Assessment Scheme

Registration with the Victoria BLA via IStructE

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Purpose

- This assessment scheme document confirms how the Institution of Structural Engineers complies with the regulations set out in the Professional Engineers Registration Act 2019. It sets out the qualification and experience requirements that a person should meet, and the assessment process that they will follow to achieve registration via two assessment pathways depending on the applicant's overall membership/registration goal.
- 2. This scheme will not be varied without the approval of the Business Licensing Authority of Victoria.
- 3. This scheme, and any conditions, will be published on the IStructE website within 14 days of its approval.

Assessment by the IStructE

- 4. The assessment scheme covers the structural area of engineering, and will cover both registration as well as endorsement for applicants who meet the requirements.
- 5. The Institution of Structural Engineers will assess candidates via two assessment pathways:
- Assessment Pathway 1: this pathway is for candidates seeking a qualification and experience assessment solely for the purpose of applying for registration in Victoria under the Act. Pathway 1 provides two assessment options:
 - **Option A:** For candidates who hold a Washington Accord accredited qualification, or a qualification assessed as equivalent via the Engineering Council UK (Washington Accord signatory).
 - **Option B:** For candidates who do not hold a Washington Accord, or equivalent, qualification this option provides an assessment to demonstrate that they have achieved the competences and outcomes of a WA qualification through experiential or academic learning (or a combination).
- Assessment Pathway 2: this pathway is for candidates who are seeking an assessment for the purpose of registration in Victoria as well as Chartered Membership of the Institution. This pathway may also be used by candidates who are already Chartered Members of the Institution seeking registration in Victoria.
- 6. An applicant who is registered under a mandatory statutory registration scheme for engineers in another Australian state or territory, or in New Zealand, should contact Consumer Affairs Victoria at engineers@bla.vic.gov.au for advice on registrations under mutual recognition.

Assessment Pathway 1, Option A

For candidates who hold an accredited Washington Accord qualification, or equivalent, seeking registration in Victoria only. Candidates who do not hold an accredited Washington Accord qualification, or equivalent, should use Assessment Pathway 1, Option B. Candidates who are also seeking membership of the IStructE should refer to Assessment Pathway 2.

Qualifications, experience and competency requirements

Qualifications

- 7. The review of an applicant's academic qualifications is initially undertaken by a member of the Membership Department secretariat. The secretariat, in processing an application, will ensure that the candidate meets the academic requirements for registration with Victoria as set out in section 9.1.
- 8. Candidates who do not hold a Washington Accord degree will be able to undergo an assessment to determine that their qualification is of substantial equivalence to a Washington Accord degree. This assessment is carried out by the Institution's Academic Qualification Panel (AQP) which has authority from the Engineering Council by virtue of the Institution's licence agreement to make the determination.
- 9. Candidates who are not found to have a qualification of substantial equivalence to a Washington Accord degree may continue their application for registration via Assessment Pathway 2, Option B.

Experience and Competence

Initial Professional Development:

- 10. IPD comprises the acquisition and development of the specialist knowledge and skills, and their practical application, that are needed to practise as a structural engineer. Applicants are required to satisfy all Learning Outcomes which are set out in the Institution's IPD Regulations.
- 11. All applicants via the Victoria route will be required to demonstrate that they have achieved five years' engineering experience in the relevant area, of which at least four-years must be post-graduate experience. To be eligible for registration as a practising professional engineer this experience must have been gained within the last ten years. Exceptions to this time period may be made where an applicant is able to demonstrate that they meet the competence requirements and is assessed as competent to provide professional engineering services without direct supervision. Applicants must also demonstrate competency in the following five elements of the 'Australian Engineering Competency Standards Stage 2: Experienced Professional Engineer' in the area of structural engineering:
 - Element 1 Deal with ethical issues
 - Element 2 Practice competently
 - Element 4 Develop safe and sustainable solutions
 - Element 6 Identify, assess and manage risks, and
 - Element 13 Engineering knowledge according to their area of practice including a knowledge of standards and practices.

An applicant who also wishes to be assessed to apply for endorsement to provide professional engineering services in the building industry in Victoria must demonstrate knowledge and practical application of:

- Victorian building laws and standards, and
- the operation and use of the National Construction Code as it applies to structural engineering.



Professional Review Interview:

- 12. Upon completion of the academic and IPD requirements, candidates may apply for a Professional Review Interview. The interview will be held as soon as can be arranged with the Australia Regional Group such that the application can be completed within 90 days.
- 13. At the interview candidates will be expected to bring evidence of IPD by means of a portfolio of work. The relevant forms and an experience report must be submitted when applying for approval to sit the Review. During the hour-long interview, candidates are questioned on the training and experience evidenced in their commitment to the profession. Unsuccessful candidates will be told where their IPD falls short and encouraged to reapply once the gaps have been filled. There is no limit to the number of times a candidate can apply for the Professional Review Interview.
- 14. The interview will be conducted by at least one member of the Australia Regional Group.
- 15. Members of the IStructE secretariat team will process applications from Victoria candidates via the HQ offices in London. Only candidates who meet the assessment requirements and have supplied the necessary evidentiary documents will be permitted to follow the Victoria route. If any items from the application check-list are missing from the application, IStructE staff will contact them to seek the missing documentation before their application can progress to the next assessment stage.
- 16. Any documents that are in a language other than English will be required to be translated in accordance with the following guidelines:
 - if the documents are translated within Australia:
 - The translator must be accredited by the National Accreditation Authority for Translators and Interpreters (NAATI) www.naati.com.au.
 - The Australian Institute for Interpreters and Translators (AUSIT) Directory of Translators provide a current list of qualified, active AUSIT members who have NAATI accreditation in translating – www.ausit.org.

if the documents are translated in a country outside Australia:

• The translator must be approved by the authorities in the country where the translation is made. The International Federation of Translators (IFT) – www.fit-ift.org – provide a list of translation associations, some approved by authorities to provide certified translation.

