engineering new zealand
te ao rangahau

PROFESSIONAL ENGINEERING GEOLOGIST

Assessment guidance

AUGUST 2025

Contents

Introduction

A Professional Engineering Geologist (PEngGeol) applies specialised knowledge of geology to evaluate and manage the interaction between geological conditions and engineering activities. They play a key role in identifying and mitigating ground-related risks, assess impacts from hazards, ensuring the safety, efficiency and sustainability of infrastructure and resource development projects. Professional engineering geologists demonstrate their competence by integrating geoscience expertise with engineering practices.

PEngGeol is a Chartered Membership class of Engineering New Zealand and distinct from the role of registered Chartered Professional Engineers (CPEng) practising in the Geotechnical field. The table below outlines the key differences:

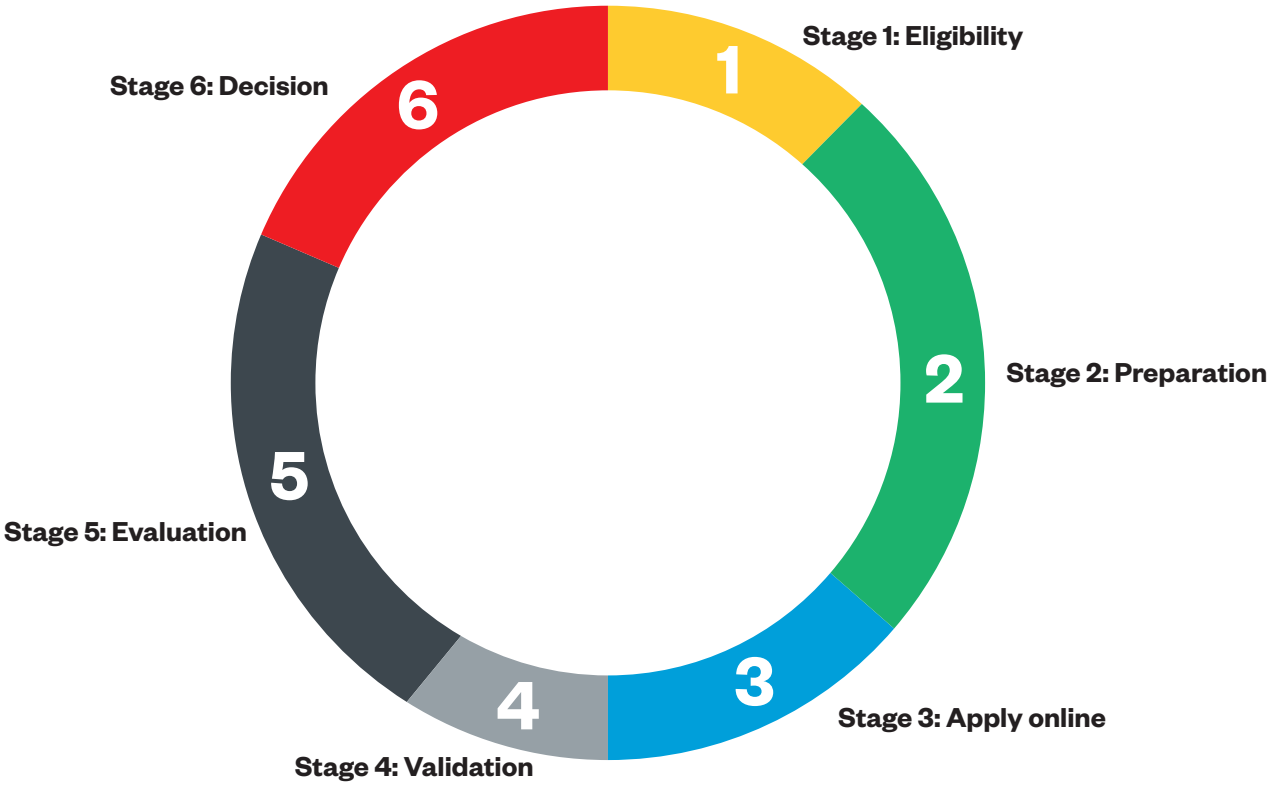
	Professional Engineering Geologists (PEngGeol)	CPEng Geotechnical Engineers
Qualification	Geology degree at honours level **or** a postgraduate qualification in engineering geology **or** an engineering qualification assessed by NZQA at Level 7 AND at least 8 years' engineering geology experience.	Washington Accord degree or demonstrated equivalent knowledge.
Assessment	Assessed once.	Reassessed at least every 6 years.
Membership vs registration	Membership class of Engineering New Zealand.	Registration regulated under the CPEng Act (2002).
Primary focus	Geological characterisation, ground models, material behaviour and processes affecting engineering works.	Analysis, design and implementation of engineering solutions for engineering works supported by the ground.
Core knowledge	Earth materials, geological structures and processes, groundwater and natural hazards.	Soil mechanics, rock mechanics and geotechnical design principles.
Key skills	Site characterisation, scope and undertake site investigations, interpret geological conditions, develop and communicate ground model, design recommendations, natural hazard assessment, verify ground conditions	Ground improvement, foundation design and slope stability analysis.
Field work	Significant emphasis on site investigations and geological mapping. Verification of ground conditions during construction.	May include site investigations. Verification of ground conditions and geotechnical construction.
Deliverables	Reports on site investigations, geology, ground models, natural hazards, and recommendations for geotechnical design.	Reports on geotechnical assessments, design, and design and construction recommendations. Drawings and specifications.
Regulatory interaction	Provide geological inputs for regulatory compliance and risk assessments. For example, geotechnical investigation reports. Suitability assessments for land subdivision.	Ensures designs meet engineering standards, codes and guidelines. Authorised to undertake Restricted Building Work involving critical structural and safety elements. Can issue Producer Statements and Certificates of Work for engineering designs, confirming compliance with the Building Code.

Assessment process

The assessment process for PEngGeol is complemented using a Body of Knowledge and Skills (BOKS) published by the New Zealand Geotechnical Society and is available on their website. It's expected that applicants familiarise themselves with the BOKS for PEngGeol prior to applying for a competence assessment.

Our process

The six stages of the assessment process for PEngGeol are detailed below:



Stage 1: Eligibility

Education requirement

To be eligible to apply for Engineering New Zealand membership as a Professional Engineering Geologist (PEngGeol), you must have a geology degree at honours level, or a postgraduate qualification in engineering geology. You will need to demonstrate that you meet the education requirement by undergoing a credential check.

CREDENTIAL CHECK

The credential check process is the first step to us recognising your eligibility for registration as a Professional Engineering Geologists (PEngGeol). 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 PEngGeol.

If your credential check outcome indicates you do not have the required qualifications or credentials to be eligible for assessment as a PEngGeol, you need to provide us with the following:

- Engineering qualification assessed by the New Zealand Qualifications Authority as equivalent to a degree at level 7 on the NZ Qualifications Framework; and
- a detailed CV that shows at least 8 years of engineering geology experience.

Find out more about credential checks

MUTUAL RECOGNITION

We currently do not offer mutual recognition for overseas professional geologist registrations. As a result, applicants holding registrations from other countries are not eligible for a shortened assessment or reduced requirements.

Competence requirement

To join Engineering New Zealand as a Chartered Member (PEngGeol), you will need to complete an assessment to demonstrate you meet the minimum standard. You will need to provide us with:

- your work history (CV) demonstrating your involvement in complex engineering geology activities
- work samples with annotations explaining how the samples demonstrate your engineering geology competence
- the names and contact details of two eligible referees along with a completed and signed referee declaration form uploaded to the Supporting Documents 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. In order of preference they must be either PEngGeol, or CPEng, or CMEngNZ, or chartered with a recognised international professional engineering body.
- 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 geology knowledge and skills in the last six years or since university graduation.

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.

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 PEngGeol. Without a post graduate qualification at least 8 years of work experience is required. To meet the minimum standard, you need to demonstrate that you are able to practice competently to the standard of a reasonable professional engineering geologist.

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 engineering geology	(2.1) Exercise sound engineering judgement	(3.1) Conduct your engineering geology 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 engineering geology
(1.2) Local application of engineering geology knowledge – comprehend and apply engineering knowledge that is specific to New Zealand[1]	(2.2) Be responsible for making decisions on part or all of complex engineering geology activities	(3.2) Recognise the reasonably foreseeable social, cultural, and environmental effects of engineering geology activities generally	(4.2) Design or develop solutions to complex engineering problems in accordance with good practice for engineering geology
(1.3) Maintain the currency of your engineering geology knowledge and skills	(2.3) Manage part or all of one or more complex engineering geology 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 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 (PEngGeol) is defined below:

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.

Appendix 2 provides some examples of how Engineering Geologists may provide evidence of complexity at the required level.

1 You must provide at least two New Zealand work samples in your application to demonstrate your local knowledge.

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 PEngGeol.

If you plan to upload your CPD records in bulk, you must use Supporting Document C – CPD Activity Report.

REFEREES

We strongly encourage you to find a mentor who can support you as you prepare for your PEngGeol application. You will also need to find two referees to support your application. In order of preference they must be either PEngGeol, CPEng, CMEngNZ, or chartered with a recognised international professional engineering body. The sooner you start engaging with mentors 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 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 3 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.

Stage 3: Apply online

a) Profile

If you are not a member of Engineering New Zealand, you will first need to sign up 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 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.

When completing your application, please indicate your intention to register as an Engineering Geologist in the 'Memberships and Registrations' section of the application. You'll be able to select the practice field of geotechnical engineering and the membership class of PEngGeol.

You will also need to provide a short statement (15–25 words) to describe your area of practice. This is determined by – the area within which you have engineering geology knowledge and skills; and the nature of your professional engineering geology 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.

