



IPENZ ENGINEERS NEW ZEALAND

**MANUAL FOR THE ACCREDITATION OF
PROFESSIONAL ENGINEERING AND
ENGINEERING TECHNOLOGY PROGRAMMES**

**FIFTH EDITION
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PREFACE TO FIFTH EDITION

This extensive revision of the IPENZ Accreditation Manual was required because of significant changes in the environment for accreditation in New Zealand and worldwide.

1. New Zealand has been a signatory to the Washington Accord since its inception in 1988 and has more recently become a signatory to the Sydney and Dublin Accords. All of these Accords have, or are developing, requirements for accreditation and review, and IPENZ wishes as far as possible to use similar policies and procedures for accreditation of any engineering qualification for which substantial equivalence status, and thereby international recognition, is sought under any of the three Accords.
2. The expansion of the Washington Accord (WA) membership has given rise to updated procedures for admission of new members to the Accord, and regular review of member countries' accreditation procedures and a requirement for mentoring of new members.
3. The number of Tertiary Education Organisations in New Zealand offering engineering education qualifications has expanded and it has become necessary to codify the procedures to ensure equitable treatment of all providers and common standards of assessment

This manual, which is living document, will be amended from time to time based not only on experience of accreditation in New Zealand but also on the international experience gained by IPENZ representatives on accreditation visits conducted by other Accord members. We all learn from each other and we particularly wish to acknowledge the assistance of Engineers Australia in this regard.

IPENZ Standards & Accreditation Board

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1 INTRODUCTION

IPENZ ENGINEERS NEW ZEALAND represents the engineering profession in New Zealand and, under the Chartered Professional Engineers Act 2002, is the Registration Authority for professional engineers in New Zealand. IPENZ therefore has the responsibility to ensure the maintenance of standards of engineering professionals in New Zealand through the accreditation process.

1.1 Engineering degrees and diplomas generally provide the initial academic education for prospective members of IPENZ. IPENZ operates three competence-based membership registers each representing an engineering occupational role:

- Professional Membership (MIPENZ) for professional engineers
- Technical Membership (TIPENZ) for engineering technologists
- Associate Membership (AIPENZ) for engineering technicians

Every prospective member is required to provide evidence of having acquired formal engineering qualifications appropriate to the membership class for which they are seeking entry.

The key objective of accreditation is to provide independent confirmation that accredited engineering programmes produce 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 the international Accords 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 a professional 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 The engineering education accreditation standards, systems and procedures are now internationally benchmarked through a range of international agreements of which IPENZ is the New Zealand signatory. Four-year Bachelor of Engineering (BE) programmes are internationally benchmarked under the Washington Accord and three-year Bachelor of Engineering Technology (BEngTech) degrees under the Sydney Accord. It is planned to internationally benchmark two-year national engineering diplomas under the Dublin Accord. IPENZ is currently a provisional signatory to the Dublin Accord and is in the process of developing processes for recognising programmes at this level.

1.3 Accreditation is a joint exercise between IPENZ and TEOs and includes industry and student involvement. The process is agreed to be mutually beneficial in that the TEOs can better relate their activities to the needs of the profession and the

profession can better appreciate engineering requirements and developments in the education sector.

1.4 Definitions

Programme means the degree or identified specialisation within a degree that is the qualification to be accredited as identified by the wording on the testamur.

2 REQUIREMENTS FOR ACCREDITATION

The IPENZ academic requirements for four-year BE degrees and three-year BEngTech degrees are outlined in separate policy documents¹.

IPENZ accreditations have a strong ‘output’ focus. The Tertiary Education Organisation (subsequently referred to as ‘TEO’) is expected to supply sufficient evidence that their engineering programmes enable graduates to meet the graduate capability profile outlined in the relevant IPENZ academic requirements policy. There is, however, a clear understanding that some ‘inputs’ such as admission criteria, curriculum, resources (including the quality of academic staff), programme management, and quality assurance systems are significant factors in deciding whether IPENZ can be assured that the TEO can consistently and sustainably deliver graduates with the required capability profile.