Consistent with National and International Standards

- 17. The Institution's Learning Outcomes satisfy the standards outlined in the Australian Engineering Competency Standards, Stage 2 Experienced Professional Engineer requirements, which have been mapped via the Mutual Recognition Agreement between the Institution and Engineers Australia.
- 18. The Institution is also a signatory of the Washington Accord (since 1989) by virtue of representation through the Engineering Council. The Washington Accord is an international agreement among bodies responsible for accrediting engineering degree programs. It recognizes the substantial equivalency of programs accredited by those bodies and recommends that graduates of programs accredited by any of the signatory bodies be recognized by the other bodies as having met the academic requirements for entry to the practice of engineering.
- 19. The Institution ensures that its international activities are closely monitored and relies on Council where representatives from each international group meet at least three times per year. Additionally, the Institution has created an International Interest Group which is a subset of Council which meets to discuss matters of detail and reports directly to council.
- 20. The Institution is recognised by the EU Directive as the competent authority for structural engineering in the UK.



Assessment of qualifications and competence Procedures for Assessment in a Professional Manner

Initial Professional Development regulations

- 21. The Initial Professional Development regulations were introduced in 2001 and became mandatory from 1 January 2003. The regulations define the learning outcomes that are tested through the combination of a Professional Review Interview and a written examination. The Institution's IPD Regulations are publicly available on our website. Successful applicants for registration will be able to demonstrate:
- A sound understanding of core structural engineering principles.
- ▶ The ability to use relevant existing technology coupled with the ability to locate and use new research and development to benefit their work and structural engineering generally.
- The ability to solve complex structural engineering problems and produce viable structural design solutions using appropriate methods of analysis.
- The ability to exercise independent judgement in the application of structural engineering science and knowledge.
- Technical, management and leadership skills to plan, manage and direct human, material and financial resources.
- Commitment to the public interest in all aspects of their work, including health, safety, risk, financial, commercial, legal, environmental, social, energy conservation and sustainability.
- > Effective communication and interpersonal skills.
- > Knowledge of the statutory and other regulations affecting current practice in structural engineering.
- A significant base of information technology skills.
- Commitment to the profession of structural engineering, particularly with regard to the Institution's Code of Conduct and the requirement for Continuing Professional Development.
 - 22. The Applications and Professional Review Panel (A&PR) is responsible for monitoring and reviewing the IPD processes and procedures and reports to the Institution's Membership Committee.
 - 23. A series of Core Objectives are derived from the list of Learning Outcomes required from successful candidates. The core objectives are compulsory and outline the basic competence required of candidates.

Professional Review Interview

- 24. At the Professional Review Interview candidates are required to demonstrate that they have satisfied the core objectives, thereby achieving the required competence and commitment to the profession. The Interview may be held anywhere in the world convenient to the applicant, subject to the availability of appropriately qualified Reviewers to conduct the interview, however, any Victoria candidate will be assessed by at least one local member who understands the Victorian regulatory and practising environment. The duration of the interview will normally be one hour, during which the candidate will be required to make an informal presentation of no more than 15 minutes.
- 25. The candidate will supply a portfolio of evidence to their interviewers to demonstrate how their experience meets the core objective requirements. The interview is tailored for each individual and will recognise the different backgrounds and career development of each individual. The Reviewers will complete the Summary Report Form to show the standard achieved against each Core Objective as



either satisfactory or unsatisfactory. A candidate must be deemed to be satisfactory in every one of the Core Objectives in order to pass the Professional Review Interview.

- 26. The professional review assessment requires a candidate to submit the following documentary evidence to form part of the review:
 - Completed application form with details of a supporter who is able to substantiate the evidence of competence submitted by the candidate
 - > Evidence of qualifications through certified copies of degree certificates or transcripts
 - A portfolio of work that demonstrates the candidate's practical experience as well as a CV

Fees for assessments

27. The following fees are charged for the assessment process via the Institution of Structural Engineers, and are reviewed annually:

Assessment fees for registration	GBP	AUD
Academic Assessment fee (if candidate does not hold a recognised degree)	£160	\$286
Professional Review application fee	£105	\$187
Professional Review Interview (PRI) fee	£185	\$330

Assessment Pathway 1, Option B

For candidates who do not hold an accredited Washington Accord qualification, or equivalent. Candidates with an accredited Washington Accord qualification, or equivalent, should refer to Assessment Pathway 1, Option A. Candidates who are also seeking membership of the IStructE should refer to Assessment Pathway 2.

