MANUAL FOR THE ACCREDITATION OF ENGINEERING EDUCATION PROGRAMMES

ACC 01

May 2024 (version 9.2)

engineering new zealand
te ao rangahau

DOCUMENT AND VERSION CONTROL

Version	Action	Approver	Date
8	New Version	Standards and Accreditation Board	Feb 2014
8.1	• Minor revisions to terminology and Role descriptions • Change to Section 9.2 • Update to Appendix 1 (numbering of references to accreditation criteria)	Standards and Accreditation Board	May 2016
9	New Version • Reformatted to Engineering New Zealand style guide • Changes to Accreditation Outcomes – Section 2 • Clarification of Team Roles, Selection and Training – Section 4 • Updates to Accreditation Visit Procedures – Section 5 • New Appendix 1 – Accreditation Process – Key dates • Updated advice on Representation on Industry Advisory Boards – Section 12	Standards and Accreditation Board	October 2020
9.1	Clarification of expectations for provisional accreditation – Section 5	Standards and Accreditation Board	July 2022
9.2	• Changes to align with and reference version 4.1 of Accreditation Criteria and Documentation requirements ACC02 • Additional advice on provisional accreditation - Section 5 • Clarification of timeframes for meeting requirements and the scheduling of general reviews -Section 2 • Updated panel member training section – section 4.4 • Update of section 5.2 to affirm use of on-site visits and the supplementary use of online/electronic tools	Standards and Accreditation Board	May 2024

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1. BACKGROUND

1.1 PURPOSE AND BASIS OF ACCREDITATION

The key objective of accreditation is to provide independent confirmation that an engineering programme is producing graduates who have acquired the academic capabilities expected of them by the engineering profession in New Zealand, as defined in Engineering New Zealand policy, and who meet the requirements of any relevant international Education Accord to which Engineering New Zealand is a signatory.

More specifically accreditation provides:

- Public identification of programmes that have been evaluated by Engineering New Zealand, independently of the Tertiary Education Organisation (TEO) offering the programme, as having met the stated criteria[1]
- A statement of the standing that TEOs can offer to prospective students
- A basis for international comparability and graduate mobility
- A statement to governments and TEOs of the basic requirements of engineering education and the resources reasonably needed to meet these requirements
- Consultative feedback on the design of new programmes and modes of delivery, and assistance in the promotion of innovation and good educational practice.

1.2 BENEFITS TO GRADUATES

Graduates from Engineering New Zealand accredited programmes are eligible for membership of Engineering New Zealand in the Emerging Professional membership class and hold a qualification that satisfies the academic requirement for professional registration and/or competence-based Engineering New Zealand membership in the appropriate engineering occupational class. Graduates also benefit from international recognition of their qualification under the relevant international Education Accord[2]. These benefits apply to graduates who complete their studies from a specified year onwards.

1.3 GLOSSARY OF TERMS

The glossary of terms used by the International Engineering Alliance is adopted by Engineering New Zealand[3].

1.4 SCOPE OF ACCREDITATION

Engineering New Zealand considers engineering programmes for accreditation at the request of the TEO offering the programme(s) concerned, or at the request of a national qualification owner.

Programmes are not ranked or merit-graded; they are either accredited or not.

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[1] Listing of accredited programmes: https://www.engineeringnz.org/resources/accredited-engineering-qualifications/

[2] www.ieagreements.org

[3] IEA Glossary of Terms: https://www.ieagreements.org/assets/Uploads/Documents/IEA-Extended-Glossary.pdf

Accreditation is granted at a programme level that is consistent with the level of differentiation shown on a graduate's testamur. For a programme to be accredited, all undifferentiated pathways available to students for its completion must be included in the evaluation and must meet the criteria.

1.5 ACCREDITATION STANDARDS

The standard against which programmes are evaluated is set out in the following document: Accreditation Criteria and Documentation Requirements (ACC 02).

1.6 STANDARDS AND ACCREDITATION BOARD

All policies relating to Engineering New Zealand accreditation of engineering programmes are approved by the Engineering New Zealand Standards and Accreditation Board (SAB). The SAB receives the accreditation recommendations of panels, makes final decisions on the accreditation of individual programmes and releases a final accreditation report to the TEO.

The SAB works under delegation from the Engineering New Zealand Governing Board and membership includes an appropriate balance between industry and academic representation.

2. ACCREDITATION OUTCOMES

The possible accreditation outcomes are:

- Accreditation
- Accreditation with Requirements
- Provisional Accreditation
- Abeyance
- Declined or removed accreditation

Table 1 summarises the justification for each outcome (in terms of accreditation findings) and sets out consequential actions.

TABLE 1: SUMMARY OF ACCREDITATION OUTCOMES

Accreditation status	Accreditation findings	Next General Review	Subsequent TEO reporting obligations	Subsequent ENZ Review Process	Possible outcomes of that review	Graduate credit applies to
Provisional Accreditation	Provisional Accreditation may be granted to new or revised programmes that do not yet have graduates. Programme development already done, and the plans in place for further development suggest that it is likely (although not necessarily certain) that the programme can satisfy the requirements for accreditation by the time students graduate.					
	The panel may summarise (in the form of concerns) potential issues to be addressed and may also provide further Opportunities for Improvement to assist the TEO.	N/A	N/A	N/A	Provisional Accreditation normally lapses if accreditation is not gained within 2 years of first graduates completing or at the next General Review (whichever is later).	(Subject to accreditation being gained) students graduating in or after the year in which Provisional Accreditation was granted receive credit.
Accreditation	All accreditation criteria met – no requirements set, but Concerns related to potential issues may be identified and Opportunities for Improvement noted.	Up to 6 years.	Mid-term report on responses to Concerns and describing any significant developments.	Consideration of mid-term report by the SAB.	No change to accreditation unless the TEO has made major programme changes in which case the term to next assessment may be changed at the discretion of the SAB.	Students who complete requirements to graduate within the term of accreditation (but may graduate in the year following).
Accreditation with Requirements	One or more accreditation criteria are not met	Up to 6 years, although the timeframe for	Self-review and supporting evidence showing how the	The Chair of the SAB shall rule on the means of assessing	Requirement(s) met: date of next General Review confirmed.	Graduates who complete the requirements to be

Accreditation status	Accreditation findings	Next General Review	Subsequent TEO reporting obligations	Subsequent ENZ Review Process	Possible outcomes of that review	Graduate credit applies to
		meeting requirements, which can be up to 3 years, is set by SAB taking account of the seriousness of the matters identified and what is regarded as the minimum time for Requirements to be addressed.	Requirements have been addressed.	the TEO's response. The assessment will be undertaken by: • The original accreditation panel, or • A subcommittee of the original accreditation panel, or • A reconstituted panel approved by the chair of SAB The Review process may involve one or more of: • A visit • A review of the written self-review report • A meeting with programme representatives.	Requirement(s) not met – Accreditation placed in Abeyance or removed at end of the timeframe set for meeting requirement(s).	awarded the qualification within the timeframe for meeting requirements.

