

# **ELECTION OR TRANSFER TO ENGINEERING NEW ZEALAND MEMBERSHIP CLASSES** REGULATIONS

# PURPOSE

- 1. In accordance with Rule 7.3 of the Engineering New Zealand Rules (the "Rules"), these Regulations set out the procedures for:
  - 1.1 approval of applications for the following Engineering New Zealand Membership Classes:
    - Fellow;
    - Chartered Member;
    - Chartered Member (Engineering Technologist);
    - Chartered Member (Engineering Technician);
    - Chartered Member (Engineering Geologist);
    - Member;
    - Emerging Professional;
    - Affiliate Member; and
    - Student Member.
  - 1.2 changing Engineering New Zealand Membership Classes.
- 2. The criteria and procedures for nominations to the classes of Distinguished Fellow and Honorary Fellow are provided for in the Engineering New Zealand Fellowships Guidelines.
- 3. These Regulations are made by the Engineering New Zealand Governing Board (the "Board") pursuant to Rules 22 and 7.3.

# COMMENCEMENT

4. The regulations came into force on 1 October 2017 and were last updated on 12 December 2019.

# **INTERPRETATION**

5. In these regulations, unless the context otherwise requires, —

*Membership Class* means any class of membership as listed in Rule 5.1 of the Rules, but for the purposes of these Regulations it does not include the classes of Distinguished Fellow or Honorary Fellow.

*Recognised experience* means experience gained before or after completing a recognised qualification, through:

- Employment in an engineering, engineering geology or engineering academic role.
- Volunteering in an engineering or engineering geology role.
- Post graduate study in engineering or engineering geology.

*Recognised qualification* means an undergraduate or post graduate tertiary qualification in engineering or engineering geology that is from New Zealand or overseas.

Practice area means an engineer's area of practice, as determined by-

- the area within which they have engineering knowledge and skills; and
- the nature of their engineering activities.

*Practice field* means the field(s) of engineering (taken from a list prescribed by Engineering New Zealand) within which the engineer's practice area lies.

# APPLICATIONS FOR ENGINEERING NEW ZEALAND MEMBERSHIP

- 6. Any person can apply to Engineering New Zealand to become a member of Engineering New Zealand.
- 7. Each applicant must include with their application:
  - 7.1 the Membership Class that they are applying for; and
  - 7.2 a declaration that they will comply with the Rules of Engineering New Zealand and the Code of Ethical Conduct; and
  - 7.3 for applications for the Membership Classes of Fellow, Chartered Member, Member, and Emerging Professional, a declaration that they will comply with the Engineering New Zealand CPD Policy; and
  - 7.4 evidence they meet the criteria for that Membership Class as set out in Schedule 1; and
  - 7.5 the relevant application fee; and
  - 7.6 in the case of an application for Chartered Membership, the additional information required by clause 11 of these Regulations.

# ASSESSMENT OF APPLICATIONS FOR ENGINEERING NEW ZEALAND MEMBERSHIP

- 8. Applications for the following Membership Classes will be assessed against the criteria for the relevant Membership Class as set out in Schedule 1, and determined by the Chief Executive of Engineering New Zealand:
  - 8.1 Member
  - 8.2 Emerging Professional
  - 8.3 Companion
  - 8.4 Affiliate
  - 8.5 Student
- 9. Applications for the Class of Fellow will be determined by the Board, in accordance with the criteria and procedures set out in the Engineering New Zealand Fellowship Guidelines.
- 10. Applications for the Class of Chartered Membership include an assessment of the applicant's engineering competence against the competence standard set out in Schedule 1, and are determined in accordance with the procedures set out in clauses 16 to 28 of these Regulations.