Qualifications, experience and competency requirements

Qualifications

- 28. The review of an applicant's academic qualifications is initially undertaken by a member of the Membership Department secretariat. The secretariat, in processing an application, will ensure that the candidate meets the academic requirements for registration with Victoria as set out in section 9.1.
- 29. Candidates following this route will not hold a qualification that is accredited under the Washington Accord, or equivalent. The first step in their assessment process will be to undergo an assessment of any qualifications they do hold to determine the appropriate method for the candidate to demonstrate equivalence. This assessment is carried out by the Institution's Academic Qualification Panel (AQP) which has authority from the Engineering Council by virtue of the Institution's licence agreement to make the determination.
- 30. This assessment is called the Individual Case Procedure as it is based on each candidate's academic qualifications, including the topics and modules undertaken and the individual marks achieved in each of them. The recommendation made by the AQP also takes into account the candidate's industry experience.

Competency assessment pathway:

- 31. Candidates who do not hold a qualification at the benchmark standard may apply for an academic assessment to be carried out by the IStructE's Academic Qualifications Panel (AQP) which will determine what methods the applicant can use to demonstrate substantial equivalence with the published standard. The AQP will take into consideration any academic qualifications held by the applicants alongside the experience that they have already gained in the profession.
- 32. If the review finds that the portfolio of evidence supplied does not demonstrate substantial equivalence with the published standard the candidate will be invited to undergo an additional assessment via either the Technical Report Route or the Institution Examinations which will allow them to demonstrate that their experience has allowed them to develop the required level of knowledge and understanding.

Technical Report Route

- 33. The Technical Report Route is intended to be undertaken by candidates with sufficient experience to undertake the Professional Review Interview. It is assumed that all candidates will have already undertaken significant further learning beyond any degree studies and the requirements for their Technical Report will depend on both the initial degree level and the extent of any further academic and experience-based learning which has been undertaken.
- 34. The Technical Report must demonstrate that the applicant has achieved the knowledge and understanding of structural engineering principles that would normally be expected of the holder of an accredited Washington Accord degree, or equivalent. The principle objective of the report is to demonstrate to two independent assessors that the candidate has achieved the output standards required.



- 35. The Report should demonstrate particularly the candidate's understanding of engineering principles and their ability to integrate in structural design and engineering practice their knowledge of mathematics, science and computer-based methods, and their ability to generate innovative and appropriate designs. To demonstrate that understanding, the report is expected to contain some discussions of the validity of the principles relating to the subject of the report.
- 36. The Technical Report will be of between 5,000 and 10,000 words, to be determined by the AQP. Typically, two projects should be chosen for a platform for demonstration of academic equivalence.
- 37. Candidates will first submit a synopsis of their proposed report which will be considered by the AQP. If the synopsis is approved the candidate will be informed that they may proceed to submit their Technical Report and they will normally be allowed up to a year for submission.
- 38. The Technical Report will be assessed by two Assessors, whose reports will be considered by the AQP. If successful, the candidate will be invited to proceed to the Technical Report Interview stage.
- 39. The Technical Report Interview will normally last around one hour. At this stage the assessors will determine whether the candidate is permitted to proceed to the Professional Review Interview.
- 40. At each stage of the assessment process, the candidate will be provided with feedback if their submission does not meet the required standard.

Examination for further learning

- 41. The Institution has two seven-hour examinations which can be used as the test of competence/underpinning knowledge required for registration. The examination to be undertaken will be determined by the AQP.
- 42. The examinations may be used by candidates who have demonstrated learning to Bachelors level, and the examination is used to test that the academic top-up has been achieved.

Experience and Competence

Initial Professional Development:

- 43. IPD comprises the acquisition and development of the specialist knowledge and skills, and their practical application, that are needed to practise as a structural engineer or technician. Applicants are required to satisfy all Learning Outcomes which are set out it the Institution's IPD Regulations.
- 44. All applicants via the Victoria route will be required to demonstrate that they have achieved five years' engineering experience in the relevant area, of which at least four-years must be post-graduate experience. To be eligible for registration as a practising professional engineer this experience must have been gained within the last ten years. Exceptions to this time period may be made where an applicant is able to demonstrate that they meet the competence requirements and is assessed as competent to provide professional engineering services without direct supervision. Applicants must also demonstrate competency in the following five elements of the 'Australian Engineering Competency Standards Stage 2: Experienced Professional Engineer' in the area of structural engineering:
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 - Element 13 Engineering knowledge according to their area of practice including a knowledge of standards and practices.



An applicant who also wishes to be assessed to apply for endorsement to provide professional engineering services in the building industry in Victoria must demonstrate knowledge and practical application of:

- Victorian building laws and standards, and
- the operation and use of the National Construction Code as it applies to structural engineering.