Accreditation status	Accreditation findings	Next General Review	Subsequent TEO reporting obligations	Subsequent ENZ Review Process	Possible outcomes of that review	Graduate credit applies to
Abeyance	One or more accreditation criteria are not met. Deficiencies are ongoing and/or substantial equivalence to the relevant Accord exemplar is not being achieved.	1 year from Abeyance decision.	Self-review and supporting evidence against deficiencies (expressed as requirements) within 9 months.	Re-visit by original accreditation panel, a panel sub-committee, or a re-constituted panel (as the Chair of SAB may decide) with subsequent reporting to the SAB.	Removal of accreditation status or award of accreditation.	Graduates who complete academic requirements before the end of the calendar year before accreditation was placed in abeyance. In the event abeyance is removed and accreditation reinstated, graduates completing in the year of abeyance receive graduate credit.
Declined/ Removed Accreditation	Accreditation criteria have not been met and substantial equivalence to the relevant Accord exemplar is not being achieved, a decision to decline or remove accreditation would normally follow a period of Abeyance (for currently	N/A A new application for accreditation would normally not be accepted for at least two years.	N/A	N/A	N/A	Graduate credit does not apply.

Accreditation status	Accreditation findings	Next General Review	Subsequent TEO reporting obligations	Subsequent ENZ Review Process	Possible outcomes of that review	Graduate credit applies to
	accredited programmes) or an opportunity to address deficiencies through a continued accreditation process (for unaccredited or provisionally accredited programmes).					

2.1 REQUIREMENTS

Requirements will be set to address any area a panel identifies that do not meet accreditation criteria.

Current programme accreditation will either be placed in Abeyance or Accreditation with Requirements will be granted. Any requirement is time-bound taking account of the seriousness of the issue and the minimum timeframe for it to be addressed.

2.2 CONCERNS

The panel may summarise (in the form of concerns) potential issues which, if not addressed, might lead to accreditation criteria not being met and may become requirements at the next General Review.

Concerns are defined as specific suggestions for improvement associated with a defined risk to satisfying accreditation standards. While TEOs are not required to act on any specific concern, they are expected to report on their consideration of the concern and the underlying risk in their mid-term report and for the next General Review.

2.3 OPPORTUNITIES FOR IMPROVEMENT

A key objective of the accreditation process is continuous improvement. Accreditation panels may list Opportunities for Improvement, which are not mandatory, but which the accreditation team/panel considers will improve the programme. Opportunities for Improvement are essentially suggestions to add value and there is no formal expectation on TEOs to provide updates on actions taken in response, or on future accreditation teams to report on implementation.

2.4 OTHER MATTERS

During the accreditation visit, team members may identify issues that fall outside the scope of accreditation, but they feel ethically obliged to raise with the TEO. These matters should not be included in the accreditation report (which relates solely to accreditation) but instead should be reported separately to the Accreditation Team Leader, who will brief the TEO on the issues and coordinate a separate report on such out-of-scope issues for SAB. The SAB will decide on the appropriate action to be taken.

2.5 DECLINED OR REMOVED ACCREDITATION

In cases where Engineering New Zealand terminates accreditation, a further application is not normally considered for two years, when a new panel would normally be formed to undertake the next review.

In deciding to terminate accreditation, the SAB assesses the extent that students currently enrolled on the programme can be recognised by Engineering New Zealand upon graduation.

2.6 DISCONTINUED PROGRAMMES

When a TEO decides to discontinue delivery of an accredited programme, the TEO must advise Engineering New Zealand so that a decision on the run-out period of accreditation for the programme can be made.

3. DELIVERY MODELS

3.1 MULTIPLE TEO/COLLABORATIVE PROGRAMMES

Multiple TEO/collaborative programmes are defined as programmes developed and/or maintained by two or more TEOs working collaboratively. When evaluating these programmes for accreditation, Engineering New Zealand processes are adapted to minimise process duplication.

An accreditation team is convened to consider the general suitability of the programme for accreditation, taking account of all relevant Engineering New Zealand criteria.

Where the outcome of a collaborative programme is a differentiated qualification award, each TEO is subject to a separate accreditation evaluation (via a team visit) and separate decisions on accreditation will be made for each TEO.

Accreditation teams evaluating individual TEOs normally include representation from the team that reviewed the collaborative programme curriculum. Where possible, visits are coordinated with the review of any other programmes offered by the individual TEO.

If the qualification award is undifferentiated across TEOs, Engineering New Zealand must be satisfied that all TEOs satisfy accreditation requirements for a single accreditation covering provision by all TEOs to be granted. This decision may be based on a visit programme that samples provision and outcomes at individual TEOs and assurances gained from a review of national quality assurance processes.

3.2 MULTI-CAMPUS PROVISION

If a TEO offers the same programme from more than one permanent location, the accreditation team (or a subset of the team) normally visits each location to gain assurance of the standard of provision and achievement of graduate outcomes. If the programme award is undifferentiated, the provision at every campus must satisfy the criteria for the programme to be accredited. Panels assess the impacts of such aspects as:

- Any differences in physical/staffing resources
- Any differences in programme structure
- The effectiveness of moderation processes across sites to ensure consistent assessment of common courses
- Use of technology to support multi-campus delivery.

If a programme is only partially delivered at another campus, a separate panel visit may not be required, particularly if delivery is restricted to less specialist or advanced aspects of the curriculum.

3.3 OFF-SHORE DELIVERY OF PROGRAMMES

All matters regarding offshore delivery of programmes will follow IEA policy.