With this in mind, there are three key elements to the accreditation criteria that have been adopted by IPENZ:

1. The programme
 - Outcomes to be achieved
 - The curriculum
 - Admission standards
 - Assessment
2. Institutional Infrastructure and Staffing
 - Academic staff
 - Technical staff
 - Laboratories
 - Independent study facilities
3. Management structures and quality systems to sustain and enhance the programme and its delivery
 - Management structure
 - Institutional support
 - Advisory structures
 - Education Culture
 - Quality Processes

¹ ‘IPENZ Requirements for Initial Academic Education for Engineering Technologists’ and ‘IPENZ Requirements for Initial Academic Education for Professional Engineers’

3 STANDARDS AND ACCREDITATION BOARD

All policies relating to IPENZ' accreditation of engineering programmes are approved by the IPENZ Standards and Accreditation Board (SAB). Their policy decisions are then ratified by the IPENZ Governance Board. The SAB also receives the recommendations of Accreditation Panels as to whether or not engineering programmes meet the IPENZ requirements and approves engineering programmes for accreditation. The IPENZ Governance Board is informed of the accreditation decisions made by the SAB.

The SAB is made up of a maximum of six IPENZ Members who are appointed by the IPENZ Board. Every effort is made to maintain an appropriate balance between industry and academic representation. The Secretary to the SAB is the IPENZ Director – Learning and Assessment who has responsibility for the co-ordination of IPENZ accreditation visits.

4 BASIS OF ACCREDITATION

IPENZ considers engineering programmes for accreditation at the request of the TEO offering the programme concerned.

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

Accreditation is accorded to engineering programmes, not to engineering schools or providers. For a programme to be accredited, all pathways available to students for its completion must be included in the evaluation and must meet the criteria.

5 THE ACCREDITATION PROCESS

5.1 The accreditation process, whether for an initial accreditation or re-accreditation, is a comprehensive assessment comprising the following:

- a review of information provided by the TEO
- an onsite review by an accreditation panel
- preparation and submission of the accreditation report to the SAB
- decision on accreditation by the SAB

5.2 An IPENZ accreditation team will normally visit the TEO to ensure that the education being delivered provides the graduates with the capability profile outlined in the relevant IPENZ Academic Requirements policy document. During the visit, emphasis will be placed on verifying the standards reached by the students, through detailed inspection of the applicable quality output measures. If a TEO offers the same degree in different locations then IPENZ will normally visit all locations as, if there is no way of differentiating the locations in which the qualification is gained, the accreditation panel must assure itself that the programme meets the IPENZ requirements in all locations.

5.3 Once a programme has gained full accreditation it is normally reviewed every five years. If however, the programme undergoes substantial change or the TEO is substantially changed in some way (e.g. by a merger with another provider, or by

significant restructuring relevant to the delivery of engineering programmes), IPENZ can request that an accreditation visit be conducted earlier. The provider is expected to inform IPENZ of any substantial change to programmes or the structure of the TEO.

- 5.4** 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 provider and for IPENZ.

6 TYPES OF ACCREDITATION

TEOs can request that IPENZ review programmes for full accreditation or for provisional accreditation. They can also request that IPENZ provide 'advice and guidance' on proposed new programmes.

The type of accreditation depends on whether the programme being reviewed is an existing programme previously accredited by IPENZ, or a new programme. Accreditation processes may also vary depending on whether the TEO has other programmes that have been accredited by IPENZ or whether it is a new provider of engineering programmes.

6.1 Full Accreditation

Full accreditation is granted only to programmes that have produced graduates, so that sufficient evidence can be gathered to assure IPENZ that graduates of the programme consistently meet the graduate capability profile outlined in the appropriate IPENZ Academic Requirements policy. Accreditation Panels need to be assured that the TEO has sufficient resources and strategic planning in place to assure sustainable delivery of the programme.

6.2 Provisional Accreditation

Provisional accreditation can be granted to new or revised programmes which have yet to have graduates emerge to enable full accreditation to be considered. The accreditation procedure used will depend on whether the TEO already has programmes that have been granted full accreditation by IPENZ.

- 6.2.1** TEOs can request that IPENZ review new or revised programmes for provisional accreditation when the programme has yet to have graduates emerge to enable full accreditation to be considered.

- 6.2.2** Existing providers of IPENZ accredited engineering programmes must have clearly developed objectives for the programme as a whole, a clear outline of the structure of the programme and the courses to be offered, an identified programme leader to champion the more detailed course development and clear plans in place for curriculum development, resourcing, staff recruitment and delivery. The Accreditation Panel will review the overall programme objectives, structure and development plans and assess the quality of the academic staff and other resources that will support its delivery. In such cases a review of the programme could be conducted as a desktop assessment. A visit would be required only if the

TEO provided insufficient evidence that the programme met the IPENZ Academic Requirements.