Professional Review Interview:

- 45. Upon completion of the academic and IPD requirements, candidates may apply for a Professional Review. The interview will be held as soon as can be arranged with the Australia Regional Group such that the application can be completed within 90 days.
- 46. At the interview candidates will be expected to bring evidence of IPD by means of a portfolio of work. The relevant forms and an experience report must be submitted when applying for approval to sit the Review. During the hour-long interview, candidates are questioned on the training and experience evidenced in their commitment to the profession. Unsuccessful candidates will be told where their IPD falls short and encouraged to reapply once the gaps have been filled. There is no limit to the number of times a candidate can apply for the Professional Review Interview.
- 47. Candidates will be interviewed by at least one member of the Australia Regional Group.
- 48. Members of the IStructE secretariat team will process applications from Victoria candidates via the HQ offices in London. Only candidates who meet the assessment requirements and have supplied the necessary evidentiary documents will be permitted to follow the Victoria route. If any items from the application check-list are missing from the application, IStructE staff will contact them to seek the missing documentation before their application can progress to the next assessment stage.
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Consistent with National and International Standards

- 50. The Institution is granted a licence by the Engineering Council (the UK's engineering regulatory body) to award Chartered Engineer registration (as well as IEng and EngTech registrations). This licence is awarded on a five-yearly cycle, involving an in-depth audit of all processes and procedures connected with the membership process, as well as an interim review between full audit periods.
- 51. The Institution's Learning Outcomes satisfy the standards outlined in the Australian Engineering Competency Standards, Stage 2 Experienced Professional Engineer requirements, which have been mapped via the Mutual Recognition Agreement between the Institution and Engineers Australia.
- 52. The Institution is also a signatory of the Washington Accord (since 1989) by virtue of representation through the Engineering Council. The Washington Accord is an international agreement among bodies responsible for accrediting engineering degree programs. It recognizes the substantial equivalency of programs accredited by those bodies and recommends that graduates of programs accredited by any



of the signatory bodies be recognized by the other bodies as having met the academic requirements for entry to the practice of engineering.

- 53. The Institution ensures that its international activities are closely monitored and relies on Council where representatives from each international group meet at least three times per year. Additionally, the Institution has created an International Interest Group which is a subset of Council which meets to discuss matters of detail and reports directly to council.
- 54. The Institution is recognised by the EU Directive as the competent authority for structural engineering in the UK.

Assessment of qualifications and competence Procedures for Assessment in a Professional Manner

Initial Professional Development regulations

- 55. The Initial Professional Development regulations were introduced in 2001 and became mandatory from 1 January 2003. The regulations define the learning outcomes that are tested through the combination of a Professional Review Interview and a written examination. The Institution's IPD Regulations are publicly available on our website. Successful applicants for registration will be able to demonstrate:
- A sound understanding of core structural engineering principles.
- The ability to use relevant existing technology coupled with the ability to locate and use new research and development to benefit their work and structural engineering generally.
- The ability to solve complex structural engineering problems and produce viable structural design solutions using appropriate methods of analysis.
- The ability to exercise independent judgement in the application of structural engineering science and knowledge.
- Technical, management and leadership skills to plan, manage and direct human, material and financial resources.
- Commitment to the public interest in all aspects of their work, including health, safety, risk, financial, commercial, legal, environmental, social, energy conservation and sustainability.
- > Effective communication and interpersonal skills.
- > Knowledge of the statutory and other regulations affecting current practice in structural engineering.
- A significant base of information technology skills.
- Commitment to the profession of structural engineering, particularly with regard to the Institution's Code of Conduct and the requirement for Continuing Professional Development.
 - 56. The Applications and Professional Review Panel (A&PR) is responsible for monitoring and reviewing the IPD processes and procedures and reports to the Institution's Membership Committee.
 - 57. A series of Core Objectives are derived from the list of Learning Outcomes required from successful candidates. The core objectives are compulsory and outline the basic competence required of candidates.



Professional Review Interview

- 58. At the Professional Review Interview candidates are required to demonstrate that they have satisfied the core objectives, thereby achieving the required competence and commitment to the profession. The Interview may be held anywhere in the world convenient to the applicant, subject to the availability of appropriately qualified Reviewers to conduct the interview, however, any Victoria candidate will be assessed by at least one local member who understands the Victorian regulatory and practising environment. The duration of the interview will normally be one hour, during which the candidate will be required to make an informal presentation of no more than 15 minutes.
- 59. The candidate will supply a portfolio of evidence to their interviewers to demonstrate how their experience meets the core objective requirements. The interview is tailored for each individual and will recognise the different backgrounds and career development of each individual. The Reviewers will complete the Summary Report Form to show the standard achieved against each Core Objective as either satisfactory or unsatisfactory. A candidate must be deemed to be satisfactory in every one of the Core Objectives in order to pass the Professional Review Interview.
- 60. The professional review assessment requires a candidate to submit the following documentary evidence to form part of the review:
 - Completed application form with details of a supporter who is able to substantiate the evidence of competence submitted by the candidate
 - > Evidence of qualifications through certified copies of degree certificates or transcripts
 - A portfolio of work that demonstrates the candidate's practical experience as well as a CV

Fees for assessments

61. The following fees are charged for the assessment process via the Institution of Structural Engineers, and are subject to an annual review:

Assessment fees for registration	GBP	AUD
Academic Assessment fee (if candidate does not hold a recognised degree)	£160	\$286
Professional Review application fee	£105	\$187
Professional Review Interview (PRI) fee	£185	\$330
Technical Report Route synopsis review fee	£70	\$135
Technical Report Route submission review fee	£420	\$795
Examination fee	£480	\$860

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Assessment Pathway 2

For candidates who are seeking both registration with the Victoria BLA and professional registration with the Institution of Structural Engineers as a Chartered Member. Candidates who are already Chartered Members of the IStructE may also use this pathway. Candidates seeking registration with the Victoria BLA only should refer to Assessment Pathway 1.