3.4 DISTANCE/FLEXIBLE DELIVERY

Panels evaluating programmes that are substantially delivered in some form of distance or flexible mode will ensure that the nature of delivery overall provides students with an appropriate learning experience and does not compromise the achievement of graduate outcomes. The evaluation will include considering whether the TEO is taking reasonable steps to ensure the adequacy of:

- Any part-time or occasional physical resources such as teaching or laboratory facilities
- Instructional design in developing distance (electronic or hard copy) learning materials
- Laboratory activities, which might include mobile laboratories, laboratory access agreements, use of site visits, virtual laboratory experiments
- Online learning management systems

- Mechanisms for staff-student, staff-staff and student-student interaction
- The robustness of assessment processes

4. ACCREDITATION TEAM ROLES, SELECTION AND TRAINING

This Section describes the structure and resourcing of an Accreditation Team. Subject to the scope of the visit (nature and number of programmes being evaluated), the structure and resource may be scaled up or down, as appropriate and as agreed between the SAB Chair, Visit Manager and Team Leader.

4.1 DEFINITIONS

- Accreditation Team: The collective term for the group of people undertaking an Accreditation Visit
- Accreditation Panel: A subset of the Accreditation Team responsible for reviewing an individual programme (or group of programmes).

The following roles exist within an Accreditation Team:

- Visit Manager
- Visit Coordinator
- Team Leader
- Panel Leader (typically one panel per discipline/Department and which may cover more than one programme)
- Panel Members (typically two [in addition to the Leader] per Panel)

4.2. EXPECTATIONS AND RESPONSIBILITIES OF ACCREDITATION TEAM MEMBERS

Being a member of an Accreditation Team is a significant responsibility, privilege and commitment.

To be considered for a role on an Accreditation Team, the person must have met the training obligations outlined in Section 4.4.

Team Members must act professionally at all times, honouring the Engineering New Zealand Code of Ethical Conduct, in particular being aware of any potential conflicts of interest and respecting the confidentiality of the TEO, their Staff and Students and the material and information provided.

Importantly, each Team Member must be able to make available the time and energy, not only for the visit, but to prepare for the visit and the follow up. Depending on the nature of the visit and the individual's role, the time commitment may range from 40 hours for a Team Member up to 100 hours for a Team Leader.

Engineering New Zealand will maintain a small pool of Visit Managers to maximise consistency of approach. To recognise the specialised nature of the role and frequency of involvement, Visit Managers are reimbursed on a not-for-profit contract for service basis. Other Accreditation Team Members contribute to the process on a voluntary basis, although all travel and accommodation costs and other reasonable out of pocket expenses will be met in accordance with Engineering New Zealand's Travel Policy.

Visit Manager

The Visit Manager has responsibility for overall organisation and administration of the accreditation process. The Visit Manager supports the Team Leader and has a focus on ensuring that Engineering New Zealand accreditation policies and procedures are adhered to and that accreditation criteria are interpreted consistently. The Visit Manager has the overall responsibility for producing the Accreditation Report, under the direction of the Team Leader. Visit Managers will have a strong background in tertiary education and a detailed understanding of key academic quality assurance processes associated with curriculum development and review, programme delivery and assessment.

Visit Coordinator

The Visit Coordinator provides logistical support to the Visit Manager and coordinates with the Team Leader, Panel Leader(s) and individual Team Members.

The Visit Coordinator has the following specific responsibilities:

- Liaising with the TEO regarding submission requirements
- Confirming the scheduling of the visit
- Coordinating the pre-visit teleconference
- Producing visit Worksheets and the base report template, with input from the Visit Manager and Team Leader
- Preparing visit Timetable
- Coordinating the logistics of the visit

Team Leader

The Accreditation Team Leader works closely with the Visit Manager, the Visit Coordinator and any Panel Leaders.

The Team Leader is responsible for the accreditation report (drafted/collated by the Visit Manager) and for leadership of the Accreditation Team. Team Leaders will normally have participated in other accreditation visits. Because of the small size of the New Zealand education system, and potential conflicts of interest, Team Leaders are normally practicing engineers. They must be of high standing in their industry sector and the engineering profession.

The Team Leader has the following responsibilities:

- Chairing all plenary sessions involving the whole Accreditation Team
- General problem solving during the visit, and liaison between any Accreditation Panels
- Reviewing high-level considerations such as institutional and school governance, strategy, finance and culture
- Liaising with the TEO's senior management personnel, such as Dean, Chief Executive or Vice Chancellor
- Coaching or mentoring Panel Leaders to identify requirements and concerns consistently across panels and across visits
- Providing verbal feedback to the TEO at the end of the visit summarising the general nature of the Accreditation Team's findings
- Overseeing the preparation of the Accreditation Report by the Visit Manager, including finalising the report Executive Summary and endorsing any sections produced by individual accreditation panels

- Considering feedback on the draft report received through the moderation process and from the TEO around matters of fact in the report
- Attendance at the SAB meeting where the report recommendations are considered
- Providing Engineering New Zealand with feedback on the contributions of panel members to assist with future accreditation panel selection

Panel Leader(s)

Where the Accreditation Team is made up of separate panels (normally to review the programmes offered by separate engineering departments), a Panel Leader will be appointed to each panel. The Panel Leader must have a strong understanding of the programme's academic requirements and the New Zealand context, so will normally have New Zealand academic experience.

Accreditation Panel Leaders have the following responsibilities, in addition to the responsibilities of Team Members listed below:

- Chairing meetings involving the Panel, and in this role ensuring the panel systematically reviews the programme against all the indicators of attainment
- Ensuring all necessary information to support the Panel's findings is verified
- Ensuring any issues are reported to the Accreditation Team Leader
- Summarising the Panel's key findings to members of the wider accreditation team during the visit and working to ensure consistency with other panels
- Producing a panel report, approved by all panel members, in line with a report template that is provided. Reports should be submitted to the Visit Manager within the prescribed timeline

Accreditation Team Members

Accreditation Team Members are appointed to ensure a balance of representation from practicing engineers and engineering academics. Team members may be assigned to a specific Panel and work under the direction of a Panel Leader.

