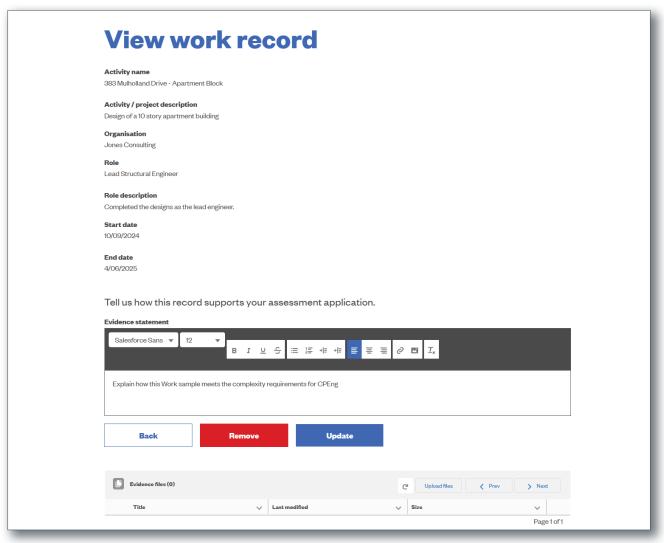
Let's get you Chartered Page 34 of 48



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



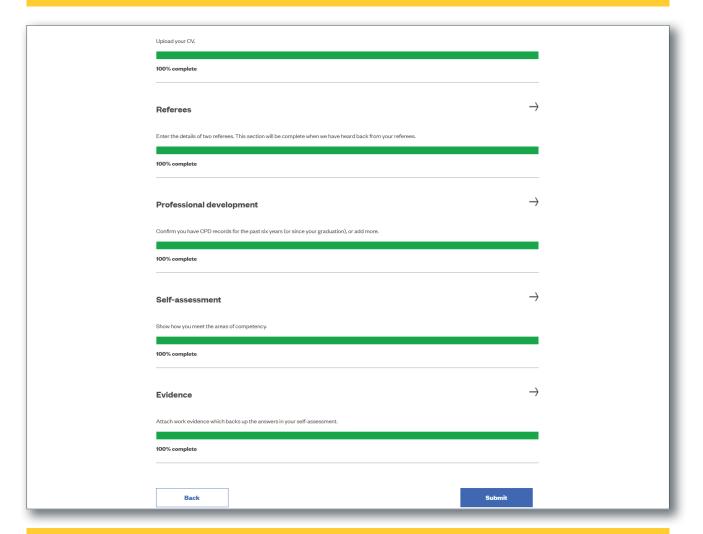
Let's get you Chartered Page 35 of 48



Supporting documents Upload your supporting documents here (this includes your CV, valid photo ID, CPD bulk upload excel file in approved Engineering New Zealand format, and signed referee declaration form - please see latest guidance for information/other requirements) Supporting documents (0) Title Last modified Page 1 of 1

Let's get you Chartered Page 36 of 48

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.

At Engineering New Zealand we believe behaving professionally and keeping current are critical to maintaining high standards and protecting your credibility. Please make sure you read, understand and agree with the following: As a Chartered Professional Engineer, I will honour the CPEng Rules, and agree for my name to be published on the Engineering New Zealand website for up to 21 days, allowing the public to provide evidence on whether I meet the minimum required standard. I confirm all information in my application is true and accurate. Engineering New Zealand is subject to the Privacy Act. We'll only collect, use, store your information for a purpose connected to one of our functions as a professional body and regulatory authority. We may contact you using the information you provide us but you can unsubscribe to our communications at any time. Confirm Confirm

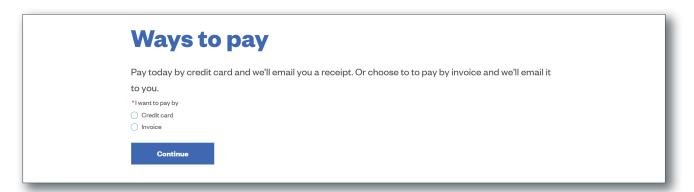
Let's get you Chartered Page 37 of 48

Declarations Declare any criminal convictions (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 ○ 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? 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

Confirm billing details Check your billing address is correct and add a purchase order number. If your employer is paying include their name in the 'billing street' field. PO number (optional) -*Billing tibrest The Villa -*Billing city Love island Billing state/province -*Billing state/province

Let's get you Chartered Page 38 of 48

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



Please note: Once you have submitted your application to us and we have spent time reviewing it, we will not be able to issue you with a full refund if you decide to withdraw from the process. We can issue you with a 50% refund if your application has not yet been sent to an assessment panel. However, please note that once your application has been reviewed by a panel, no refund is possible.

Let's get you Chartered Page 39 of 48

Appendix 5: CPEng Competence Performance Indicators

To meet the minimum standard for CPEng registration, 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 taken into account in assessing 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 (for CPEng); 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.

