

**MANUAL FOR THE  
ACCREDITATION OF  
ENGINEERING EDUCATION  
PROGRAMMES  
(ACC 01)**

EIGHTH EDITION

### Documentation and Version Control

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## TABLE OF CONTENTS

1. Purpose of Accreditation .....	4
2. Glossary of Terms .....	4
3. Scope of Accreditation .....	4
4. Accreditation Standards .....	4
5. Accreditation Outcomes and Associated Matters .....	5
5.1 Requirements .....	9
5.2 Recommendations .....	9
5.3 Benefits to Graduates .....	9
5.4 Multiple TEO/Collaborative Programmes .....	10
5.5 Multi-Campus Provision .....	10
5.6 Off-shore Delivery of Programmes .....	10
5.7 Distance/Flexible Delivery .....	11
5.8 In-Term Programme Development .....	11
5.9 Discontinued Programmes .....	12
5.10 Public Reporting .....	12
6. Operational Principles .....	12
6.1 Confidentiality .....	12
6.2 Links to Other Processes .....	12
6.3 Accreditation Visit Observers .....	13
6.4 Accreditation Costs .....	14
7. Roles and Appointments .....	15
7.1 Standards and Accreditation Board .....	15
7.2 Guidelines for Selection of Panels .....	15
7.3 Accreditation Panel Roles .....	15
8. Accreditation Procedures .....	17
8.1 Applying for Provisional Accreditation .....	17
8.2 The Request for Accreditation .....	18
8.3 Scheduling of Accreditation Visit .....	18
8.4 Appointment of Accreditation Panel .....	18
8.5 Finalisation of Visit Timetable .....	18
8.6 Submission of Documentation .....	18
8.7 Initial Review of Documentation .....	18
8.8 Review of Documentation by Panel .....	19
8.9 Initial Review of Collaborative Programme Documentation .....	19
8.10 Pre-visit Teleconference by Panel .....	19
8.11 Panel Orientation and Training .....	19
8.12 On-site Visit .....	19
8.13 The Exit Meeting .....	20
8.14 Finalising the Accreditation report .....	20
8.15 Accreditation decision making .....	21
8.16 Notification of Outcome .....	21
8.17 Appeals .....	21
8.18 Administrative Support During Visits .....	21
9. Assistance to TEOs .....	21
9.1 Guidance and Advice Reports .....	21
9.2 IPENZ Representation on Industry Advisory Committees .....	22
Appendix 1 – Timetable Exemplar .....	23
Appendix 2: Expense Claim Guidelines .....	28

## **1. PURPOSE OF ACCREDITATION**

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

More specifically accreditation provides:

- Public identification of programmes that have been evaluated by IPENZ, independently of the Tertiary Education Organisation (TEO) offering the programme, as having met the stated criteria
- 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.

## **2. GLOSSARY OF TERMS**

The glossary of terms used by the International Engineering Alliance is adopted by IPENZ.

<http://www.ieagrements.org/assets/Uploads/IEA-Extended-Glossary.pdf>

## **3. SCOPE OF ACCREDITATION**

IPENZ 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.

Accreditation is accorded to engineering programmes, not to engineering schools, colleges, faculties, other TEOs or qualification owners. For a programme to be accredited or recognised, all pathways available to students for its completion must be included in the evaluation and must meet the criteria.

## **4. ACCREDITATION STANDARDS**

The standard against which programmes are evaluated is set out in the following document: Requirements for Accreditation of Engineering Education Programmes (ACC 02).

## **5. ACCREDITATION OUTCOMES AND ASSOCIATED MATTERS**

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, such as the term to next accreditation assessment and the need for TEO reporting and subsequent IPENZ assessment.

Accreditation status	Accreditation findings	Term to next assessment	Subsequent TEO reporting obligations	Subsequent IPENZ Review Process	Possible outcomes of that review	Graduate credit applies to:
Provisional accreditation	<p>Provisional accreditation may be granted to new or revised programmes, which have yet to have graduates emerge.</p> <p>The development of the programme already undertaken, and the plans in place for further development suggest that it is likely (although not necessarily certain) that the programme can satisfy accreditation requirements by the by the time students' graduate,</p> <p>The panel may summarise (in the form of recommendations) critical issues to be addressed and suggestions to assist the TEO</p>	N/A	N/A	N/A	Provisional accreditation normally lapses if accreditation is not gained within 2 years of first graduates completing or at next scheduled accreditation visit (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 recommendations may be made	6 years	Mid-term report on responses to the recommendations 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	Graduates who complete the requirements to be awarded the qualification at latest in the final calendar year within the term of accreditation (but may graduate in the year following)