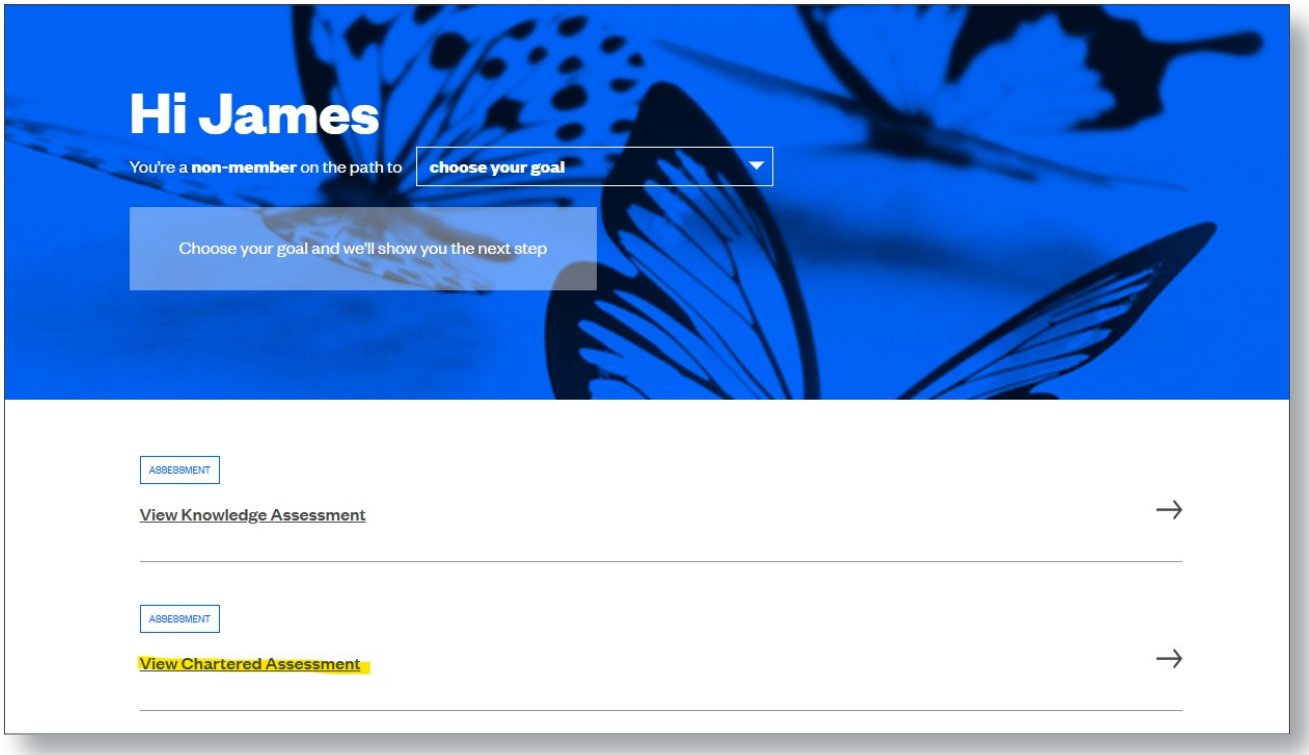
c) Referees

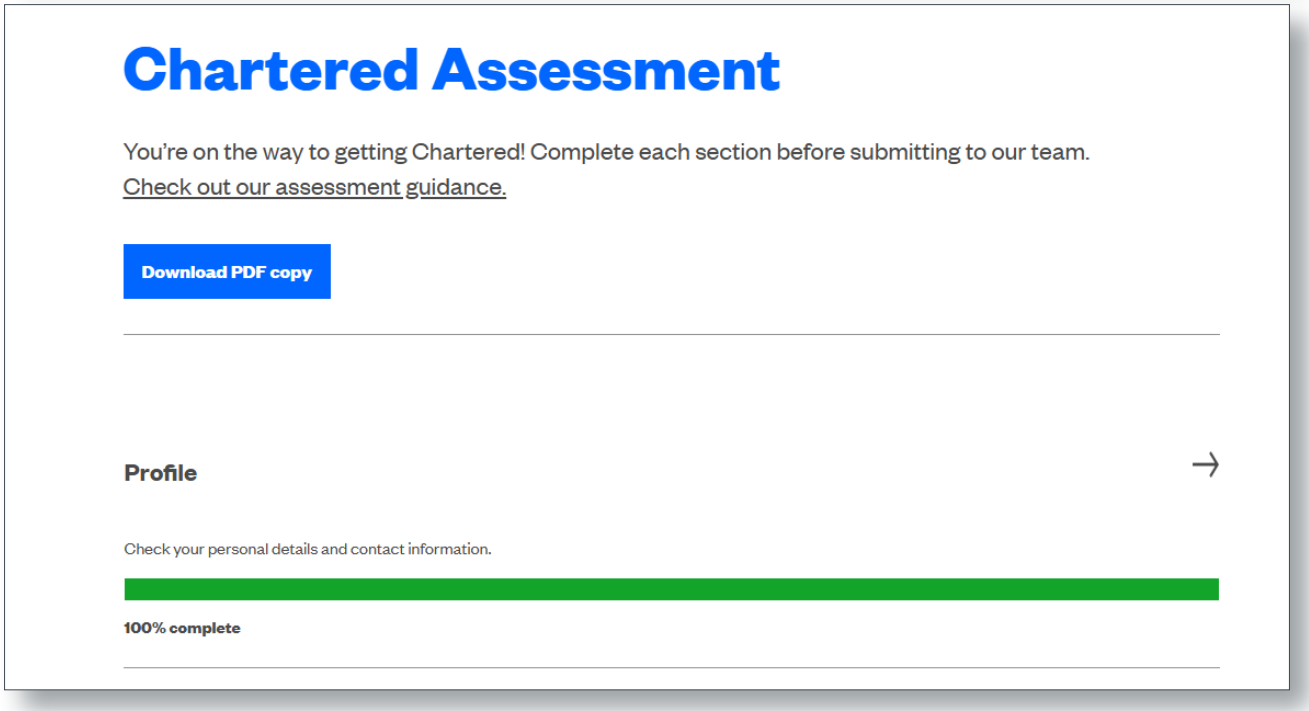
You will need to nominate two referees in order to complete your application to register as a PEngGeol. Your nominated referees will be sent an invitation to provide a reference for you. If they accept the invitation, they'll be asked to provide information about your professionalism and technical competence as an Engineering Geologist. 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 Supporting Document C – referee declaration form. 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:





Send your completed 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.

WHAT IS AN EXAMPLE OF A GOOD REFEREE?

Both referees need to be (in order of preference) either PEngGeol, CPEng, CMEngNZ, or chartered with a recognised international professional engineering body. Your referees 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.
- ✓ 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 an engineering geologist.
- ✗ Referees who are conflicted; for example, through a close personal relationship with you or having a financial interest in the outcome of the assessment.

Tip: 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 Engineering Geology work.

REFEREE QUESTIONS

Referees will be asked the following questions[2]:

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 as an engineering geologist. If you're unable to provide a technical reference in the practice field of the applicant, please decline this request for a reference.

Engineering geology competency

Please comment on the technical engineering geology competence of the applicant to practice within their practice area. Do you consider the engineering geologist to be competent in the 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 geology 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 application to join Engineering New Zealand as a Professional Engineering Geologist?

Referees may also be contacted by assessors during the evaluation process.

d) CPD

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

2 The online form completed by referees refers to registration as CPEng – please notify your referee that you are applying for PEngGeol and to ignore any references to CPEng. If they feel more comfortable, referees can respond to the engineering geologist referee questions above at assessment@engineeringnz.org

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 Engineering Geology. The table below sets out the ideal mix of CPD for applications:

- ✓ Active involvement in the New Zealand geotechnical/geological industry is essential. You will need to specifically demonstrate your knowledge of New Zealand codes, regulations and technological development.
- ✓ Evidence of learning linked to the application of contemporary knowledge of the engineering geologist's practice area.
- ✓ CPD activities across different categories to show a diversity of learning (we recommend at least 15 hours of technical CPD, a few hours addressing risk management and business processes, courses on professional ethics, cultural competency and then a range of activities across career interests).
- ✓ 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 career break that we need to know about, please make this clear in the self-assessment area of your application.

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 geological 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.

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.	No upper limit on number of hours. Minimum 15 hours of technical CPD activities per practice field.
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 ARE ASSESSORS LOOKING FOR?

CPD review questions:

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

e) ID verification

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 Documents area of the application form. The image quality should be clear enough for assessors to read 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.

f) Work samples

This part of your application is key to demonstrating your current technical competence as an Engineering Geologist. 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 professional engineering geologist, an assessor needs to confirm that the provided work samples clearly demonstrate competency in relation to the required core competencies and the body of skills and knowledge for Engineering Geologists.

You will need to provide sufficient evidence to demonstrate competence as an Engineering Geologist. 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.

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 engineering geologist provided 4–6 work records?
- Do evidence statements clearly state how files provided are relevant to the assessment, and which competency group they relate to?
- Have New Zealand specific examples been provided or knowledge of the New Zealand context mentioned?
- Has the engineering geologist explained how the work samples demonstrate complex work?

g) 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, look at Appendix 1, 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.

h) Supporting Documents

In this area, you must provide your work history. 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 engineering geologist.

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 more importantly, 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. Supporting Document A provides a CV template you're encouraged to use.

- ✓ 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 an Engineering Geologist.
- ✓ Provide sufficient work history to demonstrate the broad scope of competency required for membership as an Engineering Geologist.
- ✓ 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/since graduation/in the last 6 years.
- ✗ A list of projects you have worked on with no information on your roles and responsibilities.

WHAT ARE ASSESSORS LOOKING FOR?

Work history review questions:

- Has the engineering geologist 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 geology work?
- Does their work history demonstrate ongoing involvement in the profession?

i) 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 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 is a professional conversation, rather than an interrogation. It is an opportunity to demonstrate your understanding of the engineering geology 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 geological problems and activities
- Challenges you faced
- Lessons you learned
- Ethical dilemmas/issues you dealt with.

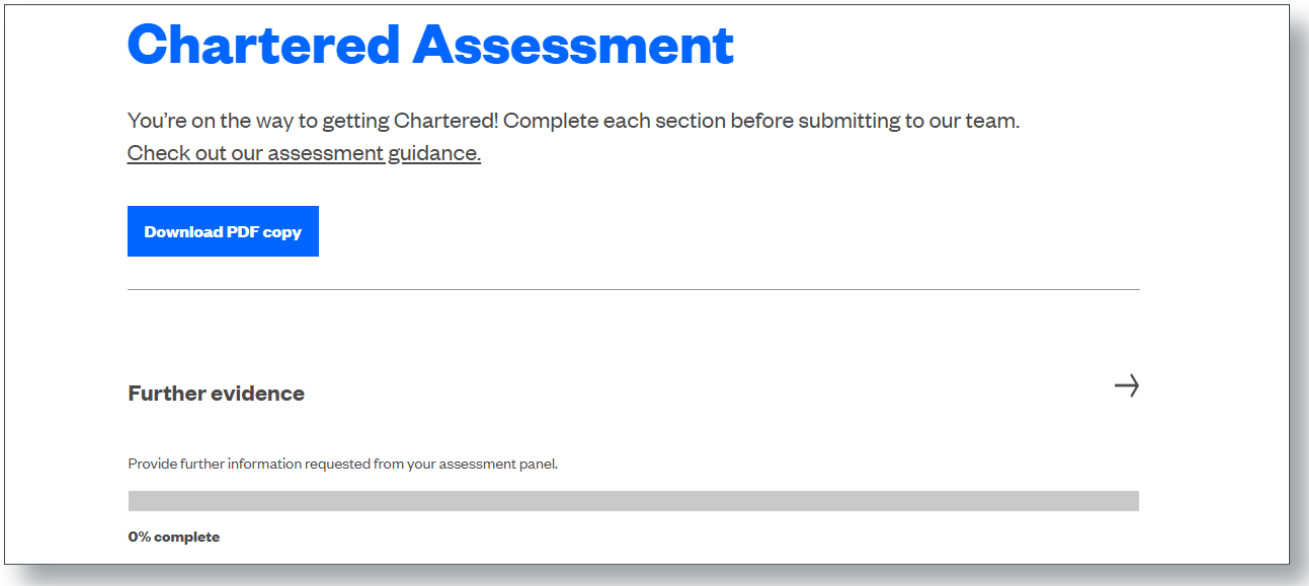
Please note that all interactive assessments are conducted via videoconference and will require you to have a working webcam. Interactive assessments are also recorded for quality assurance purposes. Recordings are securely stored on Engineering New Zealand's server for a period of three months, or until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



Stage 6: Decision

Your advisor will let you know the proposed outcome of your application. If successful, your name will appear on our online membership database – Find an Engineer. 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.

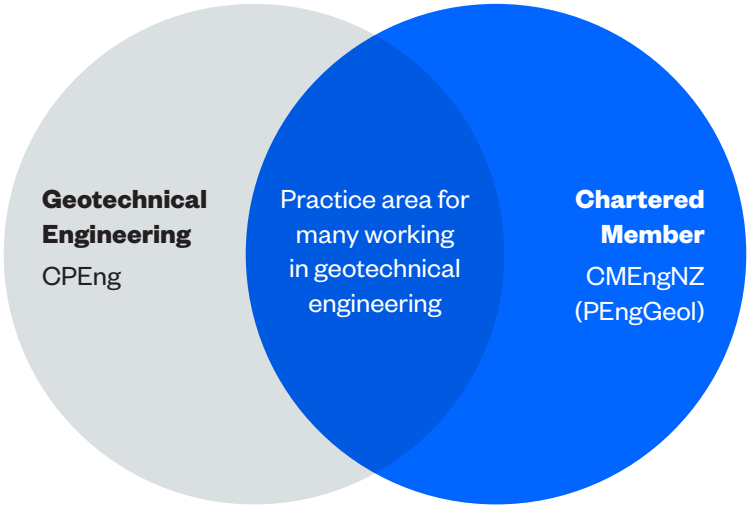
Appendix 1: Professional Engineering Geologist competence performance indicators

You'll need to demonstrate that you are able to practise competently as an Engineering Geologist, to the standard expected of a reasonable professional engineer. The extent to which you are able to perform each of the following numbered elements 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 for the definition of complexity as well as some examples of how you may be able to provide evidence of complexity for membership as an Engineering Geologist).