# ADDITIONAL INFORMATION REQUIRED FOR AN APPLICATION FOR CHARTERED MEMBERSHIP

- 11. Every application for Chartered Membership will include:
  - 11.1 the information required by clause 7; and
  - 11.2 the category of Chartered Membership the applicant is applying for; and
  - 11.3 a description of the practice area in which the person wishes to be assessed and the fields of engineering within which the practice area lies; and
  - 11.4 evidence of the following (if applicable and not already held by Engineering New Zealand):
    - i academic and other relevant qualifications; and
    - ii current registration on any engineering registers; and
    - iii results from other assessments of the engineer's competence; and
  - 11.5 a chronological summary of the applicant's work history (including a description of previous employment positions and engineering activities); and
  - 11.6 professional development activities undertaken in the last 3 years; and
  - 11.7 a statement of self-review explaining how the applicant meets the competence standard for the category of Chartered Membership being applied for; and
  - 11.8 work samples with annotations explaining how the samples demonstrate that the applicant meets the competence standard; and
  - 11.9 the contact details of two independent referees who have demonstrated an equivalent level of engineering competence; and
  - 11.10details of any convictions of the person by any court in New Zealand or elsewhere for an offence punishable by imprisonment for a term of 6 months or more; and
  - 11.11any other information that the applicant wishes to be considered; and
  - 11.12a statement signed by the applicant that all the information is accurate and any evidence provided is genuine.
- 12. Engineering New Zealand may excuse an applicant from having to provide the information described in clause 11.5 to 11.9 if either of the following applies:
  - 12.1 the applicant has previously been a Chartered Member or held a class of membership and/or registration through Engineering New Zealand that is equivalent to the category of Chartered Membership that they are applying for; or
  - 12.2 the applicant has equivalent competence to that required for the category of Chartered membership they are applying for, as demonstrated by recognition in an overseas jurisdiction recognised by Engineering New Zealand for the purpose of mutual recognition of engineering competence.
- 13. Engineering New Zealand may request an applicant to provide additional information if the application for Chartered Membership received by Engineering New Zealand does not contain, or is not accompanied by, all of the obligatory statements and information set out in clauses 7 and 11.
- 14. An application lapses if additional information is requested under clause 13 and that information is not received by Engineering New Zealand before the expiry of 6 months after the date of the request. If an application lapses, Engineering New Zealand will refund half of the registration application fee that accompanied the application, unless the application has been given to an assessment panel for evaluation, in which case no refund may be made.

# PROCEDURE FOR THE ASSESSMENT OF APPLICATIONS FOR CHARTERED MEMBERSHIP

#### **Assessment Panel evaluates application**

15. An Assessment Panel will evaluate each application to assess whether the applicant has demonstrated that they meet the minimum standard of engineering competence for the category of Chartered Membership the applicant is applying for.

#### Way in which Assessment Panel will evaluate application

- 16. The Assessment Panel will:
  - 16.1 carry out a preliminary evaluation of the information provided and assess whether the Panel needs more information to complete the assessment, in which case it may request that additional information from the applicant; and
  - 16.2 do all of the following, unless the Panel thinks it unnecessary (in which case, it may carry out one or more, or none, of the following):
    - i carry out an interactive assessment with the applicant by any meeting method; and
    - ii require the applicant to carry out a written assignment; and
    - iii carry out an assessment of the applicant's engineering knowledge by any method the panel considers appropriate; and
  - 16.3 if the Panel thinks it necessary, invite the applicant to provide, within a specified period, any or all of the following:
    - i other information;
    - ii the applicant's information in another form;
    - iii the contact details of up to two further independent referees; and
  - 16.4 have regard to any advice provided by a member of the Competency Assessment Board for the purposes of moderating between assessments; and
  - 16.5 have regard to any other relevant information held by Engineering New Zealand in relation to the applicant.
- 17. The Assessment Panel may take these steps in a different order, repeat or combine any steps, or take additional steps to carry out the assessment.
- 18. After completing the actions required by clause 16, the Assessment Panel will make a recommendation to the Competency Assessment Board on whether the applicant should be granted the status of Chartered Membership in the category applied for.

#### Competency Assessment Board will make a decision on an application

- 19. After considering the Assessment Panel's recommendations, the Competency Assessment Board will decide to approve or decline the application.
- 20. The Competency Assessment Board may only decide—

20.1 to decline an application after complying with clause 21; and

20.2 to reject or vary a recommendation of the Assessment Panel after complying with clause 22.

#### Competency Assessment Board will give applicant opportunity to respond

21. If the Competency Assessment Board proposes to decline an application for Chartered Membership, it will —

- 21.1 notify the applicant of the reasons for the proposed decision; and
- 21.2 give the applicant a reasonable opportunity to make written submissions on the matter.