Accreditation status	Accreditation findings	Term to next assessment	Subsequent TEO reporting obligations	Subsequent IPENZ Review Process	Possible outcomes of that review	Graduate credit applies to:
Accreditation with requirements	One or more accreditation criteria are not met	1, 2 or 3 years (at the discretion of the SAB taking into account the seriousness of the matters concerned and what is regarded as the minimum sufficient time for the requirements to be addressed)	Self-review and supporting evidence showing how the requirements have been addressed	<p>The Chair of the SAB shall rule on the means of assessing the TEO's response. The assessment will be undertaken by:</p> <ul style="list-style-type: none"> <li>• The original accreditation panel</li> <li>• A subcommittee of the original accreditation panel, or</li> <li>• A reconstituted panel approved by the Chair of SAB.</li> </ul> <p>The review process may involve one or more of:</p> <ul style="list-style-type: none"> <li>• A re-visit</li> <li>• A review of the written self-review report</li> <li>• A meeting with programme representatives</li> </ul>	<p>Requirement(s) met and accreditation term revised to be 6 years from previous full review.</p> <p>Requirements not met – Accreditation placed in Abeyance or removal of accreditation at end of the last year of the current term of accreditation</p>	Graduates who complete the requirements to be awarded the qualification at latest in the final calendar year within the conditional term (but may graduate in the year following)
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	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 granted then

Accreditation status	Accreditation findings	Term to next assessment	Subsequent TEO reporting obligations	Subsequent IPENZ Review Process	Possible outcomes of that review	Graduate credit applies to:
						the graduates completing in the year of abeyance receive graduate credit.
Declined/Removed Accreditation	<p>Accreditation criteria have not been met and substantial equivalence to the relevant Accord exemplar is not being achieved,</p> <p>A decision to decline or remove accreditation would normally follow a period of Abeyance (currently accredited programmes) or an opportunity to address deficiencies through a continued accreditation process (unaccredited or provisionally accredited programmes)</p>	<p>N/A.</p> <p>A new application for accreditation would normally not be accepted for at least 2 years</p>	N/A	N/A	N/A	Graduate credit does not apply

## **5.1 REQUIREMENTS**

Requirements will be set to address any areas where a panel identifies that accreditation criteria are not being met.

A summarised in the table above, where requirements are identified, accreditation will be placed in abeyance or accreditation with requirements, will be granted with a reduced term to the next assessment. this has the effect of making all requirements time-bound.

## **5.2 RECOMMENDATIONS**

A key objective of the accreditation process is continuous improvement. Accreditation panels may list recommendations, which are not mandatory, but which will, in the opinion of the accreditation panel, improve the programme.

Recommendations are defined as specific suggestions for improvement and while TEOs are not required to act on them, they are expected to report on their consideration of the recommendation and any subsequent action taken.

## **5.3 BENEFITS TO GRADUATES**

Graduates from IPENZ-accredited programmes are eligible for Graduate Membership of IPENZ and hold a qualification that satisfies the academic requirement for professional registration and/or competence based IPENZ membership in the appropriate engineering occupational class. Graduates also benefit from international recognition of their qualification under the relevant international Education Accord<sup>1</sup>. These benefits apply to graduates who complete their studies from a specified year onwards. This year is specified on the online listing of accredited programmes.

Where a programme is no longer accredited by IPENZ, the date from which granting of benefits to graduates ceased is denoted by a second date (e.g.1991-1998). This often relates to programmes that have ceased to be offered by the TEO.

The year of next accreditation review is also listed on the online accreditation listing. Granting of benefits to graduates extends to students completing their programme in the year the accreditation review is scheduled. Exceptions could be (a) where students have had a substantial break in their studies, during which accreditation of the programme has ceased; or (b) should exceptional circumstances arise, causing IPENZ to terminate accreditation of a programme. All such circumstances would be treated on merit in relation to particular students or groups of students.

Provisional accreditation of a programme does not guarantee the provision of benefits to graduates by IPENZ. This is contingent on accreditation being gained.

Where a programme transitions from provisional accreditation to accreditation the granting of benefits to graduates is normally retrospective and set to cover students who graduate during the period of provisional accreditation. If provisional accreditation lapses then for IPENZ Membership purposes all graduates of the programme will be deemed not to have gained a qualification recognised by IPENZ. They would be eligible to apply for IPENZ Graduate Membership but their qualification would not be recognised under the relevant international Education Accord.

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<sup>1</sup> [www.ieagreements.org](http://www.ieagreements.org)

## **5.4 MULTIPLE TEO/COLLABORATIVE PROGRAMMES**

Multiple TEO /collaborative programmes are defined as programmes developed and/or maintained by two or more TEOs working collaboratively. In the case of evaluating such programmes for accreditation, IPENZ processes are adapted to minimise process duplication.

An accreditation team will be convened to consider the general suitability of the programme curriculum; programme graduate outcomes; and any collaborative programme management, programme delivery and quality assurance processes against relevant IPENZ criteria.

Provisional accreditation of all TEOs offering the programme may be granted following a review of the curriculum; quality assurance processes; and evidence of a robust process of accreditation by the appropriate external accreditation body - New Zealand Qualifications Authority (NZQA) or Council on University Academic Programmes (CUAP)

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

If the programme is undifferentiated, IPENZ 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.