Each competency standard is described below, together with performance indicators which help clarify how you may be able to demonstrate that you have met the standard as an Engineering Geologist. Note that as these are indicators, you do not need to provide evidence on every indicator. The indicators are there as a guide, to assist you in providing types of work or evidence required of an Engineering Geologist to meet the element descriptions and build the holistic picture of an Engineering Geologist.

GEOTECHNICAL ENGINEERING AND ENGINEERING GEOLOGY

Many Chartered Members (PEngGeol) work in the overlapping area of the diagram. To be successful when applying to become a Chartered Member (PEngGeol), you'll need to provide evidence that covers the full breadth of Engineering Geological activity.



Part 1 – Engineering geology knowledge

Competence standard description

a. Comprehend, and apply their knowledge of accepted principles underpinning:
   i. widely applied good practice for professional engineering geology; and
   ii. good practice for professional engineering geology that's specific to New Zealand.

b. Maintain the currency of their professional engineering knowledge and skills.

Engineering Geologist performance indicators

- Scoping of Engineering Geological input to issue/problem/project
- Review of existing data
- Site or route selection
- Establishment of an initial geological and engineering ground model and assessment of the engineering geological issues that need to be addressed in a project
- Development of engineering geological investigation programmes focussed on addressing these issues
- Performance of engineering geological mapping, geotechnical field investigations and laboratory studies
- Interpretation of geological, geomorphological and hydrogeological conditions and hazards
- Refinement of initial ground model and clear communication of the significance of geological conditions and hazards to other engineering disciplines and related professionals involved in the project
- Development of recommendations related to design, mitigation and construction
- Preparation of engineering geological report
- Documentation of the geological, geomorphological and hydrogeological conditions and hazards encountered during construction, and interpretation of the implications of those conditions for design or construction progression
- Awareness and use of key New Zealand technical documentation, guidance, standards and regulations eg NZGS Field Description of Soil and Rock Description guideline, Building Act the New Zealand Building Code etc.

Part 2 – Managing engineering work

Competence standard description

- Take responsibility for making decisions on one or more complex engineering geology activities
- Manage one or more complex engineering geology activities in line with good engineering management practice
- Make sound professional engineering judgements
- Identify, assess and manage uncertainty and geotechnical risk
- Consider safety, sustainability and quality when managing engineering geology work.

Engineering Geologist performance indicators

- Plans, schedules and organises engineering geology activities
- Estimating time and cost and tracking costs
- Applies appropriate quality assurance techniques
- Manages conflicting demands and expectations
- Demonstrate effective self-management skills (including: undertaking professional development' setting own goals; practising effective time management; and recording professional development activities
- Active participation in quality system continuous improvement activities, such as quality audits and or peer reviews
- Seeks and incorporates feed-back from stakeholders (such as clients) and peers
- Supervision, inspection and sign-off of the geological, geomorphological and hydrogeological aspects of construction, post-construction and site monitoring.

Part 3 – Professional acumen

Competence standard description

- Carry out your professional engineering geology activities to an ethical standard, at least equivalent to the Engineering New Zealand Code of Ethical Conduct
- Recognise the likely social, cultural and environmental effects of professional engineering geology and engineering activities
- Communicate effectively with engineers and others.

Engineering Geologist performance indicators

- Demonstrate understanding of significance of design verification actives, and able to identify potential stakeholders effected by design verification activities
- Awareness of potential life safety risks, social, cultural, and environmental impacts related to design verification
- Evidence of effective professional communication
- Evidence of exercising judgement on own competence – outline actions taken when confronted with work outside own area of competence
- Awareness of potential risks to impartiality and appropriate mitigation measures. How does the applicant deal with potential conflicts of interest?
- Applicant's plan to deal with undue pressure from employer, clients or other stakeholder
- Dealing with situations where requirements of codes, standards or regulations are unclear or vague
- When dealing with unfamiliar or new areas, seeks appropriate guidance, and utilises a variety of appropriate resources such as codes/standards, textbooks and reputable technical journals.

Part 4 – Developing technical solutions

Competence standard description

- Recognise, define, investigate and analyse complex geological engineering problems in line with good practice for professional engineering geologists
- Analyse and communicate complex engineering geological problems in order to inform development of engineering solutions in line with good practice for professional engineering geologists.

Engineering Geologist performance indicators

- Evidence demonstrates knowledge of technical fundamentals (including initial specification and brief in terms of client perceptions, use of engineering design standards and specifications) to scope a complex engineering problem
- Examples of methodologies used for analysis, prediction, and choice outside those encompassed by standard codes (including preparing functional design requirements, addressing design concepts, and determining possible design constraints)
- Evidence of literature searches, use of network of peers to gather information on approaches to problem solving
- Demonstrates use and understanding of appropriate analysis techniques
- Can perform appropriate material selection, including consideration of strength, deflection, high and low temperature, wear and fatigue
- Applies appropriate analysis techniques
- Reports from commonly available analysis software are acceptable but having done the hand /manual calculations for results verification would be an added advantage. Where manual calculations are not available, applicant should provide additional supporting material and notes to demonstrate their knowledge on the code calculations performed by the software
- Applicant should be able to demonstrate basic checks of results from computer analysis
- Applicant shall expect the panel to ask in-depth technical questions regarding the work samples provided and questions from any areas not covered in the application but deemed important by panel
- How does the applicant maintain their technical competency?
- CPD records must contain activities relevant to engineering geology.

Appendix 2: Defining complexity

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

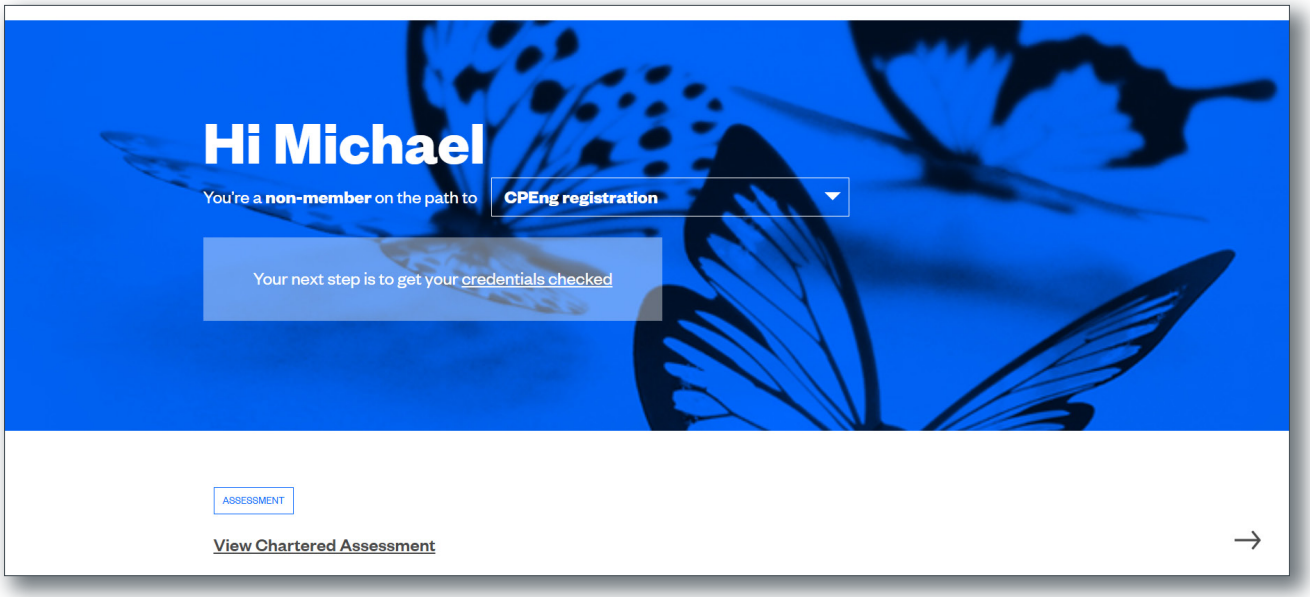
Chartered Member (PEngGeol)	
Complex engineering geological problems Problems that include some or all of the following: • Wide-ranging or conflicting engineering, engineering geological and other related issues • Not easily recognised, understood or solved, which means an original method of analysis 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.

Here are some examples of how Engineering Geologists may provide evidence of complexity at the required level:

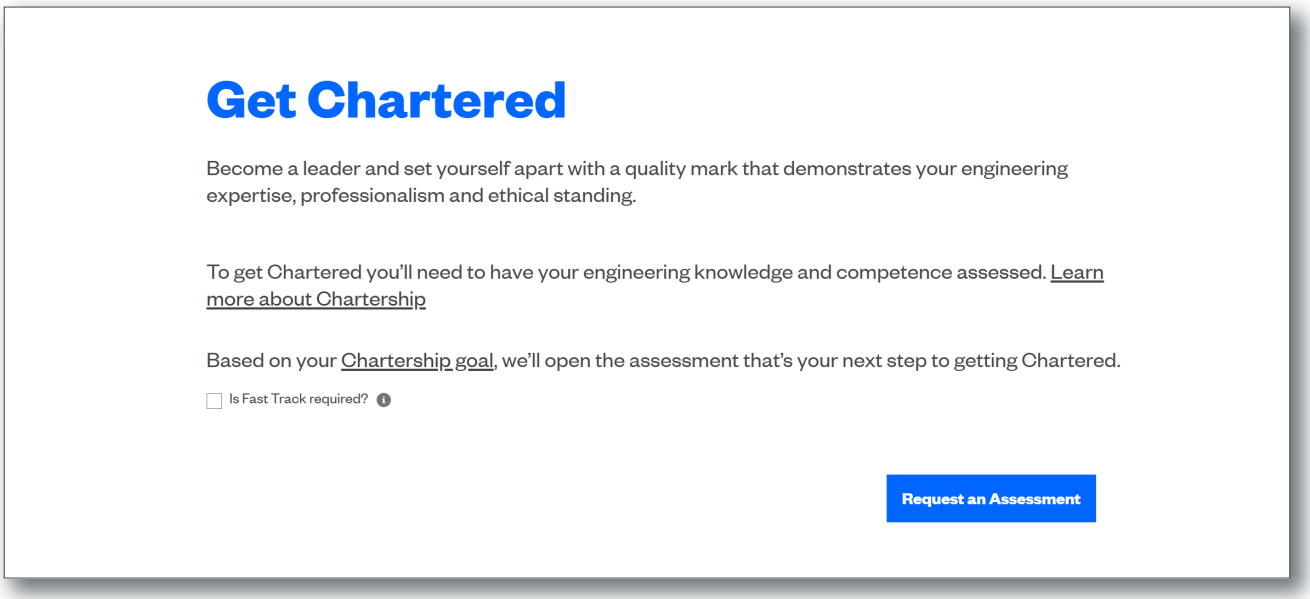
- Mapping and characterisation of difficult soils and/or rocks for either infrastructure route selection, land development, dams, tunnels or mines
- Mapping and characterisation of complex soil and rock masses for stability assessment of natural, fill and cut slopes, under static and seismic loadings, and to inform the design of potential mitigation measures
- Mapping and characterisation of a range of ground conditions to inform the design of either IL 2 buildings (as defined by AS/NZS 1170.0; as an example of typology), or bridges, dams and tunnels of comparable importance, on or in a range of foundation types
- Assessment of situations with high risk to life or property where special precautions or expertise are or may be required to identify and assess impacts from geological hazards, for example during a response to an emergency event such as an earthquake
- Characterisation and selection of soil and rock construction material for earthworks requiring a range of characteristics and properties.