Qualifications, experience and competency requirements

Qualifications

- 62. The review of an applicant's academic qualifications is initially undertaken by a member of the Membership Department secretariat. The secretariat, in processing an application, will ensure that the candidate meets the academic requirements for registration with Victoria as set out in section 9.1.
- 63. The minimum academic requirement for Chartered membership and Engineering Council CEng registration is an accredited MEng degree or the equivalent. There are many candidates who will have studied accredited BEng(Hons) degrees and will be required to undertake a period of Further Learning to bridge the gap between BEng(Hons) degree at 360 CATs points and the MEng at 480 CATs points in order to satisfy the IStructE's academic requirements for registration.
- 64. Candidates who do not hold a Washington Accord degree will be able to undergo an assessment to determine that their qualification is of substantial equivalence to a Washington Accord degree. This assessment is carried out by the Institution's Academic Qualification Panel (AQP) which has authority from the Engineering Council by virtue of the Institution's licence agreement to make the determination.

Experience and Competence

Initial Professional Development:

- 65. IPD comprises the acquisition and development of the specialist knowledge and skills, and their practical application, that are needed to practise as a structural engineer or technician. Applicants are required to satisfy all Learning Outcomes which are set out in the Institution's IPD Regulations.
- 66. All applicants via this route will be required to demonstrate that they have achieved five years' engineering experience in the relevant area, of which at least four-years must be post-graduate experience. This experience must have been gained within the last ten years. Exceptions to this time period may be made where an applicant is able to demonstrate that they meet the competence requirements and is assessed as competent to provide professional engineering services without direct supervision.

The Professional Review:

67. Upon completion of the academic and IPD requirements, candidates may apply for a Professional Review. This is a two-stage process involving the Professional Review Interview and a seven-hour written examination to ensure the candidate meets the minimum competency requirements for registration. Candidates are given the flexibility to choose the order in which they sit each element of the Professional Review, but Victoria candidates will be able to follow a speedier route to sit their PRI in the period while their exam is being marked:

Professional Review Interview:

68. At the interview candidates will be expected to bring evidence of IPD by means of a portfolio of work. The relevant forms and an experience report must be submitted when applying for approval to sit the Review. During the hour-long interview, candidates are questioned on the training and experience evidenced in their commitment to the profession. Unsuccessful candidates will be told where their IPD falls short and encouraged to reapply once the gaps have been filled. There is no limit to the number of times a candidate can apply for the Professional Review Interview. Where a candidate has already passed the Exam before sitting their PRI this result will not be considered as part of their interview:



the exam and the interview test two different skill sets, in two different ways and success in one does not automatically confer success in the other.

- 69. Candidates who are also seeking professional registration with the IStructE via this route will be interviewed by at least one member of the Australia Regional Group.
- 70. Members of the IStructE secretariat team will process applications from Victoria candidates via the HQ offices in London. Only candidates who meet the assessment requirements and have supplied the necessary evidentiary documents will be permitted to follow the Victoria route. If any items from the application check-list are missing from the application, IStructE staff will contact them to seek the missing documentation before their application can progress to the next assessment stage.
- 71. Any documents that are in a language other than English will be required to be translated in accordance with the following guidelines:

if the documents are translated within Australia:

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• The translator must be approved by the authorities in the country where the translation is made. The International Federation of Translators (IFT) – www.fit-ift.org – provide a list of translation associations, some approved by authorities to provide certified translation.

Examination:

- 72. The Examination is a demanding test of a candidate's competence in structural design and problem solving. If a candidate has passed their PRI before attempting the Exam they may be subject to additional checks of their IPD via the submission of experience reports if more than a year has elapsed between passing the PRI and taking the Exam. Furthermore, candidates who have passed their PRI but then go on to fail the examination on more than five occasions will be required to undergo a further Professional Review Interview before they can be elected. Examinations are held globally every January and July.
- 73. Candidates must pass both the PRI and Exam before they are considered to have met the requirements for registration as a Chartered Member of the Institution.

Existing Chartered Structural Engineers:

- 74. Existing members of the Institution in one of the Chartered grades, that is Member or Fellow, who have followed the standard application route may use this pathway to register with the Victoria BLA.
- 75. As these members will have already been assessed against the criteria set out above, they will not need to undergo any further assessment.

Consistent with National and International Standards

76. The Institution is granted a licence by the Engineering Council (the UK's engineering regulatory body) to award Chartered Engineer registration (as well as IEng and EngTech registrations). This licence is awarded on a five-yearly cycle, involving an in-depth audit of all processes and procedures connected with the membership process, as well as an interim review between full audit periods.



- 77. The Institution's Learning Outcomes satisfy the standards outlined in the Australian Engineering Competency Standards, Stage 2 Experienced Professional Engineer requirements, which have been mapped via the Mutual Recognition Agreement between the Institution and Engineers Australia.
- 78. The Institution is also a signatory of the Washington Accord (since 1989) by virtue of representation through the Engineering Council. The Washington Accord is an international agreement among bodies responsible for accrediting engineering degree programs. It recognizes the substantial equivalency of programs accredited by those bodies and recommends that graduates of programs accredited by any of the signatory bodies be recognized by the other bodies as having met the academic requirements for entry to the practice of engineering.
- 79. The Institution ensures that its international activities are closely monitored and relies on Council where representatives from each international group meet at least three times per year. Additionally, the Institution has created an International Interest Group which is a subset of Council which meets to discuss matters of detail and reports directly to council.
- 80. The Institution is recognised by the EU Directive as the competent authority for structural engineering in the UK.