Accreditation visits to individual TEOs will normally be conducted by panels that include representation from the panel that reviewed the collaborative programme curriculum for provisional accreditation. Where possible, visits will be coordinated with the review of any other programmes offered by the individual TEO.

## **5.5 MULTI-CAMPUS PROVISION**

If a TEO offers the same programme from more than one permanent location, the accreditation panel (or a subset of the panel) will normally visit 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 as a whole to be accredited. The panel will 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 nodal delivery

## **5.6 OFF-SHORE DELIVERY OF PROGRAMMES**

All matters regarding off-shore delivery of programmes will follow IEA policy.

## **5.7 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 panel is expected to consider the adequacy by considering the “student experience”. Does the way of facilitating learning by the student through the use of various aids to teaching including block courses, condensed laboratory programmes, transportable equipment facilities etc. create an equivalent learning experience to that experienced by students undertaking an on-campus educational experience?

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 the development of 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

## **5.8 IN-TERM PROGRAMME DEVELOPMENT**

Accredited programmes which undergo substantial changes to structure, content, delivery, or staffing, or experience a significant decline in student numbers or institutional support arrangements may be required to undergo re-evaluation prior to the expiry of the current accreditation period. It is the responsibility of the TEO to initially advise IPENZ of any such changes whereupon IPENZ will determine the accreditation status of the programme and, in conjunction with the TEO, will decide if re-accreditation/re-recognition is required and what form the assessment should take.

Substantial changes may include some or all of 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
- A significant change in student numbers that brings the financial or academic viability of a programme into question, or lead to concern as to whether the graduate attributes can be consistently delivered
- Changes to the mode of delivery
- Programme being offered at a new site
- Introduction of a new major or programme strand

## **5.9 DISCONTINUED PROGRAMMES**

When a TEO makes a decision to discontinue delivery of an accredited programme, the TEO shall advise IPENZ who will determine the run out period of accreditation of the programme.

## **5.10 PUBLIC REPORTING**

After each set of accreditation decisions is made, IPENZ updates the list of all accredited programmes on the IPENZ website. The list shows the initial and final year of accreditation. Where a programme is no longer accredited the previous period(s) of accreditation are shown. Provisionally accredited programmes are identified as such on the list.

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

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

## **6. OPERATIONAL PRINCIPLES**

### **6.1 CONFIDENTIALITY**

IPENZ will not divulge details of investigation, documentation, correspondence and discussions between IPENZ, 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 IPENZ is a signatory, observers and reviewers from other accord countries may be in attendance on panels and be required to report on the status of IPENZ accreditation procedures to their respective bodies. For this purpose they may disclose details of particular accreditations or recognition actions to those bodies, but only to the extent required to comment on the procedures operated by IPENZ.

### **6.2 LINKS TO OTHER PROCESSES**

#### **6.2.1 New Zealand Qualifications Authority**

When reviewing proposed new engineering programmes offered outside the university sector, IPENZ will work in cooperation with the NZQA to minimise duplication and compliance costs for the TEO.

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

#### **6.2.2 Universities New Zealand**

Engineering programmes offered by New Zealand universities must be accredited by CUAP.

Requests for academic approval from CUAP must be accompanied by written evidence of consultation with, and acceptability to, the appropriate professional registration or licensing bodies.

In order to respond to this CUAP requirement, for new programmes, IPENZ will convene 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 suggests:

- Alignment to a coherent and recognised body of engineering knowledge consistent with the proposed programme title
- Engagement with, and consideration of feedback from, target industries and likely employers of graduates
- 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

### **6.2.3 Internal Audit/Review**

Some TEOs have an internal review system requiring that each School, Department or programme be reviewed by an expert panel similar in composition to that required for IPENZ accreditation. To reduce compliance costs, IPENZ is willing to work with the TEO so that IPENZ accreditation visits and internal reviews occur jointly or consecutively.

### **6.2.4 Review by Accord Bodies**

All the Education Accords to which IPENZ is a signatory require periodic review of every country's procedures and practices by other Accord members. These reviews will be conducted in accordance with the 'Accord Alternative Review Process' set out in the International Engineering Alliance Rules and Procedures [http://www.ieagrements.org/assets/Uploads/Documents/Policy//IEA%20Rules%20and%20Procedures%20\(3%20June%202006\).pdf](http://www.ieagrements.org/assets/Uploads/Documents/Policy//IEA%20Rules%20and%20Procedures%20(3%20June%202006).pdf)

## **6.3 ACCREDITATION VISIT OBSERVERS**

IPENZ is expected to have provisions in place for accreditation visits to be observed by representatives from Accord signatories from other jurisdictions. This provision is intended to maintain confidence in the accreditation and recognition systems across each Education Accord and to assist in the development of 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.