Appendix 3: Online application form

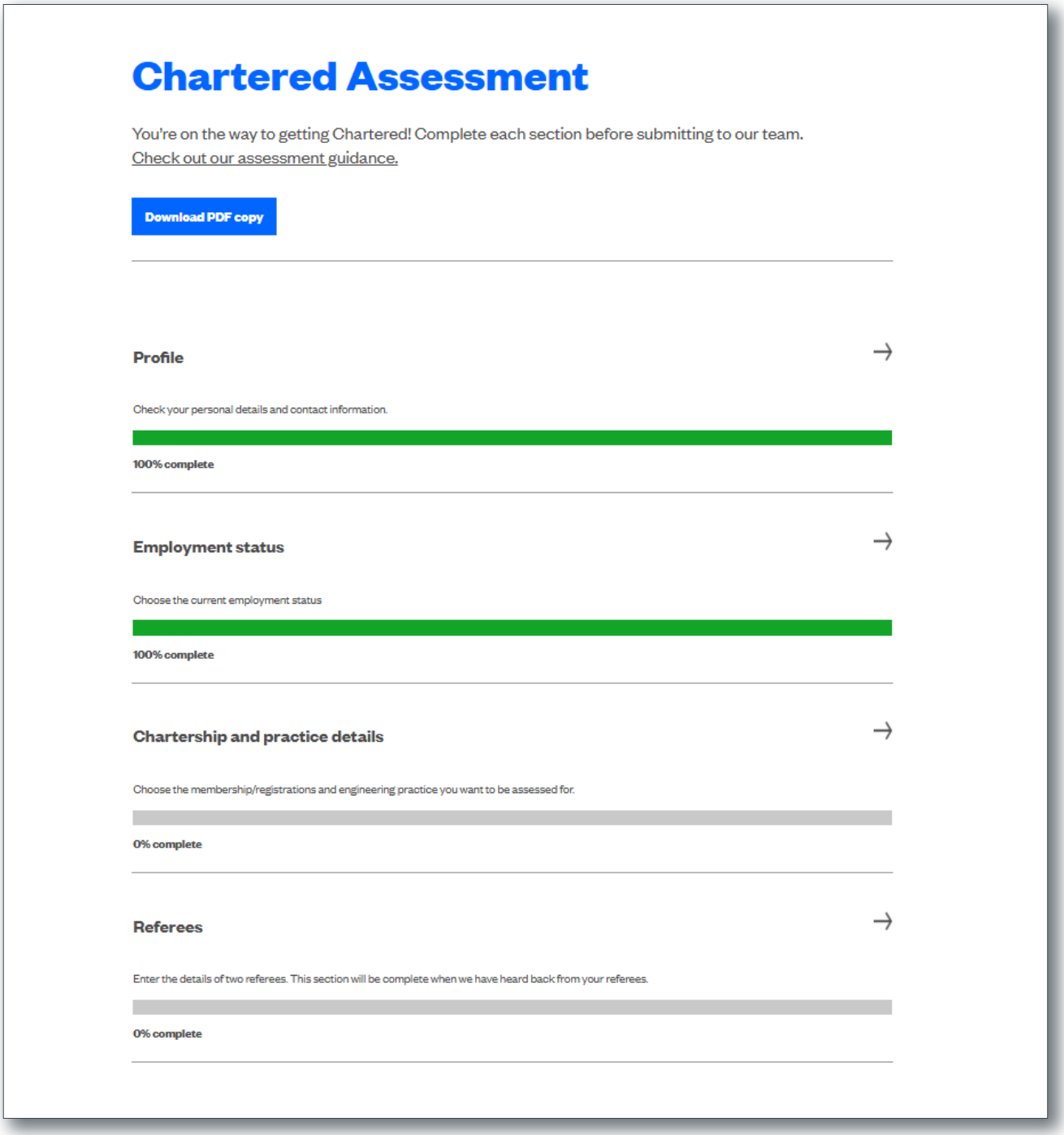
The system automatically detects your current status with Engineering New Zealand. It states which application you are eligible to complete.



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 will be unable to submit your application until all sections are completed.



Profile

Check your personal details and contact information. Make any changes before submitting your assessment application.

First name
Mike

Last name
Jones

Preferred name
Michael

Customer number
02013965

Title

Employer
Engineering New Zealand

Role

Email
assessment@engineeringnz.org

Mobile
027 777 7477

Other phone

Employment status

***Which of the following best describes your current employment situation?**

- ◯ **I am employed in New Zealand in an engineering role**
- ◯ **I am currently unemployed**
- ◯ **I am employed but based overseas**
- ◯ **Other**

‹ **Back** **Update**

Chartership and practice details

Tell us the membership/registrations and engineering practice you want to be assessed for.

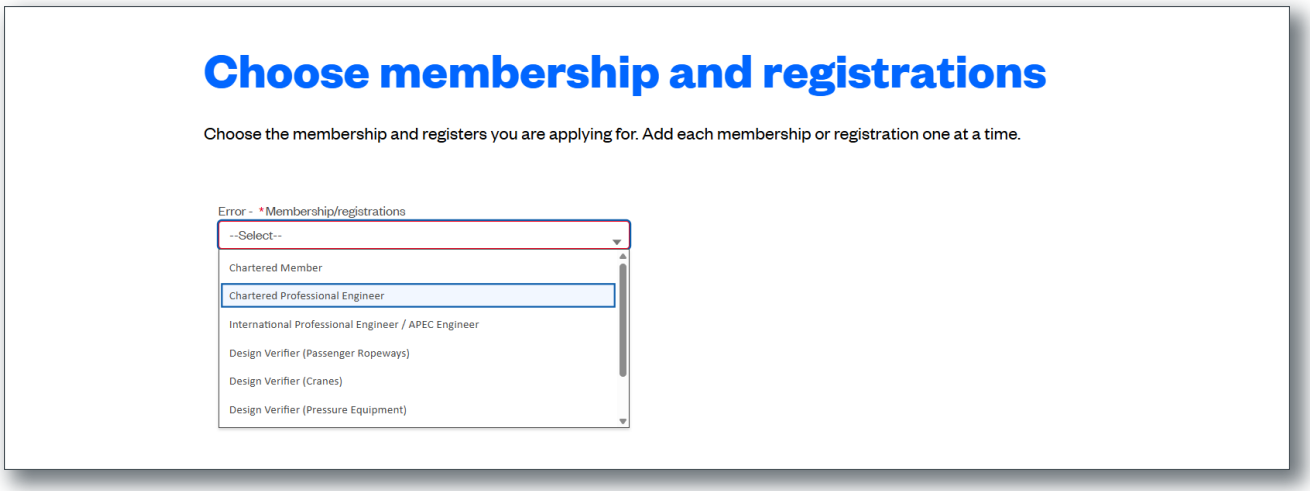
Membership/registrations
Choose the membership and registers you are applying for.

Add each membership or registration one at a time. Your selection will show in the table below.

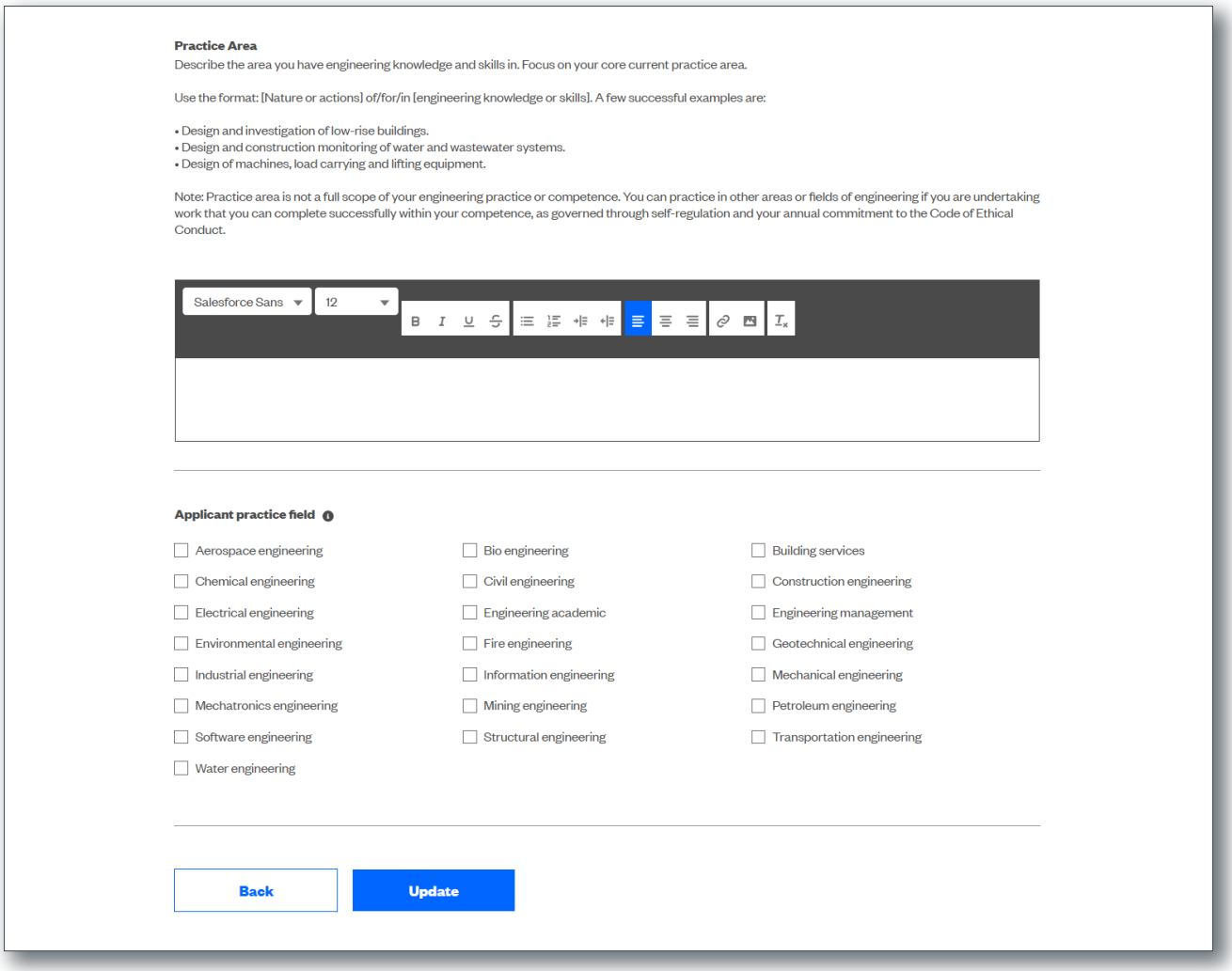
Membership/registration	Actions

You haven't selected a membership or any registers yet.