# Competency Assessment Board will meet additional requirements if rejecting or varying recommendation

22. The Competency Assessment Board may only reject or vary a recommendation of the Assessment

Panel in respect of an application for Chartered Membership if first —

- 22.1 the Competency Assessment Board requires the Assessment Panel to reconsider its recommendation for the reasons given by the Competency Assessment Board; and
- 22.2 the Assessment Panel reconsiders its recommendation, carries out any further steps it considers necessary under clause 16, and reports back on whether its recommendation should be amended; and
- 22.3 the Competency Assessment Board considers the reconsidered recommendation.

### Engineering New Zealand will notify and implement a decision

23. Engineering New Zealand will implement the decision, including notifying the applicant of the decision and the reasons for it.

# **APPEALS ON ASSESSMENT DECISIONS**

- 24. A person may apply to Engineering New Zealand for a review of a decision on their application for Chartered Membership on only one of the two following grounds:
  - 24.1 that the assessment was not carried out in accordance with the procedures set out in these Regulations; or
  - 24.2 that the decision reached by the Competency Assessment Board is manifestly at odds with the evidence presented in the application.
- 25. The application for review will be:
  - 25.1 made in writing within 14 days after the applicant is notified of the decision on their application for Chartered Membership; and
  - 25.2 accompanied by:
    - a statement of how the applicant considers that the assessment was not carried out in accordance with the procedures set out in these regulations and/or the decision reached by the Competency Assessment Board is manifestly at odds with the evidence presented with the application; and
    - ii any evidence that the applicant wishes to be considered in the review; and
    - iii any review fee as specified by the Board from time to time.
- 26. A person may apply only once for review of a particular assessment decision, and the decision made under these Regulations in respect of the application for review shall be final and binding on both Engineering New Zealand and the person concerned.
- 27. A Competency Assessment Reviewer will, as soon as practicable after receiving an application under clause 25, review the procedures followed in carrying out the assessment and/or the decision-making process of the Competency Assessment Board, and:
  - 27.1 cancel the decision of the Competency Assessment Board and refer the matter back to be reassessed if they consider that:

- i the assessment was not carried out in accordance with the procedures set out in these
- ii Regulations; and
- iii this has disadvantaged the applicant; or
- 27.2 cancel the decision of the Competency Assessment Board and refer the matter back to the Competency Assessment Board with reasons for cancellation of its decision; or
- 27.3 dismiss the application.
- 28. Engineering New Zealand will:
  - 28.1 notify the applicant of the decision under clause 23 and the reasons for that decision; and
  - 28.2 if a decision is to be cancelled, implement the decision of the Competency Assessment Reviewer, and refund the review fee to the applicant.

# PERSONS CARRYING OUT DELEGATED FUNCTIONS AND POWERS UNDER REGULATIONS

### **Assessment Panels and assessors**

- 29. Engineering New Zealand may appoint, for a particular application for Chartered Membership or class of applications:
  - 29.1 an assessor; or
  - 29.2 two or more assessors as an Assessment Panel.
- 30. Engineering New Zealand will:
  - 30.1 only appoint assessors who have demonstrated engineering competence to a standard exemplified by the category of Chartered Membership being applied for; and
  - 30.2 include in each Assessment Panel at least one assessor who has knowledge or experience relevant to the practice area in which the person is being assessed.

#### **Procedures of Assessment Panel**

- 31. An Assessment Panel of two members will act unanimously in making decisions.
- 32. If an Assessment Panel of three or more members is not unanimous, the decision of the majority of the panel is the decision of the panel.

#### **Competency Assessment Board**

33. Engineering New Zealand will appoint a Competency Assessment Board consisting of:

33.1 four or more voting members; and

33.2 one member of the Board who has no right to vote.

- 34. Engineering New Zealand will appoint members to the Competency Assessment Board who are Chartered Members or who have equivalent competence and, in appointing members, will have regard to:
  - 34.1 the extent of their experience in, and knowledge of, engineering; and
  - 34.2 their experience in competency assessments and quality assurance of competency assessments; and
  - 34.3 achieving a varied representation of geographical areas.
- 35. An appointment to the Competency Assessment Board:

- 35.1 is for the term specified by Engineering New Zealand on making the appointment, up to a maximum term of two years for voting members and one year for the nonvoting member; and
- 35.2 may be renewed, but no person may be appointed for more than three consecutive terms.
- 36. Engineering New Zealand may appoint one of the members of the Competency Assessment Board to be the chairperson. The chairperson will preside at all meetings of the Competency Assessment Board at which they are present. In the absence of the chairperson, the members present will appoint one of their number to be the chairperson for the purposes of that meeting.