Any requests for observer status will be 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 in respect of detailed visit findings and materials made available to the panel that are not in the public domain.

## **6.4 ACCREDITATION COSTS**

### **6.4.1 Accreditation Cost Recovery**

Accreditation is a core standards-setting function for IPENZ and effectively sets the standard for entry to the engineering profession in New Zealand. Accreditation confers marketing benefits to TEOs and the Graduates of accredited programmes benefit from the recognition of their qualification under the relevant international education Accord.

IPENZ seeks to recover a contribution from TEOs (and indirectly from Graduates) 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.

The amount to be recovered is set every three years and will reflect IPENZ National Office costs directly attributable to the accreditation process. In recognition of the mutual benefit of the process and a philosophy of equal partnership, only 50 percent of directly attributable costs will be recovered from TEOs. The annual fee payable by each TEO is based on a published formula that takes account of:

- The Accord standard to which programmes are accredited
- Graduate numbers
- The range of accredited programmes

TEOs become liable to contribute once they achieve provisional accreditation to a relevant Accord standard, but any contribution based on graduate numbers is set as zero until accreditation is achieved.

Fees (on which GST is also payable) shall be paid prior to 30 September on supply of a suitable invoice by IPENZ.

### **6.4.2 Accreditation Visit Costs**

Direct costs associated with individual accreditation visits are borne by the TEO. This includes all the travel and accommodation costs associated with IPENZ accreditation visits. Panel members are reimbursed expenses but are not paid for the hours that they give to such visits. Refer to Appendix 2 for guidelines on expense claims.

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

IPENZ National Office will make the travel and accommodation arrangements for the accreditation team. However the TEOs, in consultation with IPENZ, may wish to make these arrangements themselves.

## **7. ROLES AND APPOINTMENTS**

### **7.1 STANDARDS AND ACCREDITATION BOARD**

All policies relating to IPENZ accreditation of engineering programmes are approved by the IPENZ Standards and Accreditation Board (SAB). The SAB receives the accreditation recommendations of panels and makes final decisions on the accreditation of individual programmes.

The SAB is made up of:

- No less than four (4) and no more than seven (7) Members appointed by the governing Board for their knowledge of engineering education and setting of professional competence standards,
- Any IPENZ Member currently elected as Chair or Deputy Chair of an International Engineering Agreement to which IPENZ is a signatory
- One member of the governing Board, appointed by that Board annually (non-voting)

Every effort is made to maintain an appropriate balance between industry and academic representation. The Board will receive secretariat support from IPENZ National Office.

### **7.2 GUIDELINES FOR SELECTION OF PANELS**

Accreditation Teams are led by an Accreditation Team Leader, coordinated by a Visit Manager and made up of Accreditation Panels, which are responsible for the review of an individual programme or grouping of programmes.

The Visit Manager will appoint Panel members in consultation with the TEO being visited, the Accreditation Team Leader and the Chair of the Standards and Accreditation Board. Panels should include at least one person who has previously participated in an IPENZ accreditation visit. Overseas 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. In normal circumstances international representatives will be senior academics responsible for the delivery of a similar programme.

In order to satisfy ongoing review requirements established by each of the Education Accords within the International Engineering Alliance, overseas panel members may be drawn from Overall Review Panels established under the review processes documented in Appendix 5.

No-one may serve as a Panel Leader, Panel member, Team Leader or Visit Manager if they have any relationship with the TEO concerned such that their judgement might be unduly influenced (for example, staff or members of advisory committees).

### **7.3 ACCREDITATION PANEL ROLES**

#### **7.3.1 Visit Manager**

The Visit Manager has responsibility for overall organisation and administration of the accreditation process. It is the responsibility of the Visit Manager to ensure that

IPENZ accreditation policies and procedures are adhered to and are interpreted consistently.

The Visit Manager has the following responsibilities

- Making appointments to the accreditation team, in consultation with the TEO, accreditation Team Leader and SAB Chair.
- Providing advice and guidance to the TEO on the preparation of documentation
- Initial review of documentation
- Coordination of pre visit teleconference
- Producing teleconference findings report
- Finalisation of timetable
- Development of exemplar questions and worksheets to assist panel members record their observations
- Conducting an induction training session for Panel Members

### **7.3.2 Accreditation Team Leader**

The Accreditation Team Leader is responsible for the accreditation report and for leadership of the panel/s. 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 practising engineers, not academics. They must be of high standing in their industry sector and the engineering profession as a whole.