- 6.2.3 New providers of engineering programmes would normally 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 provisional accreditation could be considered. In all cases IPENZ would conduct an accreditation visit. Assessment of programmes offered by new providers will be rigorous and examine all institutional aspects as for full accreditation including such matters as academic leadership, institutional capability, sustainability, staffing etc.
- 6.2.4 Provisional accreditation indicates that full accreditation is expected but not guaranteed. Provisional accreditation is granted on the basis of evidence available at the time that full accreditation criteria are capable of being met.
- 6.2.5 The follow-up Accreditation Panel to assess transition to full accreditation may consist of one person who was a member of the Panel that originally reviewed the programme or it may be a full new Panel.
- 6.2.6 Provisional accreditation will normally lapse if full accreditation is not gained within two years of students graduating in sufficient numbers to enable a meaningful assessment against the relevant IPENZ Graduate Competence Profile. 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 Washington Accord or Sydney Accord.
- 6.2.7 The year from which graduates from the programme will automatically be recognised by IPENZ as having a recognised engineering qualification is determined at the time that full accreditation is granted. When a programme moves from provisional to full accreditation, graduates will normally be considered by IPENZ as having a recognised engineering qualification if they graduated whilst the programme was provisionally accredited; that is, accreditation is retrospective.
- 6.2.8 TEOs are required to provide a brief annual report to IPENZ on progress in respect of the IPENZ provisional accreditation report recommendations and requirements. IPENZ may appoint one of the Panel members to act as a monitor. The monitor would be expected to visit the TEO annually and provide a written report to IPENZ on their findings. The TEO would be expected to meet all the direct costs associated with the Monitor's visit.

6.3 New Providers of Engineering Education

A key challenge for any new provider of engineering programmes is to develop and maintain the required level of engineering expertise to sustain high quality programmes. Providers seeking IPENZ accreditation for the first time, can expect their application to be evaluated particularly comprehensively to ensure that this expertise is in place, and is supported by appropriate planning and management

structures and levels of institutional support to foster the engineering ethos that is required to develop a successful engineering school or department.

6.4 Changes Requiring Reaccreditation

Currently accredited programmes which undergo substantial changes to structure, content, delivery, or staffing, or significant decline in student numbers or institutional support arrangements may be required to undergo reaccreditation prior to the expiry of the current accreditation status. 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 reaccreditation 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 decline in student numbers that brings the financial or academic viability of a programme into question
- Changes to the mode of delivery by an accredited provider
- Programme being offered at a new site
- Introduction of a new major or programme strand

When accredited courses cease the TEO shall advise IPENZ who shall, after discussion with the TEO, determine the run out period of recognition for those courses.

6.5 NZQA Accreditation Visits

When reviewing proposed new engineering programmes offered outside the university sector, IPENZ, will work in cooperation with the New Zealand Qualifications Authority (NZQA) or its delegated agent, to minimise duplication and minimise compliance costs for the provider.

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

6.6 Internal Reviews

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 an IPENZ Accreditation Visit. To reduce compliance costs, IPENZ is willing to work with the TEO so that IPENZ Accreditation Visits and internal reviews occur jointly or consecutively.

6.7 IPENZ Guidance and Advice Reports

Providers of engineering programmes can request that IPENZ provide an Advisory Panel to review new programmes or proposed programmes as a preliminary to requesting an accreditation visit for provisional accreditation. The Panel then provides a Guidance and Advice Report indicating the readiness of the programme in question for accreditation.

Providers are expected to meet the full costs associated with Advisory Reports, and to make their own arrangements with IPENZ.

IPENZ 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 the Advisory Panel may not serve on the Accreditation Panel considering the programme

6.8 IPENZ Representation on Programme Advisory Boards

IPENZ representation on Advisory Boards for engineering education programmes is restricted to Boards providing oversight at a national level.

IPENZ considers that formal representation by IPENZ on the Advisory Board of an individual engineering education institution presents a conflict of interest with IPENZ' accreditation function.

IPENZ will be pleased to recommend individuals for Advisory Board roles who it considers would be effective in providing input from the profession.