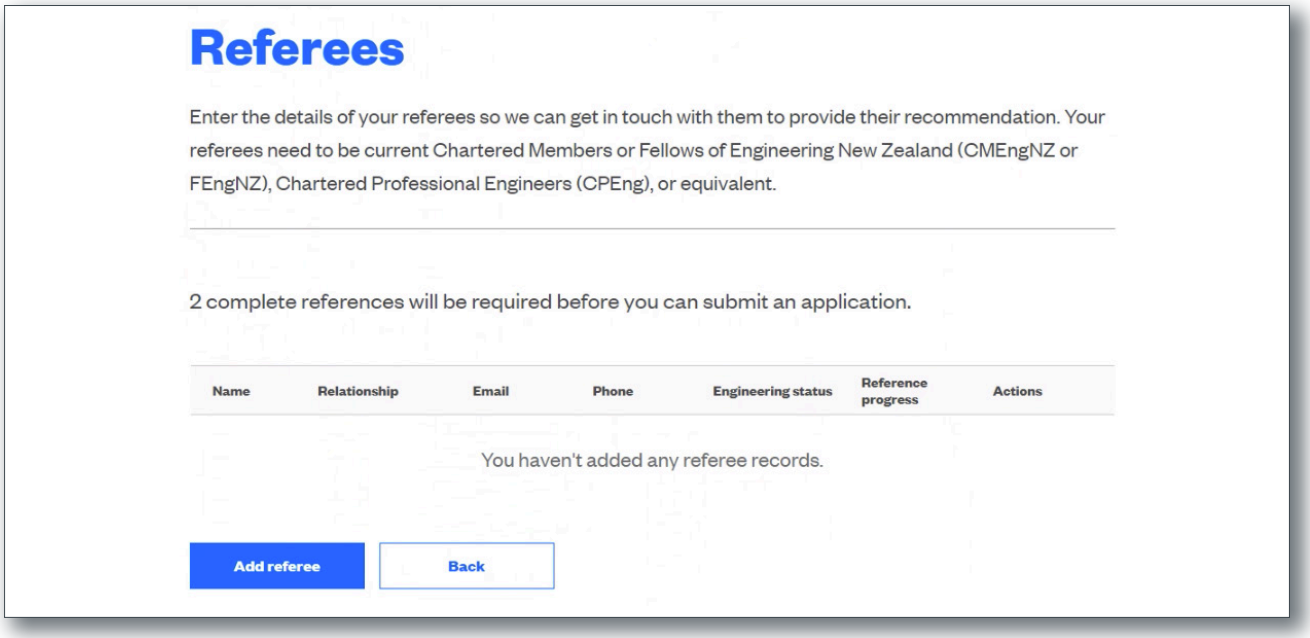
Add membership/registration

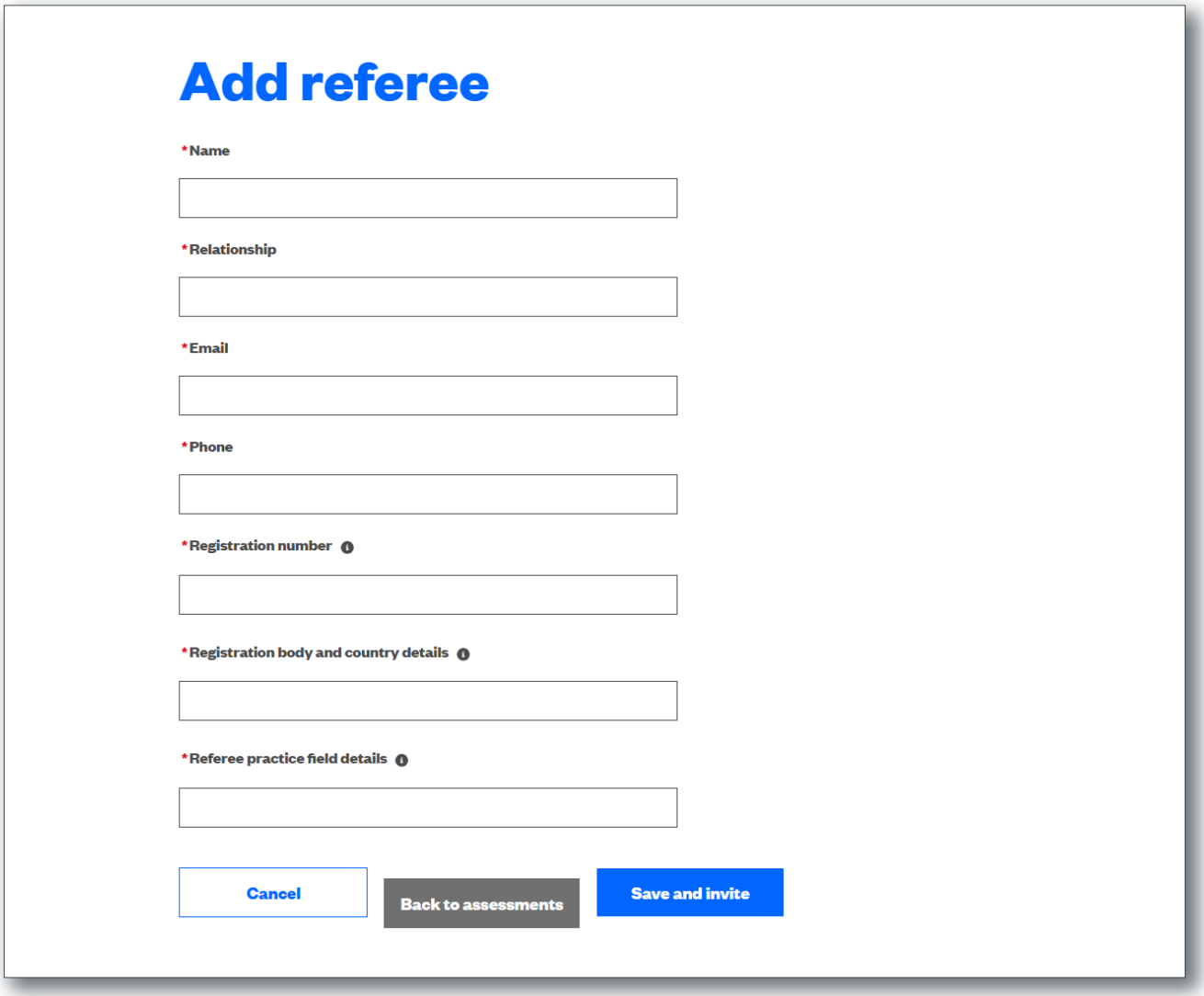


Select your practice field(s). You can select 1-2 fields, however for a geologist application, one field (typically geotechnical) is sufficient. You will also need to add your Practice Area Description (PAD). This should consist of no more than 15 words.

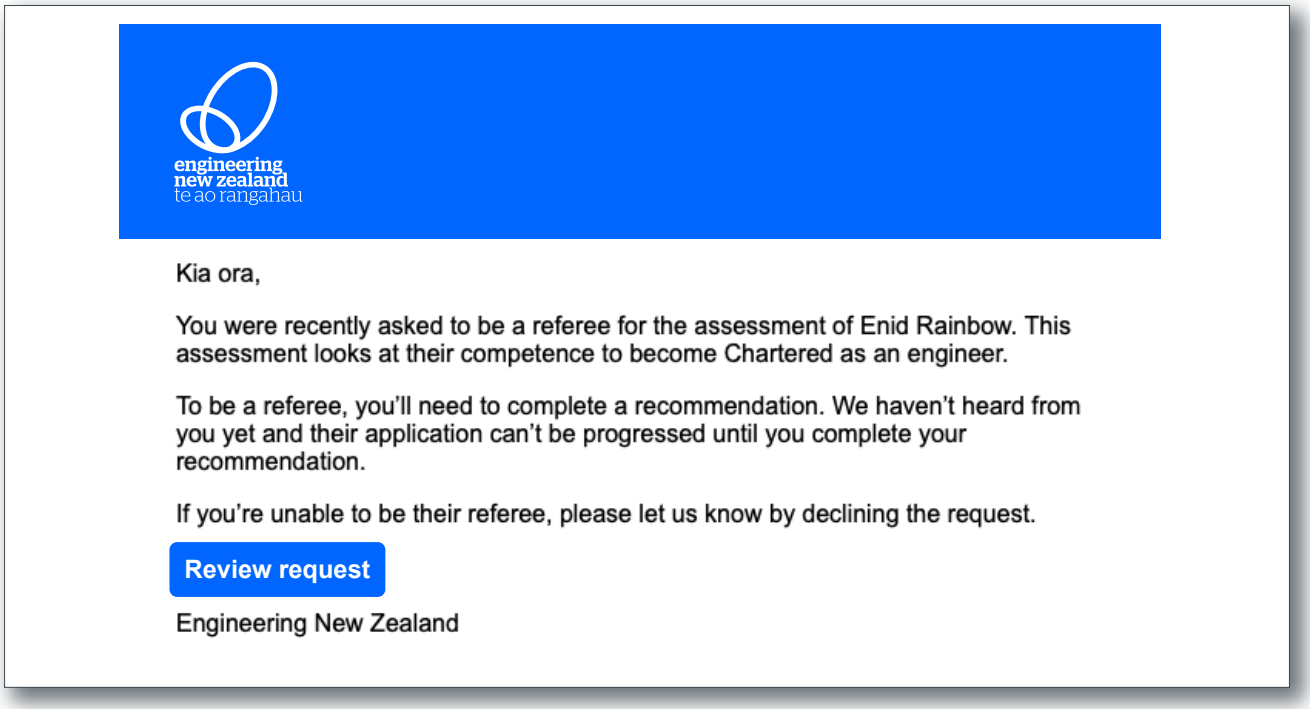


Nominate two referees are familiar with your technical and professional capabilities. Refer to the referee guidelines for more information.





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



engineering new zealand
te ao rangahau

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.

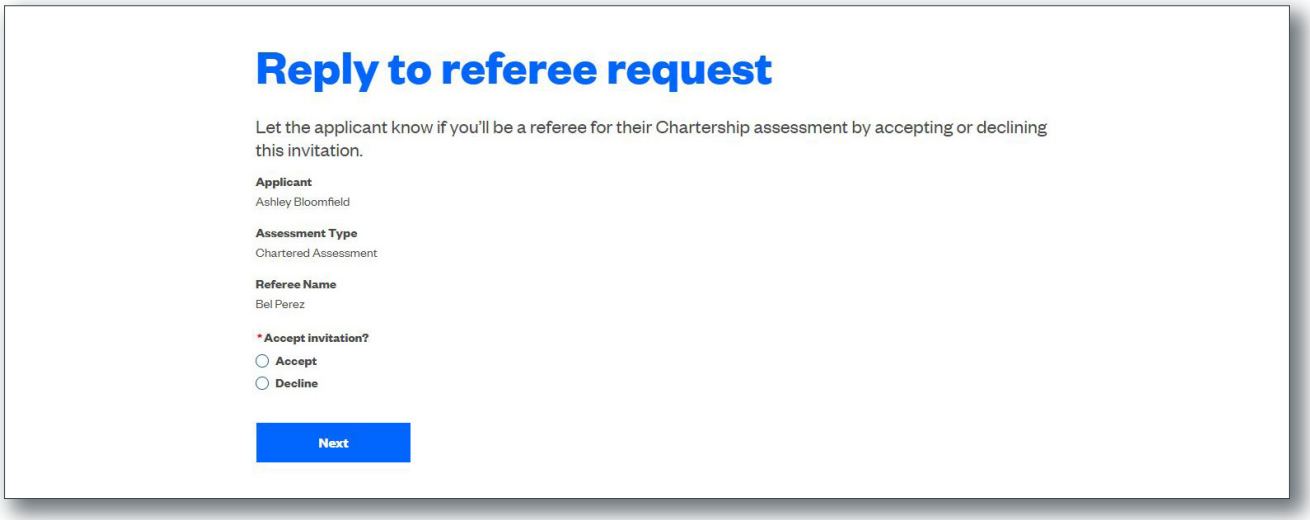
To be a referee, you'll need to complete a recommendation. We haven't heard from you yet and their application can't be progressed until you complete your recommendation.

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:



Reply to referee request

Let the applicant know if you'll be a referee for their Chartership assessment by accepting or declining this invitation.