Accreditation Team Members have the following responsibilities:

- Being suitably trained prior to the visit
- Declaring any potential conflicts of interest
- Reviewing the TEO submission
- Participating in the pre-Visit Teleconference
- Undertaking the visit (including induction and briefing)
- Actively participating and engaging in all relevant sessions during the Visit
- Making notes and generally using the templates provided
- Contributing to the preparation of the Accreditation Report under the direction of the Panel Leader and/or Visit Manager
- Reviewing the completed draft report

4.3 MAINTAINING A POOL OF POTENTIAL ACCREDITATION TEAM MEMBERS

Engineering New Zealand will maintain a schedule of potential Accreditation Team Members from which Accreditation Teams are drawn. The schedule will include:

- Qualifications and discipline
- Training and accreditation activities completed
- A Register of Interests

Recommendations for potential Team members to be considered for training are to be drawn from recommendations from TEOs, SAB, NZCED and Technical Groups.

All Accreditation Team Members are required to have undertaken training as outlined in Section 4.4.

4.4 TRAINING

The need for training/refresher training sessions for accreditation panel members will be assessed on an annual basis to ensure that all panel members are well equipped to undertake their role and familiar with the latest standards and processes. A range of training options are used including recorded webinars, workshops and individual panel member inductions.

Training upon activation for a specific accreditation visit

Accreditation Team members are issued with accreditation guidance documents and must familiarise themselves with the content of these documents. The Accreditation Team shall then raise any matters requiring clarification with the Visit Manager prior to or during the pre-visit conference call.

Accreditation Team Orientation

The Accreditation Team normally convenes the afternoon prior to a visit for a two-hour refresher focussed training / briefing session led by the Visit Manager and Team Leader.

Most of this session is treated as an orientation and briefing session, where panel members are reminded of their roles and responsibilities and visit procedures. A key objective is to ensure that Accreditation Teams are consistent in their standards and approach across panels and across all programmes being accredited in New Zealand. Panel members are expected have reviewed all documentation before arriving at the orientation session. They will have been provided with worksheets for each level of programme being reviewed. At the orientation session each Team member will share their initial findings with the rest of their Team/Panel.

4.5 SELECTION OF TEAM MEMBERS FOR A SPECIFIC ACCREDITATION VISIT

General

Accreditation Teams will generally be identified in the year prior to the scheduled visit.

The SAB Chair will be consulted over the appointment of the Team Leader and Visit Manager. The Visit Manager, working with the Team Leader, will select Team members, and any Panel Leaders from the pool of trained Accreditation Team Members. Feedback on Members' performance on prior accreditation visits will be taken into consideration.

The make-up of any Accreditation Team, including the number and membership of subsidiary Accreditation Panels, will depend on the number and type of engineering programmes under review. Accreditation Teams will typically include at least one (1) senior engineering academic and one (1) senior industry

representative whose professional background aligns with each programme under review. However, individual Team members may align with more than one programme.

Every effort will also be made to ensure that the Accreditation Team and any subsidiary Accreditation Panel includes:

- an international representative
- a senior New Zealand engineering academic
- a senior New Zealand industry representative
- a member who has previously participated in an Engineering New Zealand accreditation visit

The names of the proposed Accreditation Team will be provided to the TEO being visited for feedback on potential conflicts of interest and alignment with the programmes under review. While the TEO is invited to provide feedback, this does not represent a right of veto.

International Representatives

International representatives will be from a jurisdiction that is a full signatory to the relevant education Accord. They will be endorsed by the Accord signatory in their home jurisdiction or there will be evidence that they understand the education and accreditation standards in that jurisdiction. It is acknowledged that overseas Panel Members will typically not have been through the Engineering New Zealand Accreditation Training, so it is important that they have had experience as Panel Members in accreditation visits for other Accord signatories.

International representatives will normally be senior academics responsible for delivering a similar programme. To satisfy ongoing review requirements established by each of the education accords within the International Engineering Alliance, international panel members may be drawn from Overall Review Panels established under the review processes documented in Section 6.4.

Conflicts of Interest

No-one may serve on an Accreditation Team if they have any relationship with the TEO concerned such that their judgement might be or be seen to be unduly influenced (for example, recent former staff or members of TEO advisory committees).

Any perceived or actual conflicts of interest shall be declared to the Visit Manager at the first opportunity (i.e. pre appointment). The Visit Manager, in consultation with the SAB Chair, will determine whether this disqualifies a person from being a member of the Accreditation Team.

An Interests Register will be maintained for each Accreditation Team to guard against real or perceived conflicts of interest.

4.6 EVALUATION OF PERFORMANCE AND FEEDBACK TO TEAM MEMBERS

At the completion of the accreditation process, each Team Member will be provided with a brief survey, which provides the opportunity to comment on the process and for Panel Leaders to comment on the effectiveness of the Panel and individual Members.

The Team Leader will also provide a brief report to SAB with the Accreditation Visit Report, which provides:

- An overall review of the visit with key learnings
- Observations of the performance of the Visit Manager

- By exception feedback on the performance of the Panel Leaders or Members

Engineering New Zealand will use the feedback when reviewing the accreditation process and selecting future accreditation teams. SAB may provide constructive feedback to individual Team Members.

5. ACCREDITATION VISIT PROCEDURES

5.1 TYPES OF ACCREDITATION VISITS

Provisional Accreditation

A programme normally goes through provisional accreditation before getting full accreditation. Any TEO can apply for provisional accreditation when (1) programme development (including the specification of delivery and assessment at course-level) is largely complete, (2) programme delivery is well underway and (3) the human and physical resources required to deliver the first cycle of the programme are substantially in place.

Provisional accreditation applications can be made any time before the first student cohort graduates and making the application later in the first cycle of programme delivery increases the level of assurance that the programme meets accreditation criteria. However, an earlier application allows the accreditation visit to be used to support and encourage TEOs to take a planned and structured approach to new programme development, allow early feedback on any changes needed if full accreditation is to be achieved, and provides prospective students with assurance on the likelihood the profession will accept the new programme.