Assessment of qualifications and competence Procedures for Assessment in a Professional Manner

Initial Professional Development regulations

- 81. The Initial Professional Development regulations were introduced in 2001 and became mandatory from 1 January 2003. The regulations define the learning outcomes that are tested through the combination of a Professional Review Interview and a written examination. The Institution's IPD Regulations are publicly available on our website. Successful applicants for registration will be able to demonstrate:
- A sound understanding of core structural engineering principles.
- ▶ The ability to use relevant existing technology coupled with the ability to locate and use new research and development to benefit their work and structural engineering generally.
- The ability to solve complex structural engineering problems and produce viable structural design solutions using appropriate methods of analysis.
- The ability to exercise independent judgement in the application of structural engineering science and knowledge.
- Technical, management and leadership skills to plan, manage and direct human, material and financial resources.
- Commitment to the public interest in all aspects of their work, including health, safety, risk, financial, commercial, legal, environmental, social, energy conservation and sustainability.
- > Effective communication and interpersonal skills.
- > Knowledge of the statutory and other regulations affecting current practice in structural engineering.
- A significant base of information technology skills.
- Commitment to the profession of structural engineering, particularly with regard to the Institution's Code of Conduct and the requirement for Continuing Professional Development.

IStruct

- 82. The Applications and Professional Review Panel (A&PR) is responsible for monitoring and reviewing the IPD processes and procedures and reports to the Institution's Membership Committee.
- 83. A series of Core Objectives are derived from the list of Learning Outcomes required from successful candidates. The core objectives are compulsory and outline the basic competence required of candidates pursuing professional assessment with the Institution.
- 84. The Learning Outcomes satisfy the requirements that are set out in the Engineering Council's document UK-SPEC v4 to ensure that successful applicants can also demonstrate the Engineering Council requirements for registration as a Chartered Engineer. Victoria applicants will be advised that they are eligible for this registration if they so wish, but it is optional. During periodical updates and amendments to UK-SPEC this mapping exercise is repeated to ensure that applicants are always asked to demonstrate IPD Core Objectives that fully meet the needs of UK-SPEC.
- 85. The IPD regulations are sufficiently flexible to accommodate candidates who either go through a formal training process, or are self-led in their training. Regardless of the route that the candidate takes for their IPD the assessment that they undertake is the same, ie. The Professional Review Interview and the Examination to test that the learning outcomes have been met.

Professional Review Interview

- 86. At the Professional Review Interview candidates are required to demonstrate that they have satisfied the core objectives, thereby achieving the required competence and commitment to the profession. The Interview may be held anywhere in the world convenient to the applicant, subject to the availability of appropriately qualified Reviewers to conduct the interview, however, any Victoria candidate will be assessed by at least one local member who understands the Victorian regulatory and practising environment. The duration of the interview will normally be one hour, during which the candidate will be required to make an informal presentation of no more than 15 minutes.
- 87. The candidate will supply a portfolio of evidence to their interviewers to demonstrate how their experience meets the core objective requirements. The interview is tailored for each individual and will recognise the different backgrounds and career development of each individual. The Reviewers will complete the Summary Report Form to show the standard achieved against each Core Objective as either satisfactory or unsatisfactory. A candidate must be deemed to be satisfactory in every one of the Core Objectives in order to pass the Professional Review Interview.

Examination

- 88. Chartered Member examinations are held in January and July each year.
- 89. The Examinations Panel controls and maintains the standards and content of the examination question papers and also reviews the relevance of the examinations to the practice of structural engineering. The Panel is responsible for appointing Chief Examiners and Marking Examiners as well as other activities associated with the examinations, such as providing feedback, guidance and advice to candidates. In turn, the Examinations Panel reports to the Membership Committee.
- 90. Chief Examiners are appointed by the Examinations Panel. They set the examination questions and attend the moderation of results meetings where they are involved with the process of deciding the results and adjudicating 'borderline' cases. Chief Examiners are promoted from the pool of Marking Examiners and are appointed for a four-year term, although this can be extended by mutual consent.
- 91. A pool of Marking Examiners is maintained, and new appointments are approved by the Panel to mark the Examination scripts. All new Marking Examiners are required to undertake appropriate training. It is recommended that Marking Examiners hold a senior position within their companies, have a broad measure of experience and have taken the examination within the last ten years. Past examination papers are publicly available via the Institution's website.



- 92. The pass-rate for the Chartered Examination sits at around 35%, year on year, which gives some indication of the robustness, consistency and high standards maintained by the Institution's Examinations Panel. The examination is unique amongst the engineering institutions in the UK. As a result of the rigorous test of competence, Chartered members of the Institution are recognised throughout the world as highly qualified and competent structural engineers.
- 93. The professional review assessment requires a candidate to submit the following documentary evidence to form part of the review:
 - Completed application form with details of a supporter who is able to substantiate the evidence of competence submitted by the candidate
 - > Evidence of qualifications through certified copies of degree certificates or transcripts
 - A portfolio of work that demonstrates the candidate's practical experience as well as a CV

Fees for assessments

94. The following fees are charged for the assessment process via the Institution of Structural Engineers:

Assessment fees for registration	GBP	AUD
Academic Assessment fee (if candidate does not hold a recognised degree)	£160	\$286
Professional Review application fee	£105	\$187
Professional Review Interview (PRI) fee	£185	\$330
Examination fee	£480	\$860

95. Once the assessment has been completed, the applicant will be able to join the Institution as a Chartered Member (MIStructE) and register with the Engineering Council as a CEng. The current annual membership subscription charges are detailed on the Institution's website as they are subject to review every year by the Institution's Board. Applicants will be advised of their options regarding IStructE membership.