Applicant
Ashley Bloomfield

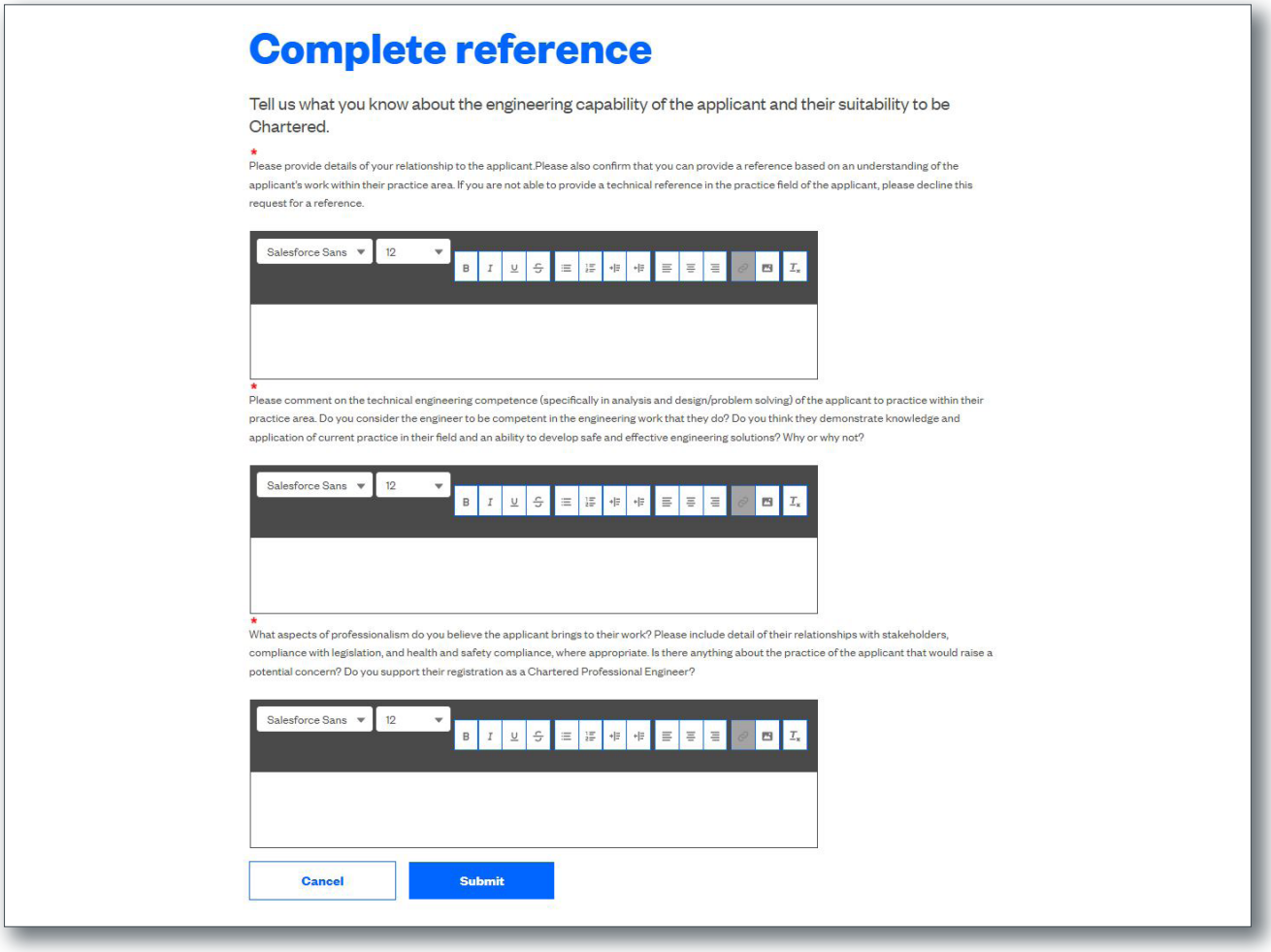
Assessment Type
Chartered Assessment

Referee Name
Bel Perez

*Accept invitation?
○ Accept
○ Decline

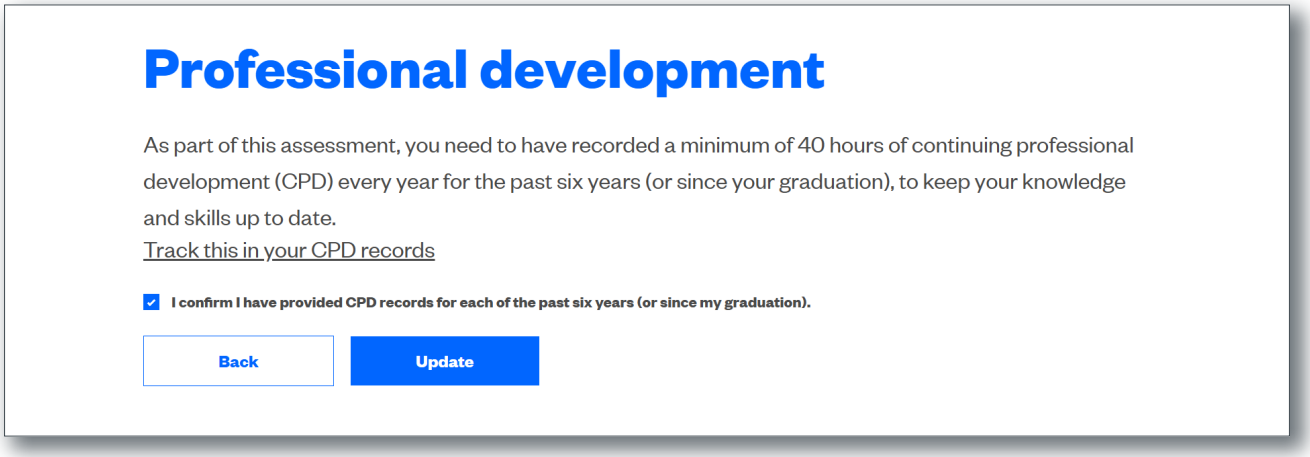
Next

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



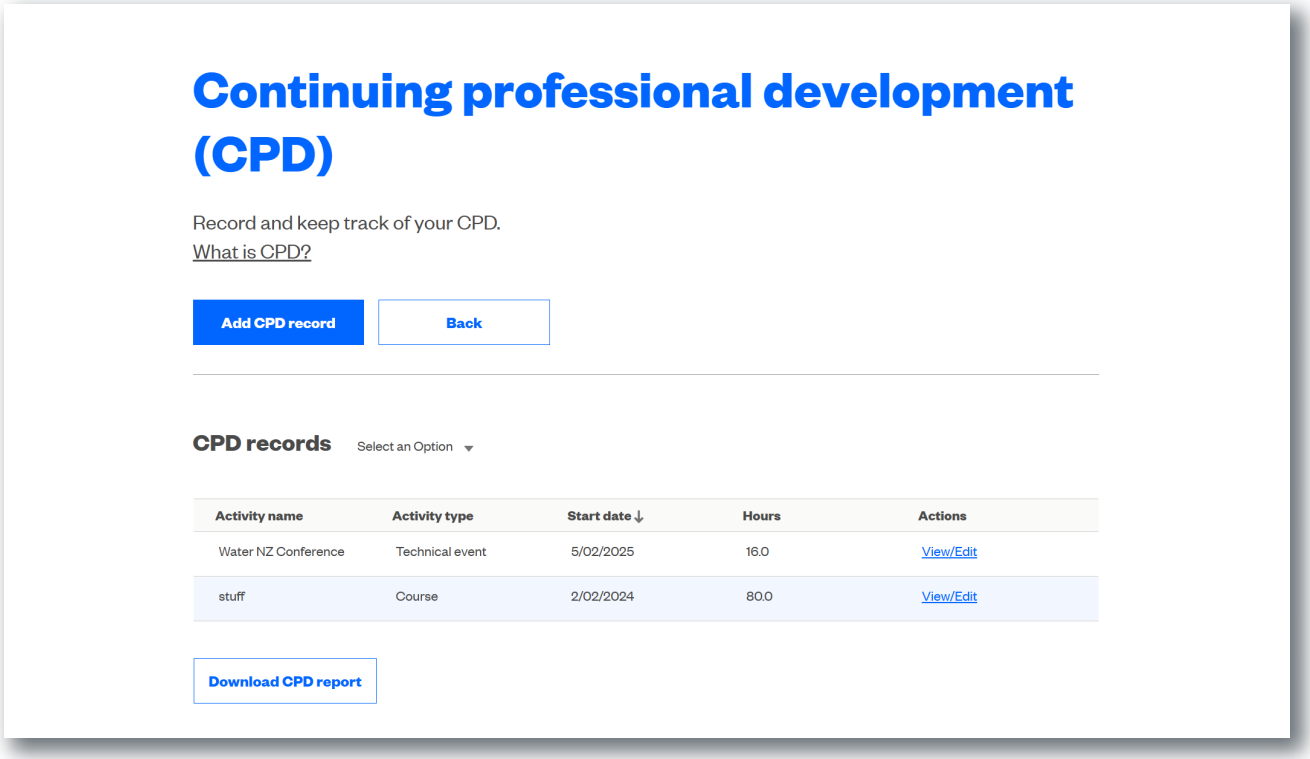
When a referee completes their response and clicks ‘submit’, you will receive an email notifying you of this. It is up to you to follow up with your referees. You won't be able to submit your application until both of them have submitted their responses.

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.

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.

Engineering New Zealand
Institute of Engineering Professionals
hello@engineeringnz.org
www.engineeringnz.org
PO Box 12 241
Wellington 6144
04 473 9444

CPD RECORDS – LAST 6 YEARS

Applicant: Michael Jones
Customer Number: 02013965
Date: 19/06/2025

Summary

Years	Hours
2025	16.0
2024	80.0
2023	0.0
2022	0.0
2021	0.0
2020	0.0

2025

Technical event

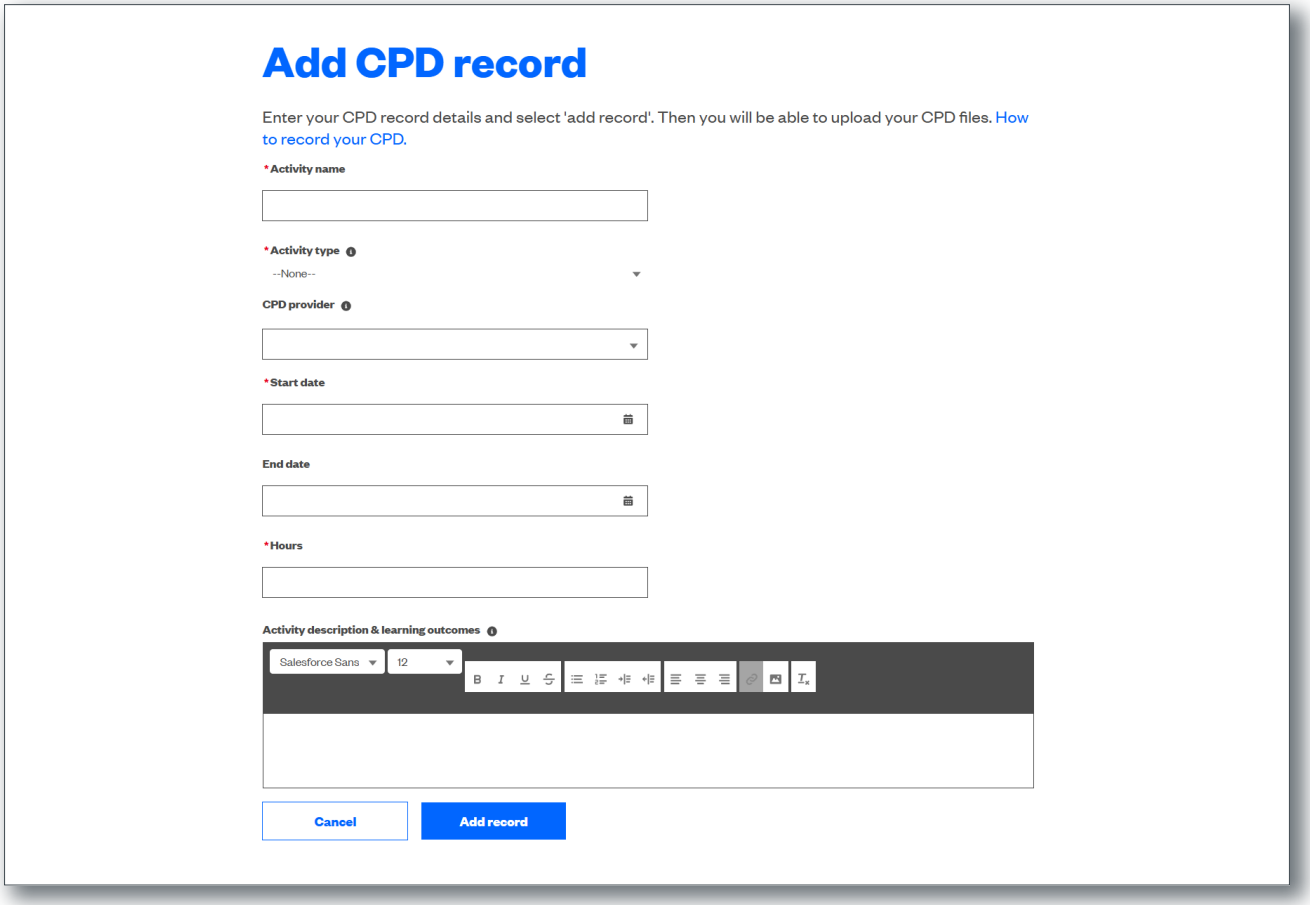
Activity	Provider	Start date	End date	Hours
Water NZ Conference		05/02/2025	07/02/2025	16