The Accreditation Team Leader for a multi-panel visit has the following responsibilities:

- Chairing all plenary sessions involving the Accreditation Team
- General co-ordination and problem solving during the visit, and liaison between the accreditation panels
- Reviewing high-level considerations such as institutional and school governance, strategy, finance and culture
- Liaison with the TEO's senior management personnel, such as Dean, Vice Chancellor, or President
- Coaching or mentoring Panel Leaders to produce consistent requirements and recommendations across panels and across visits
- Providing verbal feedback of accreditation visit outcomes at the end of the visit
- Writing the Accreditation Report Executive Summary and approving each panel report for submission to the IPENZ Standards and Accreditation Board (SAB)
- Attendance at the SAB meeting where the report recommendations are considered
- Providing IPENZ with feedback on the contributions of panel members to assist with future accreditation panel selection

### **7.3.3 Accreditation Panel Leaders**

Where the accreditation team is made up of separate panels (normally to review the programmes offered by separate engineering departments) a separate panel leader will be appointed to each panel.

Accreditation Panels will normally consist of senior engineering academics, industry representatives of high standing and representatives of relevant international accord signatories. The number of members in each Accreditation Panel will depend on the number and type of engineering programmes the panel is expected to review, but each panel will always comprise at least two persons, one of whom must be an academic or have academic experience. Normally either the industry or New Zealand academic representatives, will be appointed as Panel Leader.

Accreditation Panel Leaders have the following responsibilities:

- Chairing meetings involving the Panel, and in this role ensuring the panel systematically reviews the programme against all the indicators of attainment.
- Ensuring that all necessary information to support the Panel's findings is verified.
- Ensuring that any concerns are reported to the Accreditation Team Leader.
- Providing verbal feedback of accreditation visit outcomes to the TEO at the end of the accreditation visit in accordance with the guidelines in Section 8.1.12.
- Producing a panel report, approved by all panel members, in line with a report template that is provided. Reports should be submitted to IPENZ National Office within three weeks of the accreditation visit.

## **8. ACCREDITATION PROCEDURES**

If a TEO offers more than one engineering programme IPENZ will co-ordinate accreditation visits so that all programmes are reviewed at the same time. This has the effect of minimising costs for the TEO and for IPENZ.

The accreditation procedure for a programme or a group of programmes comprises the steps set out below:

### **8.1 APPLYING FOR PROVISIONAL ACCREDITATION**

Applications for provisional accreditation from existing TEOs of IPENZ accredited engineering programmes may be assessed as a desktop evaluation without a visit. The panel will review the overall programme objectives, structure and development plans and assesses the quality of the academic staff and other resources that will support its delivery. A visit would be required only if the TEO provided insufficient evidence that the programme met the criteria.

TEOs with no accredited programmes would normally be expected to be offering at least two thirds of the programme and the plan and resources must be substantially in place for offering the full programme before assessment for provisional accreditation can be considered. In all cases IPENZ would conduct an accreditation visit. Assessment of programmes offered by new TEOs will be rigorous and examine all institutional aspects as for full accreditation.

The follow-up panel to assess transition to full accreditation may include one person who was a member of the Panel that originally reviewed the programme or it may be a full new Panel.

## **8.2 THE REQUEST FOR ACCREDITATION**

The TEO submits a request to IPENZ for a programme or programmes to be accredited. The request may be submitted at any time, but accreditation activities are scheduled on a calendar-year basis.

For a programme that is already accredited or recognised IPENZ will issue a reminder that re-evaluation is due in sufficient time for the TEO to make the necessary preparations.

## **8.3 SCHEDULING OF ACCREDITATION VISIT**

IPENZ will acknowledge the request and schedule a date for the accreditation visit in consultation with the TEO. A date will be established by which the TEO must submit its documentation to IPENZ; IPENZ estimates a date by which the SAB will make a decision on accreditation following consideration of the panel's report.

## **8.4 APPOINTMENT OF ACCREDITATION PANEL**

The Accreditation Panel will be selected in accordance with section 7.2.

## **8.5 FINALISATION OF VISIT TIMETABLE**

The Visit Manager, in consultation with the Accreditation Team Leader, will finalise the accreditation visit timetable with the TEO at least two weeks before the visit. Visits will normally extend over two and a half days, but may take three or four days depending on the number of programmes being reviewed. A sample timetable is given in Appendix 1.

Finalisation of the visit programme will normally involve a visit to the TEO by the Visit Manager or Visit Coordinator to clarify administrative and logistical aspects of the visit and ensure the adequacy of:

- meeting room allocations
- arrangements for the review of student work
- arrangements for meeting with sufficiently representative numbers of staff, students, graduates and industry advisory group members

## **8.6 SUBMISSION OF DOCUMENTATION**

At least 8 weeks prior to the accreditation visit, the TEO is required to submit a self-review and supporting documentation setting out how the programme(s) address(es) the relevant Requirements.

Guidance of the documentation required is set out in Documentation Requirements for Tertiary Education Organisations (TEOs) Preparing for Accreditation (ACC 03).

## **8.7 INITIAL REVIEW OF DOCUMENTATION**

On receipt of the documentation the Visit Manager and Team Leader will review the adequacy of the documentation. If the documentation is considered seriously deficient the TEO will be advised and the accreditation visit may be delayed until adequate documentation is received, or the visit cancelled.