IStruct

istructe.org

Further information pertaining to both Assessment Pathway 1 and Assessment Pathway 2

CPD requirements and annual audit

- 96. The Institution defines CPD as "the systematic maintenance, improvement and broadening of knowledge and skill and the development of personal qualities necessary for the execution of professional and technical duties throughout the practitioner's working life".
- 97. The Institution's Professional Development Panel is responsible for the implementation and development of the Institution's Professional Development policy.
- 98. Registrants in full-time employment as a registered practising professional engineer are required to undertake at least 150 hours of CPD over three years to renew their registration as a professional engineer under the Victorian scheme, and at least a third of these CPD hours must relate to technical matters in the area of engineering in which they operate.
- 99. Registrants who are working part-time as a registered practising professional engineer or who took a career break will be required to undertake 90 hours of CPD over a three-year period. Registrants who are registered as non-practising professional engineers will be required to undertake 90 hours of CPD over a three-year period. Registrants who change their registration with the Business Licensing Authority between 'practising' and 'non-practising' during the last three years will be required to complete CPD on a pro-rata based on the time working as a registered practising professional engineer.
- 100. Registrants who are also registered under a mandatory statutory registration scheme for professional engineers in another Australian state or territory, or in New Zealand, that requires them to complete an equivalent amount of CPD are not required to complete separate additional CPD to renew their registration as a professional engineer under the Victorian scheme.
- 101. The Institution routinely reviews its CPD requirements to ensure they reflect current industry practice and that our members are consistently maintaining and developing their competence. In 2019 the Institution's Board agreed that a mandatory element pertaining to structural safety should be added to our CPD policy. As such, from 2020 all practising members of the Institution will be required to demonstrate a commitment to structural engineering safety by engaging with CROSS updates via structural-safety.org.
- 102. The Institution runs a comprehensive programme of learning and development activities which contribute to CPD. These events are run both locally, by Regional Groups, and centrally via the Institution's CPD team. Events are accessible to both members and non-members of the Institution, with some discounts available depending on membership status. The programme of events is published on the Institution's website.
- 103. An annual audit programme will apply to registrants who have also attained membership of the Institution. The Institution introduced mandatory reporting of CPD in 2014 making it, at the time, the first professional engineering institution in the UK to have such a requirement. This policy has now been adopted by the Engineering Council, which implemented a requirement for all Professional Engineering Institutions to undertake mandatory sampling of CPD returns from 2019 onwards.
- 104. Each year, 20% of the professional membership of the Institution (approximately 2,000 members) is selected at random to submit their CPD records for mandatory audit by the Professional Development Panel. As part of this mandatory audit, the Institution will ensure that 15% of the Victoria registrants are included, ensuring that all registrants via this scheme are subject to a CPD audit within a seven-year period.



- 105. CPD audits are carried out by a pool of CPD Reviewers who are all professionally qualified and experienced members of the Institution.
- 106. A CPD Reviewer will declare any conflict of interest with a candidate allocated to them for an audit, and in these cases the audit would be undertaken by a different reviewer.
- 107. Non-compliance with the Institution's CPD regulations will result in the member being reported to the Membership Committee and removed from the register. On average, 98.5% of members who are selected for the mandatory CPD review engage with the process and submit their record for review. Failure to submit CPD reports will be noted against the member's record and made available to the public through the members' directory.
- 108. The Institution will notify the BLA in writing within three months after 30 June each year of the results of the CPD audit. If a person refuses to participate in the audit for a period of more than 30 days after being requested to do so the BLA will be notified within seven days.

Procedures for monitoring and improving the assessment process

Assessment audits

109. The Institution is subject to regular internal and external audits to ensure that processes are being carried out in accordance with our procedural documents. The Institution will ensure that at least 15% of Victoria BLA submissions are included in the audit process each year.

Engineering Council Audit

- 110. Each year, the Institution completes a Self-Assessment Questionnaire which is submitted to the Engineering Council which assists in preparation for the Engineering Council Licence Review and Interim Licence Review meetings.
- 111. The Engineering Council conducts an in-depth audit for licensing purposes every five years. For the purposes of the audit, the Institution compiles a comprehensive file of evidence which is submitted for review. This includes minutes of committees, terms of reference, a structural chart, details of staff roles, information on training volunteers, plus annual reports and accounts.
- 112. In addition to the five-yearly licence review, the Institution submits an annual assessment return to the Engineering Council which is reviewed in line with their risk-based approach to licensing.
- 113. The Institution also engages in other activities that ensures that examples of best practice can be shared amongst other Professional Engineering Institutions (PEIs) and good practices can be adopted where appropriate. These activities include participation in workshops run by the Engineering Council which cover topics related to licensing and registration.