The following guidance has been developed to assist in the evaluation of a TEO's preparedness to seek provisional accreditation:

1. Programme development (including the specification of delivery and assessment at course-level) is largely complete. We expect that:
    - High-level curriculum design and graduate attribute mapping is complete
    - Course/paper descriptors have been finalised for all core papers
    - Teaching, learning and assessment resource development has been completed for at least the first year of delivery, with a clear plan to ensure remaining resource development tracks at least 6 months ahead of scheduled delivery
2. Programme delivery is well underway. We expect that there is evidence of effective programme delivery and assessment consistent with curriculum design and graduate attribute mapping.
3. Human and physical resources required to deliver the first cycle of the programme are substantially in place. We expect that:
    - Academic leadership for the programme is in place (commensurate with an ability to complete initial programme design)
    - Staff recruitment and physical resourcing plans are tracking ahead of delivery requirements.

Other factors that can provide a level of additional assurance include:

- A track record delivering Engineering New Zealand accredited programmes, either:
    - in other disciplines at the same level, or
    - in the same discipline at another level

- The level of curriculum/resourcing overlap with already accredited programmes
- Any collaborative or support arrangements with other accredited providers to support programme development or delivery
- External reviews of organisational quality assurance processes.

The documentation submitted for provisional accreditation should be the same quality as a full accreditation. Assessments of programmes offered by TEOs that do not have any accredited programmes will consider the TEO's quality assurance and management systems to the level of full accreditation.

The evaluation of applications for provisional accreditation will normally involve an accreditation visit.

Transition to Full Accreditation

This can be done only when there are a representative number of graduates in industry, and normally after at least two cohorts have graduated. The transition to full accreditation will normally involve an on-site visit by an Accreditation Team, which may include member(s) from the provisional accreditation visit.

Reaccreditation of Programmes

Reaccreditation is done every six years, or sooner if issues have been identified or if there have been major changes to a programme. It will normally involve an on-site visit by an Accreditation Team and will normally be coordinated to cover all accredited programmes offered by the TEO.

5.2 ACCREDITATION PROCESS STEPS

Key steps in the accreditation process are described below and summarised in Appendix 1.

5.2.1 Request for Accreditation

Engineering New Zealand schedules accreditation activities on a calendar-year basis. The TEO requesting provisional, full or re-accreditation should submit its request the year before and not less than six months in advance of the expected visit.

5.2.2 Scheduling the Accreditation Visit

Engineering New Zealand will consult with the TEO to identify a suitable date for the accreditation visit.

5.2.3 Appointing the Accreditation Team

Guidelines for selecting the Accreditation Team are given in Section 4.5. The process will begin as soon as a request for accreditation has been received.

The TEO will be notified of the team members and allowed to comment on suitability or possible conflicts.

5.2.4 Accreditation Visit Timetable

Visits typically take one or two days (excluding Accreditation Team briefing and planning sessions) but may be longer if programme(s) are delivered at more than one site. The Visit Manager or Team Leader will liaise with the TEO to produce the final accreditation visit timetable at least two weeks before the visit. A timetable exemplar is given in Appendix 2.

5.2.5 Preparing and Submitting Documentation

The TEO must submit a self-review and supporting documentation setting out how the programme(s) meets the relevant Requirements at least ten weeks before the visit. Information about the documentation required is in Engineering New Zealand's publication Accreditation Criteria and Documentation

Requirements (ACC02)[4]. The TEO should raise any queries about the documentation and process with Engineering New Zealand as early as possible in the document preparation process. Engineering New Zealand staff are available to visit the TEO to discuss documentation requirements.

The TEO must submit all documentation to the standard described in ACC02 at least twelve weeks before this date. If the documentation is not received by this deadline, the visit may be postponed.

5.2.6 Reviewing the Documentation

The processes for reviewing documents for provisional accreditation, full accreditation, re-accreditation and accreditation of collaborative programmes are the same.

5.2.6.1 Preliminary Review

The team leader and visit manager will review the adequacy of the submitted documentation. The TEO will be informed within two weeks if there are any serious deficiencies. The visit may be delayed or cancelled until adequate documentation is received.

5.2.6.2 Accreditation Team Review

Members of the accreditation team will receive the accreditation documentation at least eight weeks before the visit.

The accreditation team will confer, preferably by videoconference, at least four weeks before the visit to identify any concerns and/or requests for further information from the TEO as a formal response before or during the visit.

The Visit Manager will use the outcome of the teleconference to develop target (and generic) questions to guide the accreditation team during the visit.

5.2.7 On-Site Visit

An on-site visit by the accreditation team is seen as a key component of the accreditation process. Face-to-face interaction is considered to support a richer evaluation by maximising interaction between faculty and accreditation panel members and amongst members of the panel themselves. However, every effort is made to use electronic or online processes to supplement and enhance the face-to-face interaction.

In addition to a requirement for the submission of electronic applications that include examples of assessed student work, this can include use of videoconferencing during elements of the on-site visit to enable participation by larger numbers of graduates or Industry Advisory Board members, or as a contingency to enable involvement of remote panel members.

The visit provides an opportunity for the Accreditation Team to meet with a range of stakeholders, observe facilities and review a range of course related material to assess whether Engineering New Zealand accreditation requirements are being met. Key areas of focus will include:

- Verifying there is sufficient evidence of student attainment of relevant graduate attributes
- Verifying the data supplied

[4] https://www.engineeringnz.org/engineer-tools/ethics-rules-standards/accredited-engineering-qualifications/

- Verifying that the stated programme objectives and graduate competency profiles are being met
- Appraising quality systems and processes

The team should not be assessing factors outside the accreditation criteria. Any matters of concern outside the accreditation criteria should be raised separately with the TEO and/or Engineering New Zealand.

5.2.7.1 Team Briefing

The Accreditation Team normally convenes the afternoon before the accreditation visit for a briefing session to revisit their role, responsibilities and procedures. Each team member should have rigorously reviewed the accreditation documentation before the pre-visit videoconference meeting and shared their findings with the rest of the team. The Visit Manager will have prepared Worksheets for the programme(s) being reviewed, which will help the team comprehensively evaluate the programme. Engineering New Zealand expects that areas set out in accreditation criteria (and replicated on the Worksheet) are considered systematically and that indicators of attainment are used to support their evaluation.

5.2.7.2 Administrative Support during Visits

The Accreditation Team should be provided with lists of attendees at each meeting. Each attendee should be provided with a name badge or “table hat”.

The Accreditation Team will generally require access to overhead projection equipment, internet, and a printer during the visit.