## **8.8 REVIEW OF DOCUMENTATION BY PANEL**

Panels will receive and review the documentation from the TEO no later than one month prior to the visit to enable an initial review to be undertaken.

## **8.9 INITIAL REVIEW OF COLLABORATIVE PROGRAMME DOCUMENTATION**

The initial review of documentation for a programme that is developed and maintained on a collaborative basis will normally occur through a face to face meeting of an Accreditation Team with the collaborators. The meeting will provide the Team with the opportunity for discussion with representatives from the programme consortium.

## **8.10 PRE-VISIT TELECONFERENCE BY PANEL**

One to two weeks prior to the visit the panel will confer to discuss any preliminary findings and to particularly identify any concerns for which additional information is required from the TEO. The TEO will be advised accordingly and requested to provide a formal response, either prior to, or at the time of, the accreditation visit.

The Visit Manager will use the outcomes of the teleconference to develop a set of targeted (and generic) questions to guide the accreditation team during the visit.

## **8.11 PANEL ORIENTATION AND TRAINING**

The Accreditation Team normally convenes the afternoon before they visit the education TEO. Most of this session is treated as an orientation and briefing session, where panel members are given training in their role, responsibilities and procedures. The 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 to have reviewed all documentation before arriving at the orientation session. They will have been provided with Worksheets for each level of programme being reviewed by their particular Panel. These sheets are intended as an aid to the panel to ensure they comprehensively evaluate the programme under review. IPENZ does not insist these worksheets are completed by each panel member, but does expect the areas for evaluation set out in the accord standard (and replicated on the Worksheet) are considered in a systematic manner by the panel using the indicators of attainment to support their evaluation.

At the orientation session each Panel member will share their initial findings with the rest of their Panel.

## **8.12 ON-SITE VISIT**

The visit will focus principally on:

- Verifying the data supplied
- Verifying that the stated programme objectives and graduate competency profiles are being met
- Evaluating factors that cannot readily be described in, or verified from, documentation provided by the TEO.
- Auditing quality systems and processes

During the visit, each accreditation panel:

- Meets with the Dean, Heads of Departments or their equivalents and representative samples of students, academic staff, technical support staff, alumni and Industry Advisory Group members, some of the panel members will accompany the Accreditation Team Leader and Visit Manager when they meet with the Vice Chancellor or equivalent of the TEO.
- Reviews and discusses assessment procedures and examines representative samples of assessment tasks set with emphasis on capstone parts of the programme, students' work (both marginal and highly capable students), focussing particularly on whether all aspects of the graduate capability profiles are being proficiently and comprehensively assessed.
- Evaluates factors such as the professional culture in the school or TEO, the morale and calibre of the staff and students, and the general awareness of current developments in engineering education and engineering practice;
- Reviews facilities, particularly laboratories and independent study facilities, including the library (and in the case of programmes delivered by distance evaluates how the student experience is developed using distance mode resources).
- Examines and discusses evidence of how well the quality processes are functioning;

### **8.13 THE EXIT MEETING**

The exit meeting should be confined to:

- Summarising the general nature of overall accreditation recommendations that the Accreditation Team intends to make to the Standards and Accreditation Board
- Noting any commendations, requirements or key recommendations that the Accreditation Team wishes to make;

The purpose of the exit meeting is to report findings; it is not the place to conduct open or detailed discussions of any of the recommendations or requirements outlined.

### **8.14 FINALISING THE ACCREDITATION REPORT**

As soon as possible after the visit, normally within three weeks, a draft report is prepared and agreed by the Accreditation Team.

The Chair of SAB will assign SAB members to moderate the draft report.

After moderation by SAB (typically within 4 weeks of the accreditation visit), the draft report will be sent to the TEO to provide feedback on matters of fact in the report.

The TEO may also choose to provide comment on actions proposed/taken in response to visit findings. While the Accreditation Team may choose to acknowledge such responses in the final report, it will not include any detailed consideration of those actions or make final conclusions on the extent to which they might address any requirements that the Team has identified, as this would require evidence of implementation and efficacy.

The TEO has two weeks from the date of receipt of the report to provide a written response if it so wishes.

## **8.15 ACCREDITATION DECISION MAKING**

The final report is then forwarded for the Standards and Accreditation Board for consideration at its next meeting.

The Standards and Accreditation Board formally accepts the report and considers the recommendations outlined in it. The visit leader is invited to attend the SAB meeting at which the visit report is considered.

## **8.16 NOTIFICATION OF OUTCOME**

The outcome of the accreditation process is then communicated to the Dean/Head of Department and the IPENZ listing of Accredited Programmes is updated, as appropriate. A copy of the final accreditation report will be attached to the notification letter and accreditation certificates will be produced for all accredited programmes.