#### **Competency assessment reviewer**

- 37. Engineering New Zealand may appoint, for a particular case or class of cases, a Competency Assessment Reviewer who:
  - 37.1 is a Chartered Member or Fellow; or
  - 37.2 has other qualifications or experience that Engineering New Zealand considers relevant to the subject matter of the case.

# **ITEMS NOT COVERED**

38. Anything not covered within these Regulations that could reasonably be expected to be included will be determined at the discretion of the Board.

# SCHEDULE 1 :: CRITERIA FOR MEMBERSHIP CLASSES AND POST NOMINAL ABBREVIATIONS

# **STUDENT MEMBER**

Applicants for Student Membership are required to demonstrate they are studying:

- an accredited undergraduate engineering programme in New Zealand; or
- a new engineering programme where the provider is working towards accreditation in New Zealand; or
- a full-time postgraduate engineering or engineering geology programme in New Zealand, where postgraduate study follows directly after undergraduate study.

Post nominal: none available

## **EMERGING PROFESSIONAL MEMBER**

Applicants for election or transfer to Emerging Professional are required to demonstrate that they:

- Have completed a recognised qualification; or demonstrates equivalent knowledge through a knowledge assessment; and
- Have less than five years recognised experience.

Post nominal: none available

## **MEMBER**

Applicants for election or transfer to Member are required to demonstrate that they:

- Have completed a recognised qualification; or demonstrates equivalent knowledge through a knowledge assessment; and
- Have completed an acceptable programme of initial professional formation, as evidenced by:
  - Completing a graduate programme through an Engineering New Zealand professional development partner; or
  - A programme of continuing professional development aligned with the Engineering New Zealand Emerging Professionals Development Programme; or
  - Five years of recognised experience.

Post nominal: MEngNZ

Post nominal (retired): MEngNZ (Ret.)

### **FELLOW**

Applicants for election or transfer to Fellowship are appointed by the Board on recommendation from the Fellowship Panel, according to agreed criteria recognising their significant contribution to engineering as set out in the Engineering New Zealand Fellowships Guidelines.

#### Post nominal: FEngNZ

Fellows may also use the Chartered Member post nominal if they previously held Chartered Membership prior to their election to the Class of Fellow.

## **DISTINGUISHED FELLOW**

Distinguished fellowship is based on peer nomination and bestowed by the Board on recommendation of the Distinguished Fellowships Panel, recognising the engineer's eminent contribution to engineering and its advancement as set out in the Engineering New Zealand Distinguished Fellowships Guidelines.

#### Post nominal: DistFEngNZ

Distinguished Fellows may also use the Chartered Member post nominal if they previously held Chartered Membership prior to their election to the Class of Fellow.

## **HONORARY FELLOW**

Honorary Fellows are based on nomination and bestowed by the Board on recommendation from the Fellowship Panel, according to agreed criteria recognising their significant contribution to engineering as set out in the Fellowships Guidelines.

Post nominal: HonFEngNZ

## **CHARTERED MEMBER**

Applicants for election or transfer to Chartered Member are required to demonstrate that they:

- Have met all requirements for Member of Engineering New Zealand; and;
- Meet the minimum standard of engineering competence as defined below.

#### Minimum standard of engineering competence:

To meet the minimum standard a person will:

- a. demonstrate that they are able to practise competently in their practice area to the standard of a reasonable professional engineer. In making this assessment, consideration will be given to the extent to which the candidate is able to demonstrate the competence elements set out below, and
- b. hold a qualification recognized under the Washington Accord, or demonstrate an equivalent level of engineering knowledge as assessed by Engineering New Zealand.
- Competence elements
- a. comprehend, and apply their knowledge of accepted principles underpinning
  - i widely applied good practice for professional engineering; and
  - ii good practice for professional engineering that is specific to the jurisdiction in which they practice; and
- b. define, investigate, and analyse complex engineering problems in accordance with good practice for professional engineering; and
- c. design or develop solutions to complex engineering problems in accordance with good practice for professional engineering; and
- d. exercise sound professional engineering judgement; and
- e. be responsible for making decisions on part or all of one or more complex engineering activities; and
- f. manage part or all of one or more complex engineering activities in accordance with good engineering management practice; and
- g. identify, assess, and manage engineering risk; and
- h. conduct their professional engineering activities in accordance with the Engineering New Zealand Code of Ethical Conduct; and