2024

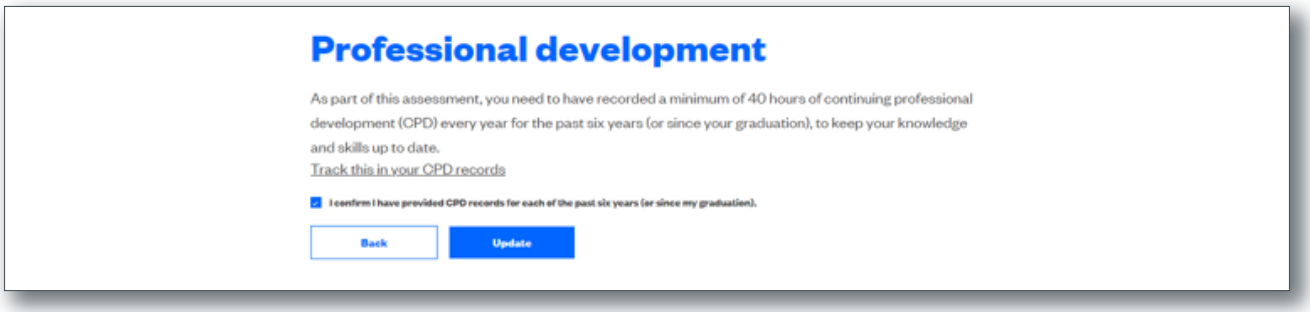
Course

Activity	Provider	Start date	End date	Hours
stuff	Ace	02/02/2024	16/02/2024	80

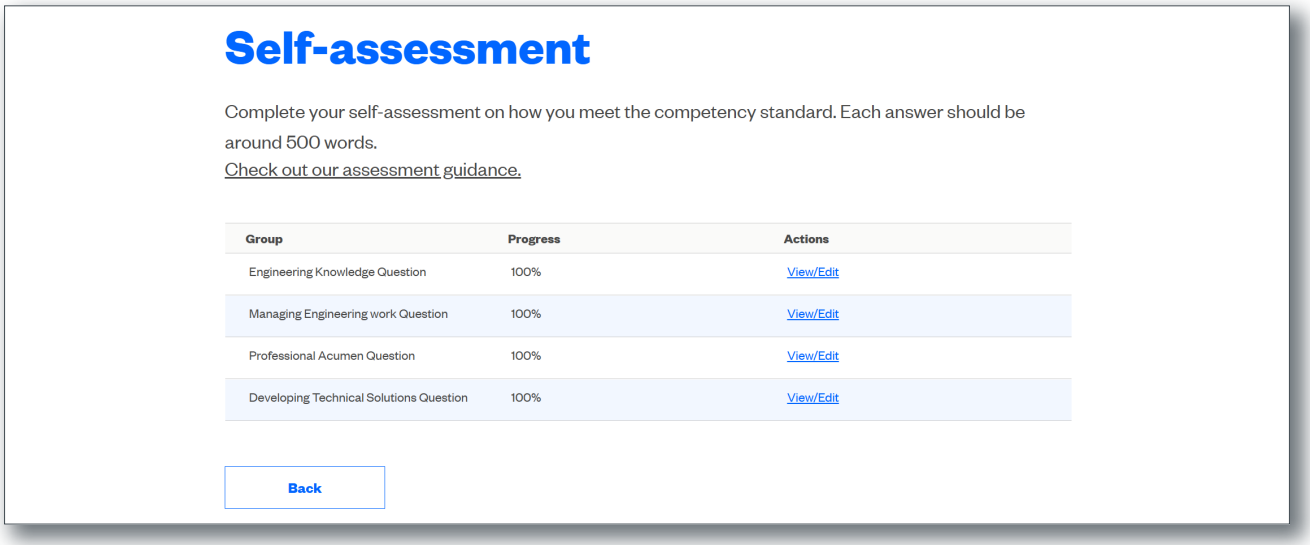
You will need the following information to add new CPD records.



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.



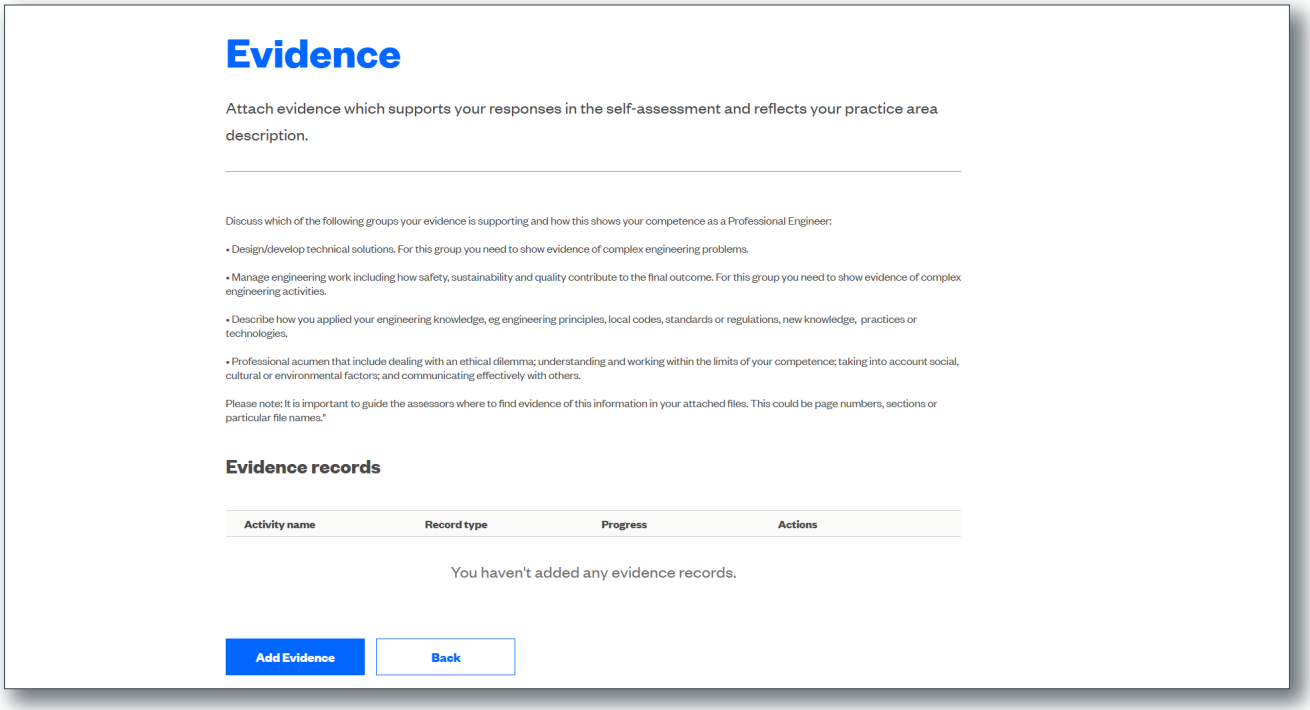
Self-assessment

Complete your self-assessment on how you meet the competency standard. Each answer should be around 500 words.
Check out our assessment guidance.

Group	Progress	Actions
Engineering Knowledge Question	100%	View/Edit
Managing Engineering work Question	100%	View/Edit
Professional Acumen Question	100%	View/Edit
Developing Technical Solutions Question	100%	View/Edit

Back

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.



Evidence

Attach evidence which supports your responses in the self-assessment and reflects your practice area description.

Discuss which of the following groups your evidence is supporting and how this shows your competence as a Professional Engineer:

• Design/develop technical solutions. For this group you need to show evidence of complex engineering problems.

• Manage engineering work including how safety, sustainability and quality contribute to the final outcome. For this group you need to show evidence of complex engineering activities.

• Describe how you applied your engineering knowledge, eg engineering principles, local codes, standards or regulations, new knowledge, practices or technologies.

• Professional acumen that include dealing with an ethical dilemma; understanding and working within the limits of your competence; taking into account social, cultural or environmental factors; and communicating effectively with others.

Please note: It is important to guide the assessors where to find evidence of this information in your attached files. This could be page numbers, sections or particular file names."

Evidence records

Activity name	Record type	Progress	Actions

You haven't added any evidence records.

Add Evidence | Back

Add work record

Enter your work record details and select 'add record'. Then you will be able to upload your work files.

*Activity name

Activity / project description

Salesforce Sans 12

*Organisation

*Role

Role description

Salesforce Sans 12

*Start date

End date

Cancel Add record

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)

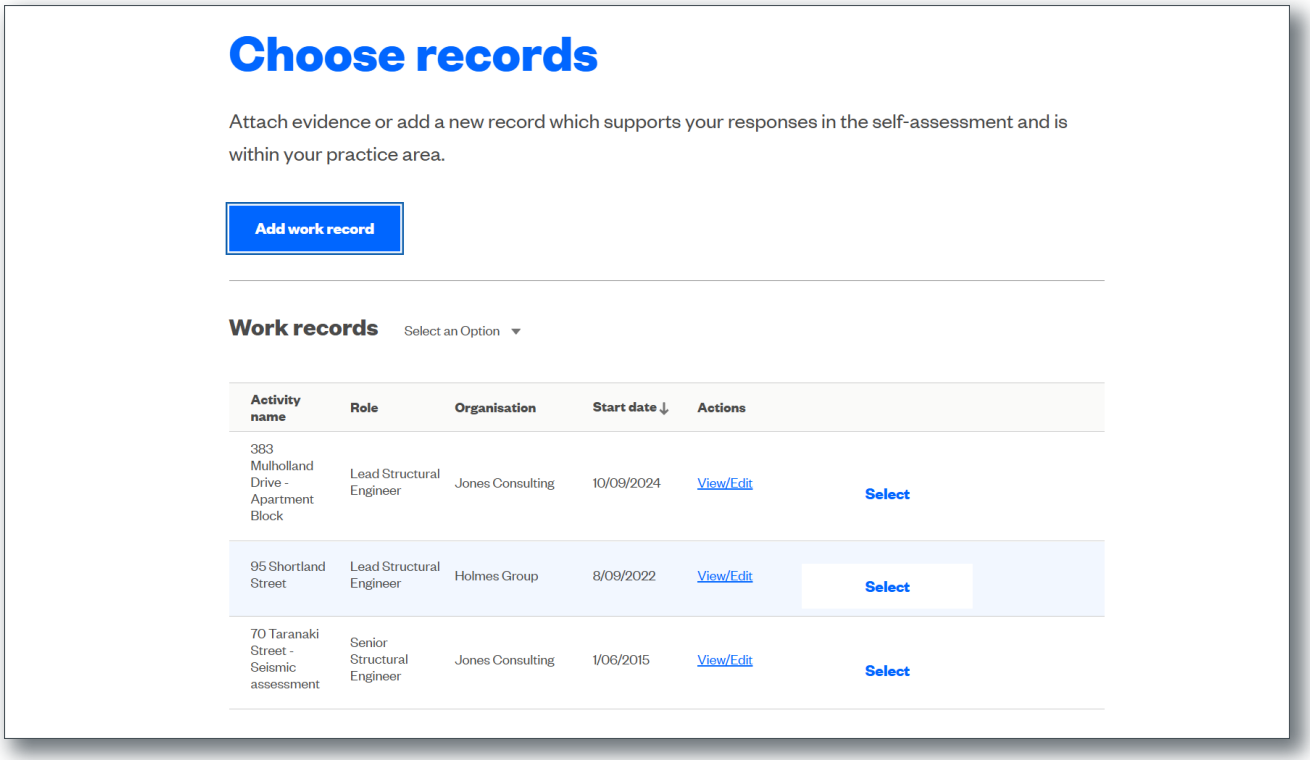
Supporting documents (0) Upload files Prev Next