## **8.17 APPEALS**

If the TEO wishes to appeal against a decision to decline or remove accreditation, an appeal must be lodged with the Chief Executive of IPENZ within two weeks of receipt by the TEO of the accreditation decision and must state the grounds on which it is based. 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 IPENZ Board shall consider the appeal and may appoint an Appeals Panel of not fewer than one experienced academic and one experienced practising engineer to investigate the appeal and advise the Board. The Board's decision, which shall be final, shall normally be given within eight weeks of receipt of the appeal.

## **8.18 ADMINISTRATIVE SUPPORT DURING VISITS**

Accreditation panels will generally require access to overhead projection equipment and a printer during the visit.

Panels should also be provided with lists of attendees at each meeting and each attendee should be provided with a name badge or "table hat".

# **9. ASSISTANCE TO TEOS**

## **9.1 GUIDANCE AND ADVICE REPORTS**

TEOs of engineering programmes can request that IPENZ nominate an Advisory Panel to review new programmes or proposed programmes prior to applying for provisional accreditation. The Panel then provides a Guidance and Advice Report indicating the readiness of the programme in question for accreditation.

TEOs are expected to meet the full costs associated with Advisory Reports, and to make their own arrangements with advisory panel members.

Guidance and Advisory Reports should be taken as advisory only and cannot be taken as assurance that the programmes reviewed will necessarily be granted provisional accreditation.

Members of any Advisory Panel may not serve on the Accreditation Panel considering the programme.

## **9.2 IPENZ REPRESENTATION ON INDUSTRY ADVISORY COMMITTEES**

It is not appropriate for IPENZ National Office Staff to participate as formal members of a TEO's Industry Advisory Committee, given IPENZ' accreditation function, but IPENZ is able to recommend Members for Advisory Board roles who it considers would be effective in providing input from the profession.

IPENZ also recognises that there can be value in industry advisory committees having access to the most up to date strategic thinking of the national professional body on matters relating to engineering practice, engineering education, or associated international trends. IPENZ will attempt to respond to occasional requests for input of this sort by supporting the attendance of National Office Staff (or representatives) at faculty level industry advisory committee meetings.

## APPENDIX 1 – TIMETABLE EXEMPLAR

A possible visit programme is given below. It is based on a visit by multiple simultaneous panels with a visit leader.

A specific visit programme will be developed for each visit to reflect the particular characteristics of the activity, such as the consideration of collaborative programmes or the evaluation of 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.

Period	Venue	Team activity	Relevant accreditation criteria
<b>Two to three weeks prior to visit</b>			
1-2 hours	Teleconference	Accreditation team teleconference to identify gaps in documentation and key areas of focus for visit	All
<b>Afternoon or evening before visit</b>			
Varies	Off campus	Team introductions and training of panellists if not done previously	
2-4 hours	Off campus	Private plenary team meeting chaired by visit leader. (Observers, if any are present)	All
		Private team dinner (Observers present)	

Day one			
Period	Venue	Team activity	Relevant accreditation criteria
1 hour	Central	<p>Opening session: Accreditation team meets with senior departmental staff</p> <p>Introductions (10 mins)</p> <p>Overview presentation by Dean on recent developments and strategic directions (20 mins)</p>	<p>1. programme graduate outcomes</p> <p>2. Programme design</p> <p>4.1. Academic staffing</p> <p>4.3. Practical teaching facilities and learning resources</p>
1.5 hours	Departments	<p>Accreditation panels meet with relevant programme leaders</p> <p>Objective: opportunity for further discussion at programme level. Areas for discussion to include: curriculum developments within individual degrees, coverage of IPENZ Graduate profile within curriculum, staffing, departmental research activity, and stakeholder input</p>	<p>1.1-1.12. Development of programme graduate outcomes</p> <p>2. Programme design</p> <p>3. Assessment</p> <p>4.1. Academic Staffing</p>
1 hour	Potential parallel session	<p>Meeting with Dean and Quality Manager to consider academic quality systems</p>	<p>5. QA and management systems</p>
1 hour (Lunch)	Central	<p>Lunch with Programme Industry Advisory Group members and stakeholders</p> <p>Objective: review level of engagement with industry and level of stakeholder support</p>	<p>1. Programme graduate outcomes, including feedback from industry on graduate capabilities</p> <p>2.4. Industry advice</p>
1 hour	Departments	<p>Accreditation Panels meet with relevant academic staff</p>	<p>1. Programme graduate outcomes</p> <p>3. Assessment</p>

		Objective: Consideration of issues relating to: curriculum development, teaching and learning approaches, assessment, programme objectives, IPENZ Graduate Profile, workloads, resourcing, technical support, research, professional culture	<b>4.1.</b> Academic staffing <b>4.4.</b> Educational and professional culture
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 IPENZ Graduate Profile	<b>1.</b> Programme graduate outcomes <b>2.</b> Programme design <b>3.</b> Assessment
1-hour	Departments	Panels meet with selection of undergraduate students	<b>1.</b> Programme graduate outcomes <b>4.8.</b> Educational and professional culture <b>4.1.</b> Academic staff - interaction with students <b>5.2.3.</b> Quality systems – student feedback loops
30 Minutes	Central	Private session for Accreditation Team	All
45 minutes - early evening		Accreditation Panels meet with recent alumni/postgraduate students	
Later evening	Off campus	Working dinner for Accreditation Team	