5.2.7.3 Visit Components

During the visit, the Accreditation Team:

- Meets with the Dean, Heads of Departments or their equivalents and representative groups of students, academic staff, technical support staff, alumni and Industry Advisory Group members. Some Team members may accompany the Team Leader and Visit Manager when they meet the Vice Chancellor (or equivalent)
- Reviews and discusses assessment procedure and has further time to review and discuss representative samples of assessment tasks and assessed student work from both marginal and highly capable students, with emphasis on capstone parts of the programme and key assessments that evidence student achievement of graduate attributes. The focus should be on whether all aspects of the graduate capability profiles are being systematically assessed through the programme and achieved by students
- Evaluates factors such as the professional culture in the school or TEO, the morale and calibre of the academic and technical staff and students, and the general awareness of current developments in engineering education and engineering practice
- Reviews facilities and resources including; laboratories/workshops; independent study facilities and related resources; on-line delivery resources; student experience for any part of the programmes delivered by distance; general and specialised student support including diversity and disability, etc
- Examines and discusses evidence of how well the quality processes are functioning. This includes how student input to teaching quality, subject evaluation and complaints are dealt with
- Examines the documentation on any specific areas of focus that might be identified by SAB from time to time.

5.2.7.4 Exit Meeting

Normally only senior management of the TEO such as Head of School and Heads of Department should attend the exit meeting. Any significant issues leading to potential requirements should have been raised with senior management earlier in the visit and the exit meeting is not the place to conduct open or detailed discussions. The exit meeting should be confined to:

- Summarising the general nature of the overall accreditation visit and its findings and that any Requirements/ Concerns/Opportunities for Improvement will be issued by the SAB after considering the team's report
- Reiterating that the accreditation team is acting on behalf of the SAB and can only make recommendations for the SAB to consider
- Indicate the expected timing to finalise the accreditation report and communicate the outcome of the process

5.2.8 Finalising the Accreditation Report

A draft report, prepared and agreed by the accreditation team, should normally be produced within three weeks of the visit. The visit manager may contribute to the report in terms of standard presentation and ensuring matters are confined to issues associated with accreditation.

The Chair of SAB will assign SAB members to moderate and provide feedback on the draft report, normally within two weeks. If there are any issues, the Chair will discuss the report with the accreditation team leader.

After moderation, the draft report is sent to the TEO to provide feedback on matters of fact in the report. The TEO has two weeks from receiving the draft report if it wants to provide a written response.

The TEO may also choose to provide comment on actions proposed/taken in response to visit findings. The Accreditation Team may choose to acknowledge such responses in the final report but will not include any detailed consideration of those actions or make conclusions on the extent the response might address any matters the Team identified during the accreditation visit.

Minor factual corrections reported by the TEO will normally by managed by the Visit Manager as part of finalising the final draft of the report for submission to the SAB. However, any factual accuracy concerns raised by the TEO that call into question the validity of a report finding will be referred to the Accreditation Team Leader to consider. The Accreditation Team Leader may seek feedback from other members of the Accreditation Team in finalising the draft report.

Any lack of consensus from the Accreditation Team on the content of its report will be advised to the SAB and considered in SAB's decision making. It should be noted that the Accreditation Team report is to inform the SAB of the outcomes of the visit and that the final report comes from the SAB.

5.2.9 Accreditation Decision

The final draft report from the Accreditation Team is forwarded to the SAB for consideration at its next meeting. The Team Leader is invited to attend this meeting.

The SAB makes decisions on:

- acceptance of the report as a whole

- the overall outcome of the accreditation process in accordance with Section 2
- any Requirements, Concerns or Opportunities for Improvement to be communicated to the TEO

5.2.10 Notification of Outcome

The SAB communicates the outcome of the accreditation visit to the TEO. A copy of the final accreditation report, including any Requirements, Concerns and/or Opportunities for Improvement will be attached to the notification letter.

Accreditation certificates will be produced and sent to the TEO and/or presented at a suitable public/Engineering New Zealand event.

The Engineering New Zealand online listing of accredited programmes is updated to reflect the outcome of the visit.

5.3 APPEALS

TEOs wishing to appeal a decision to decline or remove accreditation must lodge the appeal with the Engineering New Zealand Governing Board within two weeks of receiving the accreditation decision, stating the grounds for the appeal.

Grounds for the appeal are normally limited to errors of fact or breach of the policy, criteria and/or procedures set out in this Manual.

The Governing Board shall consider the appeal and may appoint an Appeals Panel of not less than one experienced academic and one experienced practicing engineer to investigate the appeal and advise the Governing Board. The Governing Board's decision, given normally within three months of receiving the appeal, shall be final.

6. LINKS TO OTHER PROCESSES

6.1 NEW ZEALAND QUALIFICATIONS AUTHORITY (NZQA)

When reviewing proposed new engineering programmes offered outside the university sector, Engineering New Zealand works in cooperation with the NZQA to minimise duplication and compliance costs for the TEO.

The actual accreditation process that is followed is agreed in conjunction with all parties involved but would normally involve Engineering New Zealand representation on the NZQA accreditation team, who provide a separate report to Engineering New Zealand with the NZQA report as a supplement.

6.2 UNIVERSITIES NEW ZEALAND

Any new academic programmes a New Zealand University plans to offer must first have approval from the Committee on University Academic Programmes (CUAP). Requests for academic approval must include written evidence of consultation with, and acceptability to, the appropriate professional registration or licensing bodies.

To respond to this CUAP requirement, Engineering New Zealand convenes an Initial Evaluation Panel to assess programme proposals. The Panel's role is not to review the programme against specific accreditation criteria, but to seek evidence of a systematic programme development process that indicates:

- Alignment to a coherent and recognised body of engineering knowledge consistent with the proposed programme title
- Constructive alignment of the proposed curriculum with a set of programme graduate outcomes that are substantially equivalent to the exemplar graduate attributes for the relevant international Accord
- Engagement with, and consideration of feedback from, target industries and likely employers of graduates
- Alignment with Engineering New Zealand's Strategic Statement on Engineering Education.