|                        | i.   | recognise the reasonably foreseeable social, cultural, and environmental effects of professional engineering activities generally; and   |  |  |
|------------------------|--|--|--|--|
|                        | j.   | communicate clearly to other engineers and others that they are likely to deal with in the course of their professional engineering activities; and  |  |  |
|                        | k.   | maintain the currency of their professional engineering knowledge and skills.  |  |  |
| Engineering activities |  | For the purposes of an application for Chartered Membership, "complex engineering activities" means engineering activities or projects that have some or all of the following characteristics: |  |  |
|                        | a.   | involve the use of diverse resources (and, for this purpose, resources include people, money, equipment, materials, and technologies);   |  |  |
|                        | b.   | require resolution of significant problems arising from interactions between wide-ranging or conflicting technical, engineering, and other issues;   |  |  |
|                        | c.   | have significant consequences in a range of contexts;  |  |  |
|                        | d.   | involve the use of new materials, techniques, or processes or the use of existing materials, techniques, or processes in innovative ways.  |  |  |
| Engineering problems   | For the purposes of an application for Chartered Membership, "complex engineering problems" means engineering problems that have some or all of the following characteristics: |  |  |  |
|                        | a.   | involve wide-ranging or conflicting technical, engineering, and other issues;  |  |  |
|                        | b.   | have no obvious solution and require originality in analysis;  |  |  |
|                        | c.   | involve infrequently encountered issues;   |  |  |
|                        | d.   | are outside problems encompassed by standards and codes of practice for professional engineering;  |  |  |
|                        | e.   | involve diverse groups of stakeholders with widely varying needs;  |  |  |
|                        | f.   | have significant consequences in a range of contexts;  |  |  |
|                        | g.   | cannot be resolved without in-depth engineering knowledge.   |  |  |
| Post nominal: CMEngNZ  |  |  |  |  |

Post nominal (retired): CMEngNZ (Ret.)

# CHARTERED MEMBER (ENGINEERING TECHNOLOGIST)

Applicants for election or transfer to Chartered Member (Engineering Technologist) are required to demonstrate that they:

- Have met all requirements for Member of Engineering New Zealand; and
- Meet the minimum standard of engineering (technology) competence as defined below.

### Minimum standard of engineering technology competence:

To meet the minimum standard a person will:

- a. demonstrate that they are able to practise competently in their practice area to the standard of a reasonable engineering technologist. In making this assessment, consideration will be given to the extent to which the candidate is able to demonstrate the competence elements set out below; and
- b. hold a qualification recognized under the Sydney Accord, or demonstrate an equivalent level of engineering knowledge as assessed by Engineering New Zealand.