Day Two			
Period	Venue	Team Activity	Relevant accreditation criteria
1 Hour	Central	Private session for Accreditation Team  Objective: consolidate initial findings  Note: Programme leaders available to discuss issues arising from day 1, as required.	All
1 hour	Departments	Panels tour facilities, focusing on laboratories and independent study facilities	<b>4.3.</b> Practical teaching facilities and learning resources <b>4.2.</b> Technical and support staff
1 hour	Central	Accreditation Team meets with the VC and Dean.  Objective: review matters relating to institutional strategy, governance and support	<b>5.4.</b> Institutional support
	Potential Parallel Session	Staff research/Teaching and Learning Support initiatives	<b>4.1.</b> Academic Staff <b>4.4.</b> Educational and professional culture
	Potential Parallel Session	Student Learning Support initiatives	<b>5.1.</b> Admission standards
	Potential Parallel Session	Work Experience Support Initiatives	<b>2.7.</b> 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	<b>1.</b> Programme graduate outcomes <b>2.</b> Programme design <b>3.</b> Assessment
30 Minutes	Departments	Accreditation Panels meet with technical staff  Objective: Consideration of levels of administrative	<b>4.2.</b> Technical and support staff

		and technical support and associated systems	<b>4.3.</b> Practical teaching facilities and learning resources
2 hours	Central	Private session for Accreditation Team Objective: consolidate findings and begin to draft report	All
30 min	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.

## **APPENDIX 2: EXPENSE CLAIM GUIDELINES**

TEOs seeking IPENZ accreditation of engineering programmes are expected to cover all direct costs associated with accreditation visits. The following guidelines have been developed to ensure consistency across accreditation visits regarding travel, accommodation and other general expenses.

### **1.1 Overseas Representatives**

If a TEO is seeking accreditation of more than one programme it may not be necessary to have an overseas representative on each panel. TEOs, when advising IPENZ of the names of possible overseas panel members, should consider the travel costs of international representatives and weigh this against the advantages that an overseas representative brings to the Panel, such as the opportunity to develop international networks, and the ability to benchmark standards to an overseas TEO. Recommending overseas representatives from jurisdictions relatively close to New Zealand, such as Australia or South East Asia, would help reduce costs.

In order for IPENZ, as the New Zealand signatory, to meet its international obligations under the Washington Accord and Sydney Accord, some of the overseas representatives will need to be approved by the Accord signatory of the country in which the overseas representative resides.

Overseas representatives, when being asked if they would agree to have their name put forward to IPENZ as a potential panel member, should be informed that any direct costs associated with their participation in the accreditation will be reimbursed. They would, however, normally be expected to travel economy class if the flight time is less than five hours or Premium Economy for long haul flights (where this fare class is available). IPENZ can arrange travel; however, in order for the panel member to gain international air-points, they may wish to book their travel themselves and seek reimbursement after the accreditation visit has been held. They may then be able to use their current air-points to upgrade to business class air travel if they so wish. Overseas representatives, depending on how far they have travelled, will normally have their accommodation costs met for one day either side of the actual accreditation visit; for example, if the accreditation visit required two nights' stay, then overseas representatives would be accommodated for four nights.

### **1.2 Travel within New Zealand**

Travel within New Zealand will be economy class. Bookings will be made at least one month in advance so that advantage can be taken of airfare discounts. If panel members use their own vehicle when travelling to participate in an accreditation visit, they will be reimbursed at IPENZ standard rate.

### **1.3 Hotel Accommodation**

IPENZ will take advice from the TEO on what hotel to use for accommodation and meals. Hotels are required to have meeting rooms large enough to accommodate the accreditation team and suitable places for individual panels to meet on occasion, particularly in the evenings. A general guideline is that hotels should be close to the TEO and should meet the standards expected of at least a three-star rating.

### **1.4 Meals**

Morning and afternoon teas and lunches are arranged by the TEO and evening meals are normally organised by IPENZ.

### **1.5 General Expenses**

As panel members are not receiving payment for their participation some minor general expenses are permitted, such as one telephone call and some mini-bar or room service meals, particularly for overseas panel members who may have arrived at the hotel outside of normal meal times. Alcohol, laundry and movie costs will not be reimbursed.

### **1.6 Costs of Extra Activities**

If the TEO wishes to use local or overseas panel members for other contiguous reviews or activities before or after the accreditation visit the costs of doing so will be borne by the educational TEO.

Any additional direct costs associated with overseas representatives reviewing IPENZ accreditation standards and procedures for International Accord purposes will be borne by IPENZ.

Costs of the attendance of accreditation team leaders at the SAB meeting, when the Accreditation Reports are considered, will be borne by IPENZ