Let's get you Chartered Page 40 of 48

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 (e.g., relating to risks, safety etc)

Let's get you Chartered Page 41 of 48

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 e.g. human rights, sustainability, 	» 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.
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

Let's get you Chartered Page 42 of 48

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—including those derived by mātauranga Māori

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
- » 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, and environmental factors.

Let's get you Chartered Page 43 of 48

Frequently asked questions

What does my application status mean?

- » Started: you're compiling your assessment application
- » Payment pending: awaiting payment by credit card or invoice
- » Submitted: with our team for checking and validation (2-3 weeks)
- » **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).
- » Assessors being assigned: we're finding your assessment panel (2-6 weeks)
- » Assessment in progress: your assessment is being reviewed by the panel (6-8 weeks)
- » Pending Board: waiting for a Competency Assessment Board to be available (the CAB meet once a month)
- » Board assigned: Competency Assessment Board has been assigned
- » Complete: outcome of assessment finalised and shared with you
- » Withdrawn: application has been withdrawn

I can't attach any documents because my work is highly confidential/ 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 <u>fee</u> for CPEng reassessment is included in your annual registration fee.

If I'm successful, when will my name appear on the 'find a registered 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 <u>equivalent</u>. If you're struggling to find referees, try attending Engineering New Zealand events and branch meetings and start networking now.

Let's get you Chartered Page 44 of 48

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.

Let's get you Chartered Page 45 of 48

Common terms

Assessment criteria: the standard we use to assess engineers on their competence.

Assessment panel: usually made up of a Lead Assessor and a Practice Area Assessor, the panel evaluates reviews your assessment application, before providing recommendations to the Competency Assessment Board.

Chartered assessment: evaluates if you meet the competence standard to become Chartered, either as a Chartered Member (CMEngNZ) of Engineering New Zealand or a Chartered Professional Engineer (CPEng).

Chartered Membership: the Engineering New Zealand class of membership for engineering professionals who have demonstrated their engineering competence to an internationally-recognised benchmark.

Chartered Member CMEngNZ: solves complex engineering problems and activities by applying specialist engineering knowledge and first principles to their work.

Chartered Member CMEngNZ (Engineering Technologist): solves broadly-defined engineering problems and activities by applying knowledge of engineering principles.

Chartered Member CMEngNZ (Engineering Technician): solves well-defined engineering problems and activities through knowledge and use of established analytical techniques and procedures.

Chartered Member CMEngNZ (PEngGeol): solves complex engineering geological problems and activities by applying in-depth engineering geology knowledge.

Chartered Professional Engineer (CPEng): solves complex engineering problems and activities, which requires applying specialist engineering knowledge and first principles to their work.

Competence Assessment Advisor: a member of the Engineering New Zealand team assigned to your application and your main point of contact once you submit your application for validation.

Competency Assessment Board (CAB): the group of senior engineers that accepts or rejects recommendations made by the assessment panel.

Complexity: one of the key ways we differentiate between the competence registers.

CPD record: information about the continuing professional development activities you've done to maintain currency as an engineer.

CPEng reassessment: evaluates if you have maintained current competence to meet the Chartered Professional Engineer standard.

Dublin Accord: the agreement for the international recognition of Engineering Technician qualifications.

Educational accord: an agreement that benchmarks educational standards. If you hold an Accord- accredited qualification, you'll benefit from mutual recognition of your qualification between signatory countries.

Engineering Geologist: deals with complex engineering geological problems and activities requiring specialist and in-depth geological engineering knowledge.

Engineering Professional: deals with complex engineering problems and activities requiring the application of specialist engineering knowledge and work from first principles.

Engineering Technologist: deals with broadly-defined engineering problems and activities that require knowledge and use of principles and applied procedures.

Engineering Technician: deals with well-defined engineering problems and activities requiring knowledge and use of established analytical techniques and procedures.

Knowledge assessment: evaluates if you have gained an appropriate level of technical knowledge and understanding through your work or study to practice at the level of a professional engineer.

Lead Assessor: Chartered Engineer in charge of managing the assessment process.

Let's get you Chartered Page 46 of 48

Practice area: a combination of the area in which you hold specialised engineering knowledge and the nature of the activities you perform. These may change over the course of your career but your competence will be assessed for your current area of engineering practice.

Practice Area Assessor: the volunteer technical expert on your assessment panel who has knowledge in an area of engineering relevant to your own practice area/field.

Practice field: indicates the nature of your engineering work.

Recognised external authorities: overseas engineering registration authorities that are signatories

Sydney Accord: the agreement for the international recognition of Engineering Technologist qualifications.

Sample evidence: documents you include in your Work Record to provide evidence of your personal involvement in a project or activity.

Washington Accord: the agreement for the international recognition of engineering qualifications.

Work record: information about the projects or activities you've carried out in your engineering work, used in competence assessments to demonstrate the practical application of your engineering knowledge and skills.

Let's get you Chartered Page 47 of 48