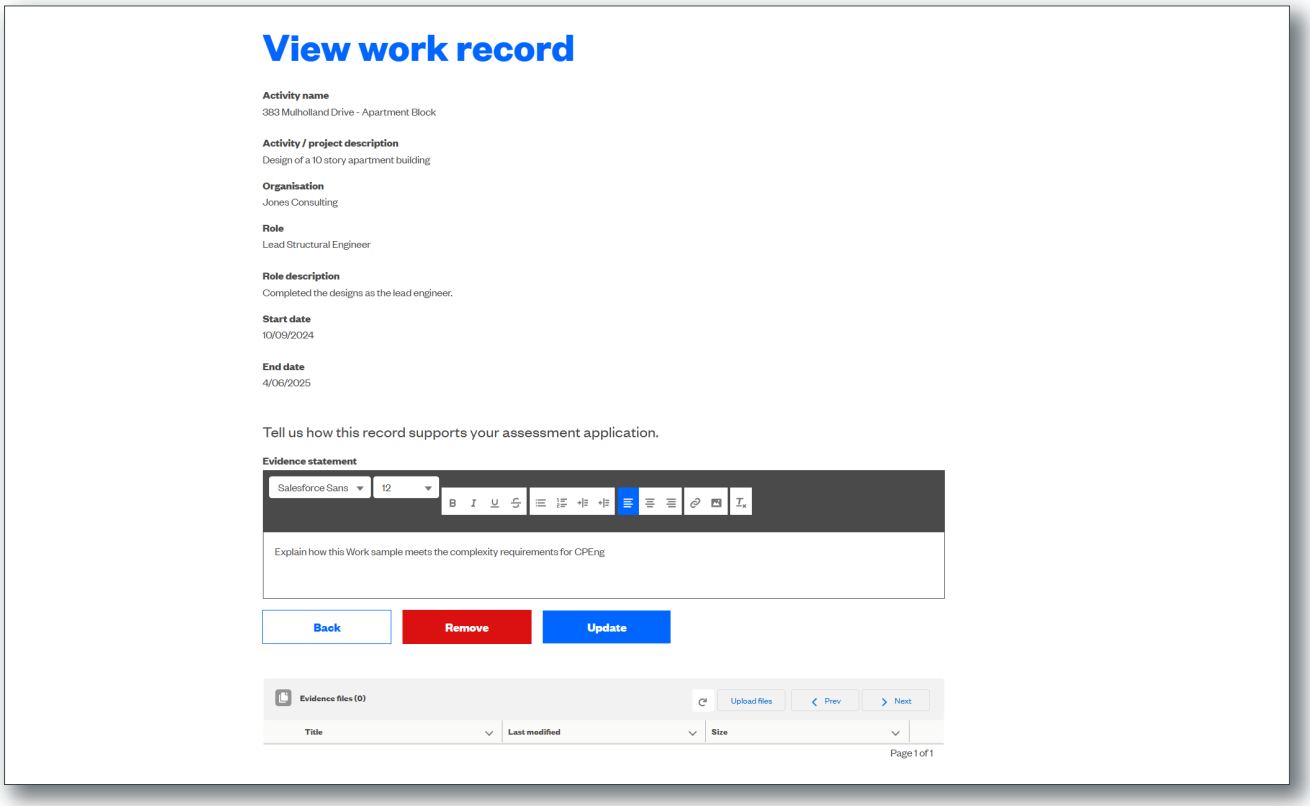
Title Last modified Size

Page 1 of 1

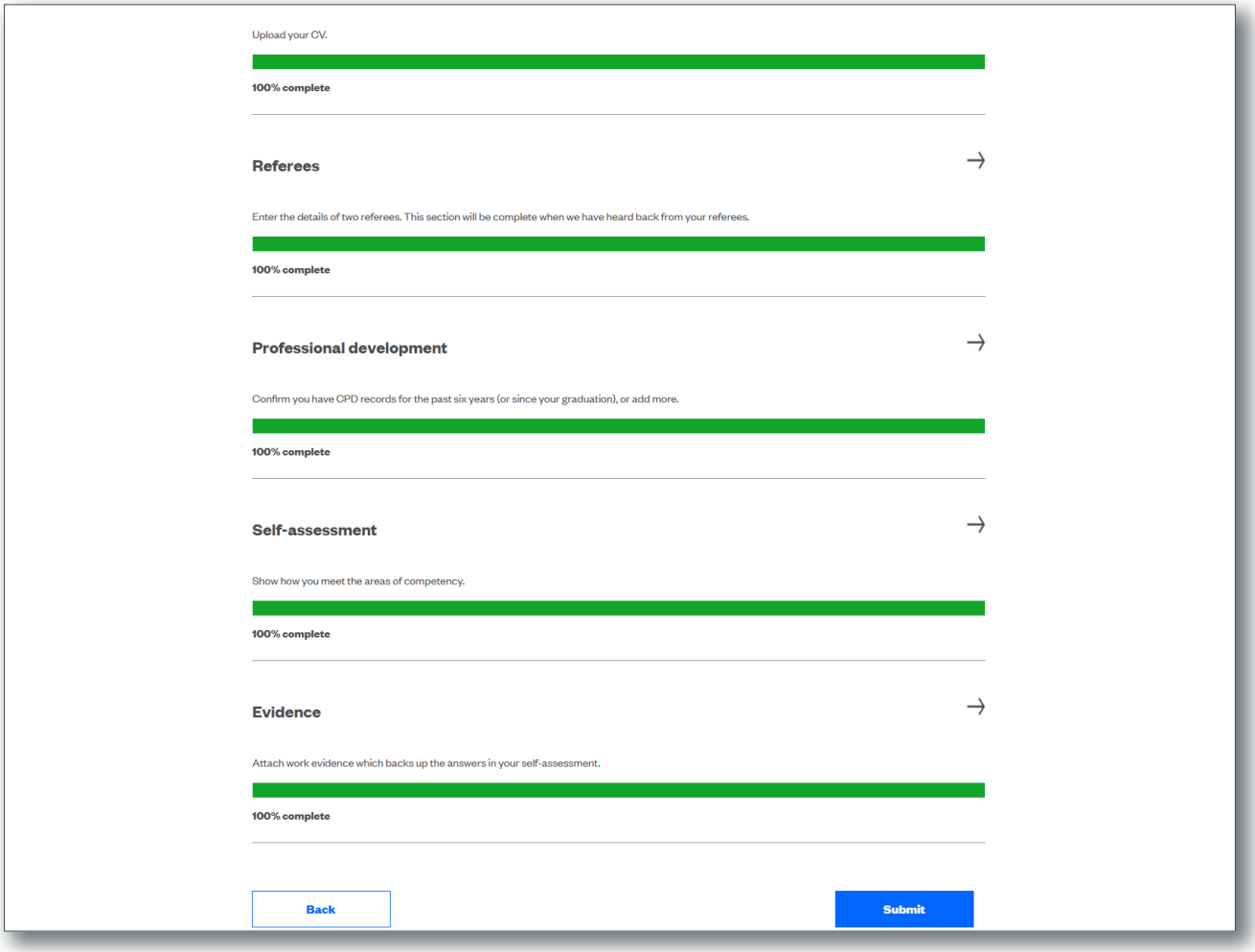
Back

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

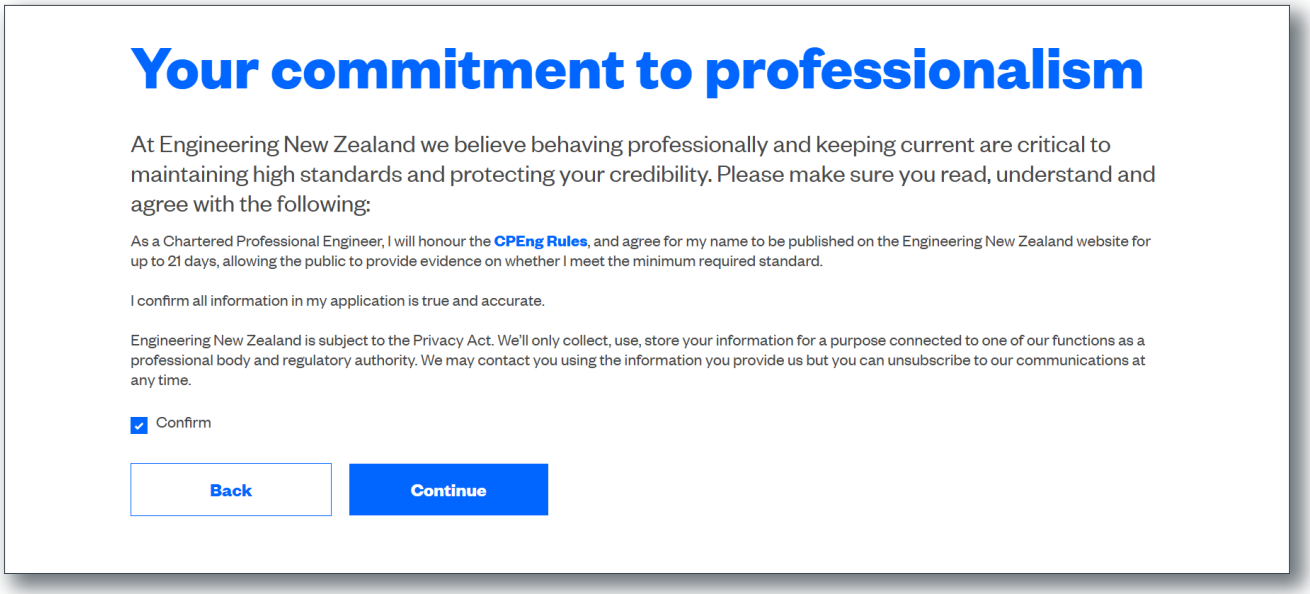




Make sure all sections are 100% completed before you submit your application.



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.)

*

- ◯ 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?

(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.)

*

- ◯ Yes
- ◯ 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.)

*

- ◯ Yes
- ◯ 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 Street

The Villa

*Billing city

Love Island

Billing state/province

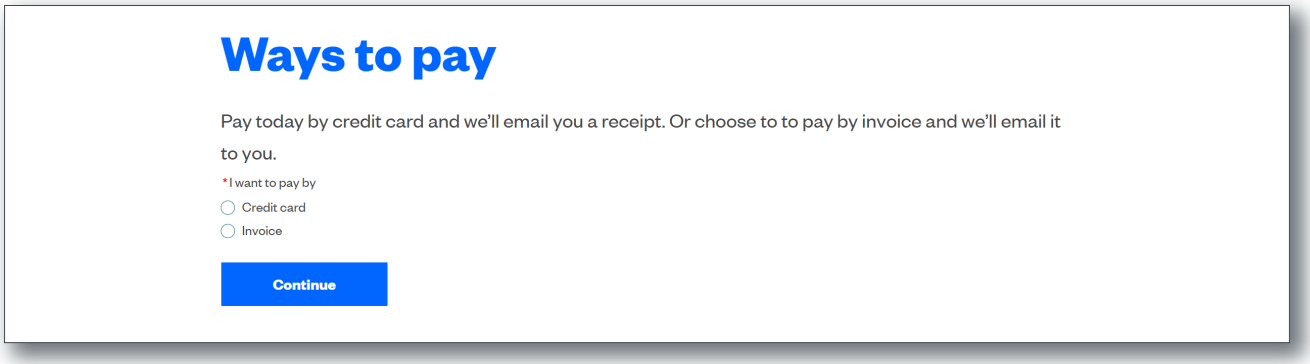
*Billing zip/postal code

*Billing country

Spain

Next

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.

Engineering New Zealand Te Ao Rangahau
hello@engineeringnz.org
www.engineeringnz.org
04 473 9444
L6, 40 Taranaki Street
Wellington 6011