7 ACCREDITATION TEAMS

Accreditation Teams are lead by an Accreditation Team Leader, coordinated by an IPENZ National Office representative (normally the Director Learning and Assessment and made up of Accreditation Panels, which are responsible for the review of individual programmes.

7.1 The IPENZ Director – Learning and Assessment has responsibility for overall organisation and administration of the accreditation process. It is the responsibility of this Director to ensure that IPENZ accreditation policies and procedures are adhered to and are interpreted consistently.

7.2 The Accreditation Team Leader is responsible for the accreditation report and for leadership of the panel/s. This person is appointed by the Chair of the Standards and Accreditation Board with advice from the Director – Learning and Assessment. 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.

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

- 7.3.1 finalising the Accreditation Panels in consultation with the IPENZ Director – Learning and Assessment and the TEO
- 7.3.2 setting the visit timetable
- 7.3.3 chairing all plenary sessions involving the Accreditation Team
- 7.3.4 general co-ordination and problem solving during the visit, and liaison between the accreditation panels
- 7.3.5 reviewing high-level considerations such as institutional and school governance, strategy, finance and culture
- 7.3.6 liaison with the TEO's senior management personnel, such as Dean, Vice Chancellor, or President
- 7.3.7 helping Panel Leaders to produce consistent requirements and recommendations across panels and across visits
- 7.3.8 providing verbal feedback of accreditation visit outcomes at the end of the visit
- 7.3.9 writing the Accreditation Report Executive Summary and approving each panel report for submission to the IPENZ Standards and Accreditation Board (SAB).
- 7.3.10 attendance at the SAB meeting where the report recommendations are considered
- 7.3.11 providing IPENZ with feedback on the contributions of panel members to assist with future accreditation panel selection.

7.4 Accreditation Panels 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. A Panel Leader, normally either the industry or New Zealand academic representatives, will be appointed for each panel.

7.5 Accreditation Panel Leaders have the following responsibilities:

BEFORE the accreditation visit:

- 7.5.1 reviewing the documentation provided by IPENZ and the TEO to identify issues that require investigation and instances where additional information is required; advising IPENZ Director – Learning and Assessment of any additional information requirements.
- 7.5.2 Holding a pre-visit Panel teleconference to discuss concerns and confirm the need for any additional information required before or during the visit.

DURING the visit:

- 7.5.3 ensuring that all necessary information to support the Panel's findings is verified.
- 7.5.4 During the visit, ensuring that any concerns are reported to the Accreditation Team Leader.

- 7.5.5 Writing a draft Accreditation Report in line with the IPENZ Accreditation Report guidelines outlined in Section 12; this must be completed before the end of the accreditation visit.
- 7.5.6 Providing verbal feedback of accreditation visit outcomes to the TEO at the end of the accreditation visit in accordance with the guidelines in Section 9.4.6.

AFTER the visit:

- 7.5.7 Ensuring that the final draft report is produced, approved by all panel members and submitted to IPENZ National Office within three weeks of the accreditation visit.
- 7.6** The IPENZ Director – Learning and Assessment 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. The overseas representative must be approved by the relevant engineering registration or professional body in the jurisdiction in which they currently reside. They must provide evidence that they understand the education standards of the international agreement to which the programme is being benchmarked. In normal circumstances the international representative is a senior academic responsible for the delivery of a similar programme.

While the overseas panel members may be used to review IPENZ accreditation processes and standards on behalf of the various Accords, separate validation of these members will be required as detailed in Section 11.

- 7.7** In addition to the formal members of the accreditation team, representatives from the other signatories of the relevant international agreement (Washington Accord or Sydney Accord) may participate as observers with the permission of the TEO being visited. Observation of accreditation visits plays an important part in validating and improving IPENZ processes and informing interested parties about its the accreditation practices.
- 7.8** No-one may serve as a Panel Leader, Panel member or Team Leader or as observer if they have any relationship with the TEO concerned such that their judgement might be unduly influenced by such a relationship (for example, staff or members of advisory committees).

8 ACCREDITATION PROCEDURES

The accreditation procedure for a programme or a group of programmes comprises the following steps:

8.1 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 already accredited IPENZ will issue a reminder that re-accreditation is due in good time for the TEO to make the necessary preparations.