| Competence elements                      | a.  | Comprehend and apply the detailed knowledge underpinning good practice as an engineering technologist.  |  |  |
|--|---|---|--|--|
|  | b.  | Comprehend and apply knowledge underpinning good practice as an engineering technologist that is specific to the jurisdictions in which he/she practices. |  |  |
|  | c.  | Identify, clarify, and analyse broadly defined engineering problems in accordance with good engineering practice.   |  |  |
|  | d.  | Design or develop solutions to broadly defined engineering problems by applying accepted procedures or methodologies.                                     |  |  |
|  | e.  | Be responsible for making decisions on part or all of one or more broadly defined engineering activities.   |  |  |
|  | f.  | Manage part or all of one or more broadly defined engineering activities in accordance with good management practice.                                     |  |  |
|  | g.  | Identify risks and apply risk management techniques to broadly defined engineering problems.  |  |  |
|  | h.  | Conduct engineering activities in accordance with the Engineering New Zealand Code of Ethical Conduct.  |  |  |
|  | i.  | Recognise the reasonably foreseeable social, cultural and environmental effects of broadly defined engineering functions generally.                       |  |  |
|  | j.  | Communicate clearly with others in the course of broadly defined engineering activities.  |  |  |
|  | k.  | Maintain the currency of engineering knowledge and skills.  |  |  |
|  | ١.  | Exercise sound engineering judgement.   |  |  |
| Fusing estimation                        |   |   |  |  |
| Engineering activities                   | For the purposes of an application for Chartered Membership (Engineering Technologist), broadly defined engineering activities or projects have some or all of the following characteristics: |   |  |  |
|  | a.  | involve a variety of resources (and, for this purpose, resources include people, money, equipment, materials, information and technologies);              |  |  |
|  | b.  | require resolution of occasional interactions between technical, engineering and other issues, of which few are conflicting;                              |  |  |
|  | c.  | involve the use of new materials, techniques or processes in innovative ways;   |  |  |
|  | d.  | have consequences that are most important locally but may extend more widely;   |  |  |
|  | e.  | require a knowledge of normal operating procedures and processes.   |  |  |
| Engineering problems                     | For the purposes of an application for Chartered Membership (Engineering<br>Technologist), broadly defined engineering problems have some or all of the<br>following characteristics:         |   |  |  |
|  | a.  | involve a variety of factors that may impose conflicting constraints;   |  |  |
|  | b.  | can be solved by application of well-proven analysis techniques;  |  |  |
|  | c.  | require knowledge of principles and applied procedures or methodologies;  |  |  |
|  | d.  | belong to families of familiar problems which are solved in well-accepted ways;   |  |  |
|  | e.  | may be partially outside those encompassed by standards or codes of practice;   |  |  |
|  | f.  | involve several groups of stakeholders with differing and occasionally conflicting needs;   |  |  |
|  | g.  | have consequences that are important locally but may extend more widely;  |  |  |
|  | h.  | are parts of, or systems within, complex engineering problems.  |  |  |
| Post nominal: CMEngNZ (Eng.Technologist) |   |   |  |  |

Post nominal (retired): CMEngNZ (Eng.Technologist) (Ret.)

# **CHARTERED MEMBER (ENGINEERING TECHNICIAN)**

Applicants for election or transfer to Chartered Member (Engineering Technician) are required to demonstrate that they:

- Have met all requirements for Member of Engineering New Zealand; and
- Meet the minimum standard of engineering (technician) competence as defined below

### Minimum standard of engineering competence:

To meet the minimum standard a person will:

- a. demonstrate that they are able to practise competently in their practice area to the standard of a reasonable engineering technician. In making this assessment, consideration will be given to the extent to which the candidate is able to demonstrate the competence elements set out below; and
- b. hold a qualification recognized under the Dublin Accord, or demonstrate an equivalent level of engineering knowledge as assessed by Engineering New Zealand.

# **Competence elements** a. Comprehend and apply detailed knowledge underpinning good practice as an engineering technician;

- b. Comprehend and apply knowledge underpinning good practice as an engineering technician that is specific to the jurisdiction/s in which they practise;
- c. Identify, state and analyse well-defined engineering problems in accordance with good practice for engineering;
- d. Design or develop solutions to well-defined engineering problems by applying accepted procedures and methodologies;
- e. Be responsible for making decisions on part or all of one or more well-defined engineering activities;
- f. Manage part or all of one or more well-defined engineering activities in accordance with good engineering management practice;
- g. Identify risk and apply risk management techniques to well-defined engineering problems;
- h. Conduct engineering activities to in accordance with the Engineering New Zealand Code of Ethical Conduct;
- i. Recognise the reasonably foreseeable social, cultural and environmental effects of well-defined engineering activities generally;
- j. Communicate clearly with others in the course of their well-defined engineering activities;
- k. Maintain the currency of engineering knowledge and skills;
- I. Exercise sound judgement.

# **Engineering activities** For the purposes of an application for Chartered Membership (Engineering Technician), well-defined engineering activities means engineering activities or projects that have some or all of the following characteristics:

- a. Involve a limited range of resources (and, for this purpose, resources include people, money, equipment, materials, information and technologies);
- b. Require resolution of interactions between limited technical and engineering issues with little or no impact from wider issues;
- c. Involve the use of existing materials techniques or processes in new ways;
- d. Have consequences that are locally important and not far-reaching;
- e. Require a knowledge of practical procedures and practices for widely applied operations and processes.