6.3 INTERNAL AUDIT/REVIEW

Some TEOs have an internal review system requiring Schools, Departments and/or programmes are reviewed by an expert panel similar in composition to that required for Engineering New Zealand accreditation. To reduce compliance costs, Engineering New Zealand is willing to work with the TEO so that Engineering New Zealand accreditation visits and internal reviews occur jointly or consecutively.

6.4 REVIEW BY INTERNATIONAL ENGINEERING ALLIANCE ACCORD SIGNATORIES

All the Education Accords to which Engineering New Zealand is a signatory require periodic review of every signatory's procedures and practices by other Accord members. These reviews are conducted in accordance with the processes set out in the International Engineering Alliance Rules and Procedures[5].

7. ACCREDITATION VISIT OBSERVERS

Engineering New Zealand is expected to have procedures in place for accreditation visits to be observed by representatives from Accord signatories from other jurisdictions. This helps to maintain confidence in the accreditation and recognition systems across each Education Accord and assists in developing accreditation systems within jurisdictions seeking entry to an Education Accord. Observing an accreditation visit may also be beneficial for individual TEOs seeking to develop an accredited or recognised engineering programme.

Requests for observer status are subject to approval by the TEO being visited, but it is expected that permission will not be unreasonably withheld.

Observers will be required to complete a confidentiality agreement covering detailed visit findings and materials made available to the panel that are not in the public domain.

8. ACCREDITATION COSTS

Direct costs associated with individual accreditation visits are borne by the TEO. This includes all travel and accommodation costs associated with Engineering New Zealand accreditation visits. Panel members are reimbursed expenses but are not paid for the time that they give to such visits.

Observers from other signatories of the international engineering agreements are expected to meet their own travel and accommodation costs.

[5] https://www.ieagreements.org/assets/Uploads/Documents/Policy/Accord-Rules-and-Procedures-July-2018-version-2019.1.pdf

Engineering New Zealand National Office will make the travel and accommodation arrangements for the Accreditation Team. However, the TEOs, in consultation with Engineering New Zealand, may wish to make these arrangements themselves.

Given the significant benefits accruing to graduates holding a qualification accredited or recognised to an international Accord standard, Engineering New Zealand seeks to recover a contribution from graduates indirectly by invoicing qualification-granting TEOs to cover costs associated with managing the accreditation process and maintaining its standing as a signatory to the Washington, Sydney and Dublin Accords. Engineering New Zealand calculates staffing and other direct costs associated with the accreditation process and recovers a percentage of those costs from TEOs through an annual accreditation charge.

9. CHANGES TO ACCREDITED PROGRAMMES

Accredited programmes that undergo substantial changes to structure, content, delivery, staffing, student numbers or institutional support arrangements may be required to undergo re-evaluation before the current accreditation period expires. TEOs must advise of any such changes so SAB can decide on the form of any evaluation process.

Substantial changes include the following:

- Change of qualification title
- Changes to regulations concerning entry requirements and cross-crediting arrangements
- Changes to the level or credits necessary to gain the qualification
- Changes to overall programme objectives
- Significant changes to the structure of the qualification
- Significant changes to staffing
- Changes in student numbers that bring the financial or academic viability or rigour of a programme into question
- Changing the mode of delivery
- Delivering a programme at a different campus
- Introducing a new major or programme strand.

10. PUBLIC REPORTING

After each set of accreditation decisions is made, the list of accredited programmes is updated on the Engineering New Zealand website. This lists the accreditation status of each programme and the initial and final year of accreditation. Where a programme is no longer accredited, the previous period of accreditation is shown.

Accreditation listings are maintained in accordance with guidelines developed by the International Engineering Alliance.

TEOs must ensure that current and prospective students are aware of the current accreditation status of their programme(s).

11. CONFIDENTIALITY

Engineering New Zealand does not divulge details of investigation, documentation, correspondence and discussions between Engineering New Zealand, the accreditation team and the TEO concerned to third parties or those not involved in the accreditation process without the approval of the TEO. Under the various international accords to which Engineering New Zealand is a signatory, observers and reviewers from other accord countries may be required to report on the status of Engineering New Zealand accreditation procedures to their respective bodies. For this purpose, they may disclose details of accreditation actions to those bodies, but only to the extent required to comment on the procedures operated by Engineering New Zealand.

12. REPRESENTATION ON INDUSTRY ADVISORY COMMITTEES

Due to potential conflict of interest with Engineering New Zealand's accreditation function, Engineering New Zealand staff cannot serve in a general representative capacity on an Industry Advisory Committee (IAC) for an engineering programme, department, school or faculty within a TEO. This does not, however, disqualify individual staff members, who do not have responsibility for, or a direct involvement in, the accreditation process, from accepting invitations to serve as an individual on an IAC, based on their industry expertise. Staff serving on an IAC are expected to actively manage any perceived conflict of interest and to be careful not to present, or to be seen to present, an Engineering New Zealand perspective on any matter that might impact on programme accreditation.

Engineering New Zealand is also able to recommend Members it considers would be effective in providing input from the profession for IAC roles.

Engineering New Zealand Members serving on an IAC are also free to take up a role in Engineering New Zealand's accreditation process, either as a member of the SAB, or as a panel member on accreditation visits to other tertiary providers. Any potential conflicts of interest for SAB members are managed through an Interests Register, which is reviewed at every SAB meeting.

Engineering New Zealand recognises there can be value in IACs having access to the most up-to-date strategic thinking of the national professional body on engineering practice, engineering education, or associated international trends. Engineering New Zealand will normally support National Office staff (or representatives) attending faculty level IAC meetings.

APPENDIX 1

ACCREDITATION PROCESS

KEY DATES

Year prior to visit

	TEO	Engineering New Zealand	Accreditation team
October	Notify/ confirm request for and scope of visit.		
November	Provide feedback on any Conflict of Interest with proposed team members. TEO begins developing Application documentation using ACC02.	Consult with TEO to establish visit date. Select Accreditation team. Confirm document requirements and timeframes for submission to TEO.	

Year of visit

	TEO	Engineering New Zealand	Accreditation team
February/March	TEO continues development of Application using ACC02.	Annual team member training session.	
12 weeks before visit	TEO submits application documentation.	Draft visit timetable developed with Visit Manager and Team Leader.	
10 weeks before visit	Feedback provided on visit timetable. Re-work of documentation (if required).	Travel and accommodation arrangements confirmed with team.	Initial review of application completed by Team Leader and Visit Manager. Any serious deficiencies advised to TEO.
8 weeks before visit		Final documentation provided to accreditation team or decision made to defer visit.	