Professional Review Interview Seminar

114. The Institution holds an annual seminar where the PRI Co-ordinators from each of the regional groups are invited to attend and exchange best practice so that a fair and consistent approach is adopted, irrespective of the regional group conducting the interviews.

Trial marking meetings

115. All the chief and marking examiners, along with members of the examinations panel, will attend a day-long session to set the standard for the marking process that will then take place. The underlying purpose of the meeting is for the chief examiners to present their examination question to the marking examiners and explain what the question is looking to test. Examples of suitable solutions are given and a suitable strategy for assessing the examination papers is discussed, thus ensuring a consistent approach.



Review of Assessments

- 116. Candidates have the right to appeal any decision regarding their Professional Review (Exam or Interview). Grounds for appeal include either extenuating circumstances occurring immediately before or during the application process, interview or exam, or, departure from the Institution's application, interview or exam procedures. The Institution does not charge a fee for the appeal process.
- 117. Any candidate wishing to submit an appeal must write to the Deputy Chief Executive of the Institution within 30 days of receipt of the result, which may include supporting evidence. The Deputy Chief Executive will carry out a review to decide whether a case exists to review the decision. If a case exists the appeal will be referred to the relevant panel for consideration at its next scheduled meeting, and the decision is then considered by the Membership Committee which will make the final decision. Candidates will be informed of the result in writing.
- 118. A candidate has the right to a second appeal. They must write to the Chief Executive within 30 days of the receipt of the result of their first appeal, detailing their grounds for another appeal. They may not make an appeal on different grounds from the original appeal or put forward new evidence at this stage. If the Chief Executive deems that a case exists, he will appoint an Appeals Panel to review the appeal. The panel will consist of three Fellows who are unconnected with the interview, exam or application process and who have no prior knowledge of the candidate or their application. The decision of the Appeals Panel will be reported to the Membership Committee.
- 119. There is no fee charged for the appeals procedure. The outcome of any appeal will be considered by the secretariat such that any re-training of assessors or review of procedures is undertaken as appropriate.

Scheme review

- 120. An internal audit is conducted annually at the end of each year. The audit examines the effectiveness of the implementation of Institution procedures and covers the following activities:
 - Membership applications and elections including Students, Graduates, Technicians, Associate-Members, Chartered Members and Fellows.
 - Academic qualifications for membership including the Individual Case Procedure and Technical Report Route.
 - ▶ Initial Professional Development and the Professional Review.
- 121. The Membership Committee is responsible for appointing two auditors from its membership to audit the processes of the Academic Qualifications Panel, the Applications and Professional Review Panel, and the Examinations Panel this is in addition to the standard checking which takes place during the quarterly meetings. The report of the auditors is presented to the Membership Committee for consideration and action, as appropriate.
- 122. The Examinations Panel is responsible for examining the Institution's examination procedures. To monitor the progress of the examination from concept to fruition a checklist for each examination cycle is produced by the Examinations Manager and reported to the Panel.
- 123. The Applications and Professional Review Panel is responsible for checking the procedures for the operation of the IPD and the Professional Review Interview arrangements. Members of the Panel examine all Professional Interview reports from the Reviewers where the candidate has failed and a further sample of reports where the candidate has passed all the requirements. A PRI Coordinator is responsible locally for ensuring consistent standards and may be required to submit a report to the Panel on the Interviews. The Panel will also consider all applications for transfer to Fellowship.



124. The Institution will report the outcomes of audits and reviews to the BLA within six months after the 30 June each year.

Other administrative requirements

Identification check

- 125. Candidate identification: At the Professional Review Interview the candidate will be asked to supply proof of ID which satisfies the 100-point identification check utilised within State and Federal Government Agencies. Candidates will be advised that they must provide at least one of the documents which shows their date of birth from the primary list below, plus either another primary document or one from the secondary list with sufficient points to total 100:
- Primary:
 - Drivers' licence (60 points)
 - Passport (50 points)
 - Birth certificate (50 points)
- Secondary (all carry 40 points):
 - Proof of citizenship document
 - o Change of name certificate
 - o Australian Visa
 - Marriage certificate
 - Medicare card
- 126. Candidates will be advised of this requirement prior to their interview.

Management of personal data

127. The IStructE keeps registration records in accordance with all UK legal requirements including GDPR, accounting legislation and Engineering Council requirements such that all aspects of an individual's registration can be subject to audit.

Certification of documents

128. The Institution ensures that documents which require certification are certified by appropriately authorised people. This will normally be another professional engineer, or a member of faculty in the case of degree certificates or transcripts.

People applying for assessment who have documents in a language other than English

129. Any documents that are in a language other than English will be required to be translated in accordance with the following guidelines:

- if the documents are translated within Australia:
 - The translator must be accredited by the National Accreditation Authority for Translators and Interpreters (NAATI) – www.naati.com.au.
 - The Australian Institute for Interpreters and Translators (AUSIT) Directory of Translators provide a current list of qualified, active AUSIT members who have NAATI accreditation in translating – www.ausit.org.
- if the documents are translated in a country outside Australia:
 - The translator must be approved by the authorities in the country where the translation is made. The International Federation of Translators (IFT) – www.fit-ift.org – provide a list of translation associations, some approved by authorities to provide certified translation.