# **Engineering problems** For the purposes of an application for Chartered Membership (Engineering Technician), well-defined engineering problems means engineering problems having some or all of the following characteristics:

- a. involve several issues but with few of these exerting conflicting constraints;
- b. can be solved in standardised ways;
- c. can be resolved using limited theoretical knowledge but normally requires extensive practical knowledge;
- d. are frequently encountered and thus familiar to most practitioners in the practice area;
- e. are encompassed by standards and/or documented codes of practice;
- f. involve a limited range of stakeholders with differing needs;
- g. have consequences that are locally important and not far-reaching;
- h. are discrete components of engineering systems

Post nominal: CMEngNZ (Eng. Technician)

Post nominal (retired): CMEngNZ (Eng. Technician) (Ret.)

# CHARTERED MEMBER (ENGINEERING GEOLOGIST)

Applicants for election or transfer to Chartered Member (Engineering Geologist) are required to demonstrate that they:

- Have met all requirements for Member of Engineering New Zealand; and
- Meet the minimum standard of engineering (geology) competence as defined below

#### Minimum standard of engineering competence:

To meet the minimum standard a person will:

- a. demonstrate that they are able to practise competently in their practice area to the standard of a reasonable engineering geologist. In making this assessment, consideration will be given to the extent to which the candidate is able to demonstrate the competence elements set out below; and
- b. hold a post graduate qualification in engineering geology, or demonstrate an equivalent level of engineering knowledge as assessed by Engineering New Zealand.

**Competence elements** a. Comprehend, and apply knowledge of, accepted principles underpinning widely applied good practice for professional engineering geology;

- b. Comprehend and apply knowledge of accepted principles underpinning good practice for professional engineering geology that is specific to New Zealand;
- c. Analyse and communicate complex engineering geological problems in order to inform development of engineering solutions and design in accordance with good professional practice;
- d. Be responsible for making decisions on part or all of one or more complex engineering geological activities;
- e. Manages part or all of one or more complex engineering geological activities in accordance with good engineering management practice;
- f. Identify, assess and manage engineering geological uncertainty and geotechnical risk;
- g. Conduct engineering geological activities in accordance with the Engineering New Zealand Code of Ethical Conduct;

|  | <ul> <li>Recognise the reasonably foreseeable social, cultural and environmental effects of professional engineering geological and engineering activities generally;</li> <li>Communicate clearly with other engineering geologists, engineers and those that they are likely to deal with in the course of their professional engineering geological activities;</li> </ul> |  |  |  |
|--|---|--|--|--|
|  | Maintain the currency of their professional engineering geological/<br>geotechnical knowledge and skills;   |  |  |  |
|  | . Exercise sound professional judgement in engineering geology.   |  |  |  |
| Complex engineering<br>geological activities | For the purposes of an application for Chartered Member (Engineering<br>Geologist), complex engineering geological activities means activities or projects<br>that have some or all of the following characteristics:   |  |  |  |
|  | . Involve the use of diverse resources (and, for this purpose, resources include people, money, equipment, materials and technologies);   |  |  |  |
|  | . Require recognition, understanding and resolution of significant problems arising from interactions between wide-ranging or conflicting engineering, engineering geological and/or other issues,  |  |  |  |
|  | <ul> <li>Involve the use of new techniques or processes, or the use of existing<br/>techniques or processes in innovative ways.</li> </ul>  |  |  |  |
| Complex engineering<br>geological problems   | For the purposes of an application for Chartered Member (Engineering<br>Geologist), complex engineering geological problems means problems that<br>cannot be recognised, understood or resolved without in-depth engineering<br>geological knowledge, and having some or all of the following characteristics:  |  |  |  |
|  | <ul> <li>Involve wide-ranging or conflicting engineering and engineering geological<br/>and other issues;</li> </ul>  |  |  |  |
|  | <ul> <li>Are not readily recognised, understood or solved and require originality in analysis;</li> </ul>   |  |  |  |
|  | . Involve a wide range of issues, which might be in an unfamiliar setting;  |  |  |  |
|  | <ul> <li>Are outside those problems whose resolutions are encompassed by<br/>guidelines, standards and codes of practice for professional engineering<br/>geology;</li> </ul>   |  |  |  |
|  | . Involve diverse groups of stakeholders with widely varying needs;   |  |  |  |
|  | Have significant consequences in a range of contexts.   |  |  |  |
|  |   |  |  |  |

**Post nominal:** CMEngNZ (PEngGeol)

Post nominal (retired): CMEngNZ (PEngGeol) (Ret.)