	TEO	Engineering New Zealand	Accreditation team
4 weeks before visit		Visit timetable finalised.	Team members complete initial review of documentation and hold initial video-conference to discuss initial findings.
3 weeks before visit			Report from video-conference prepared identifying any concerns/ requests for additional information.
1 weeks before visit	Any response/ additional information developed in response to video-conference report.		

Post visit

	TEO	Engineering New Zealand	Accreditation team	Standards and Accreditation Board
3 weeks after visit			Draft report prepared and submitted for SAB moderation.	Chair assigns SAB members to moderate report.
5 weeks after visit				Moderation feedback to Team.
6 weeks after visit			Report updated and provided to TEO for factual accuracy check.	
8 weeks after visit	Provide response on factual accuracy of report.			
9+ weeks after visit			Draft Report finalised and ready for submission to SAB.	Final draft Report considered by SAB at next meeting.

TEO	Engineering New Zealand	Accreditation team	Standards and Accreditation Board
	Outcome communicated to TEO. Accreditation Certificate(s) produced and online accreditation listing updated.		

APPENDIX 2

VISIT TIMETABLE EXEMPLAR

A possible visit programme is given below. It is based on a complex visit involving several panels.

A specific visit programme will be developed for each visit to reflect the characteristics of the activity, such as evaluating collaborative programmes or programmes for provisional accreditation.

Notes

1. There is some flexibility in the order and timing of activities, but the general aim is to consider the information presented in a logical order.

2. Experience has shown that some presentations tend to repeat material already provided. Care should be taken to avoid this where practical.

Pre visit

Period	Venue	Team Activity	Relevant accreditation criteria from ACC02
1-2 hours (4 weeks prior to visit)	Teleconference	Accreditation team teleconference to identity gaps in documentation and key areas for visit.	All
2-4 hours (day prior to visit)	Off Campus	Private plenary team meeting chaired by Team Leader. (Observers, if any are present).	All
Private team dinner (observers present)			

Day One

Period	Venue	Team Activity	Relevant accreditation criteria from ACC02
1 hour	Central	Opening session: Accreditation Team meets with senior departmental staff. Introductions (10 mins). Overview presentation by Dean on recent developments and strategic directions (20 mins).	1. Programme Design 3. Academic staff 5. Practical teaching facilities and learning resources 8. Management, Leadership and Institutional Support

Period	Venue	Team Activity	Relevant accreditation criteria from ACC02
1.5 hours	Departments	Accreditation panels meet with relevant programme leaders. Objective: opportunity for further discussion at programme level. Areas for discussion to include: • curriculum developments within individual degrees • coverage of Engineering New Zealand graduate profile within curriculum • staffing • departmental research activity • stakeholder input.	2. Graduate Attributes and Assessment 3. Academic staff
1 hour	Potential parallel session	Meeting with Dean and Quality Manager to consider academic quality systems.	6. Admission 7. QA systems and processes
1 hour (lunch)	Central	Lunch with Programme Industry Advisory Group members and stakeholders. Objective: review level of engagement with industry and level of stakeholder support.	1. Programme design, including feedback from industry on graduate capabilities 1.4. Industry advice
1 hour	Departments	Accreditation Panels meet with relevant academic staff. Objective: Consideration of issues relating to: • curriculum development • teaching and learning approaches • assessment • programme objectives • Engineering New Zealand graduate profile • Workloads • Resourcing • technical support • research • professional culture.	2. Graduate Attributes and Assessment 3. Academic staffing 5. Practical Teaching Facilities and Learning Resources

Period	Venue	Team Activity	Relevant accreditation criteria from ACC02
1.5 hours	Departments	Accreditation Panels review samples of capstone student work/examination scripts/projects and assessment tasks at capstone level. Objective: Review learning outcomes against course descriptors and Engineering New Zealand graduate profile.	1. Programme design 2. Graduate Attributes and Assessment
1 hour	Departments	Panels meet with selection of undergraduate students.	2. Graduate Attributes and Assessment 3. Academic staff – interactions with students 7. QA systems and processes– student feedback loops
30 minutes	Central	Private session for Accreditation Team.	All
45 minutes early evening		Accreditation Panels meet with recent alumni/ postgraduate students.	1. Programme Design 2. Graduate Attributes and Assessment 3. Academic staff – interactions with students 7. QA systems and processes– student feedback loops
Later evening	Off campus	Working dinner for Accreditation Team.	

Day Two

Period	Venue	Team Activity	Relevant accreditation criteria from ACC02
1 hour	Central	Private session for Accreditation Team. Objective: consolidate initial findings. Note: Programme leaders available to discuss issues arising from Day One, as required.	All

Period	Venue	Team Activity	Relevant accreditation criteria from ACC02
1 hour	Departments	Panels tour facilities, focussing on laboratories and independent study facilities.	4. Technical support staff 5. Practical teaching facilities and learning resources
1 hour	Central	Accreditation Team meets with the VC and Dean Objective: review matters relating to institutional strategy, governance and support.	8. Management, Leadership and Institutional Support
	Potential Parallel Session	Staff research/Teaching and Learning Support initiatives.	3. Academic Staff
	Potential Parallel Session	Student Learning Support initiatives.	6. Admission and students with specific needs
	Potential Parallel Session	Work Experience Support Initiatives.	1.6. Practical work experience
1 hour	Departments	Accreditation Panels review student work and assessment tasks. Objective: Further opportunity to review samples of student work, examinations/projects.	1. Programme design 2. Graduate Attributes and Assessment
30 minutes	Departments	Accreditation Panels meet with technical staff. Objective: Consideration of levels of administrative and technical support and associated systems.	4. Technical and support staff 5. Practical teaching facilities and learning resources
2 hours	Central	Private session for Accreditation Team. Objective: consolidate findings and begin to draft report.	All
30 minutes	Central	Exit Meeting. Objective: present verbal report on findings to Senior Management.	All

Note: the TEO is expected to provide lists of names and titles/affiliations of attendees at panel sessions with academic staff, students, alumni and advisory group members. Where possible, name badges should be provided to assist with interaction.