8.2 Scheduling of Accreditation Visits

IPENZ acknowledges the request and schedules a date for the accreditation visit in consultation with the TEO; fixes a date by which the TEO must submit its accreditation documentation to IPENZ; and estimates a date by which the IPENZ Standards and Accreditation will have approved the accreditation visit outcomes.

8.3 Submission of Accreditation Documentation

The TEO submits documentation addressing the relevant Requirements for Initial Academic Education. Refer to Section 12 for further details.

8.4 Review of Documentation

On receipt of the documentation the IPENZ Director Learning and Assessment 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.

8.5 Pre visit Conference by Panel

The panels receive and review the documentation no less than two weeks prior to the visit the panel will confer to discuss any preliminary conclusions and to particularly identify any additional information 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 Director Learning and Assessment will use the outcomes of the teleconference to develop a set of targeted (and generic) questions to guide the accreditation team during the visit.

8.6 Accreditation Visit Timetable

The IPENZ Director – Learning and Assessment, in consultation with the Accreditation Team Leader, will finalise the accreditation visit timetable with the TEO at least two weeks before the accreditation 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.

8.7 Panel Visit

8.7.1 Panel Orientation and Training

The Accreditation Team normally convenes the afternoon before they visit the education provider. Most of this session is treated as an orientation and briefing session, where panel members are given some 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.

8.7.2 Worksheets

Panel members are expected to have reviewed all accreditation documentation before arriving at the orientation session. They should also have completed Accreditation Worksheets for each programme being reviewed by their particular Panel. At the orientation session each Panel member will share their initial findings with the rest of their Panel.

8.7.3 The visit will focus principally on:

- auditing quality systems and processes
- 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.

8.7.4 Each accreditation panel

- examines and discusses evidence of how well the quality processes are functioning;
- evaluates factors such as the educational/research 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;
- audits and discusses the assessment procedures and examines representative samples of students' work, focussing particularly on the graduate capability profiles;
- audits a sample of the matters covered in the documentation, particularly laboratories and study-support facilities such as the library and computing.

8.7.5 During the visit, accreditation panels meet 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 IPENZ Director – Learning and Assessment when they meet with the Vice Chancellor or equivalent of the TEO.

8.7.6 The Exit Meeting

The exit meeting should be confined to:

- stating the outcome of the visit. Teams should say only what they will be recommending to the SAB, which then will make the final decision;
- stating any requirements and if possible the method and timing of any follow up;
- noting any recommendations.

The function 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.

8.8 Final Draft Report and Response from the TEO

As soon as possible after the visit, normally within three weeks, a draft report to the Standards and Accreditation Board is prepared and sent to the TEO.

The TEO has two weeks from the date of receipt of the report to provide a written response if it so wishes. The response is normally limited to correcting any errors of fact, but it may comment on any issue which the TEO feels the panels have misunderstood.

8.9 Report and Board Decisions

The report and recommendations are then finalised, noting any response from the TEO, and 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.

For each programme evaluated, the Board may decide to:

- accord or renew full accreditation for a period of up to five years, with or without requirements to be met within a specified timeframe
- accord provisional accreditation, with or without requirements to be met within a specified timeframe, identifying the year from which graduates of the programme might first be recognised by IPENZ (subject to full accreditation being gained)
- continue the review for a maximum period of 12 months.
- decline or withdraw accreditation

8.10 Ongoing reviews

Where a decision is made to continue a review, the original Panel will continue with the review and make a final decision at the end of the 12 months or sooner if information requested from the provider has been received before that time. The overseas panel members will not normally take part in any follow-up visits though they will continue to be consulted.

8.11 Declined or withdrawn accreditation

In cases where accreditation is declined or withdrawn, a further application would not normally be considered for two years, when a new panel would usually be formed to undertake the next review.

In making a decision to withdraw accreditation, the SAB will make a decision on the extent to which students currently enrolled on the programme can be recognised by IPENZ upon graduation.

9 TRANSPARENCY, CONFIDENTIALITY AND PUBLICATION OF DECISIONS

The accreditation process requires confidentiality in some aspects but transparency in others.

9.1 Confidentiality

Apart from reflecting the outcome of each accreditation programme evaluation in the list of recognised degrees, 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 to those bodies, but only to the extent required to comment on the procedures operated by IPENZ.

9.2 List of Accredited Programmes

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.

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

9.3 Feedback and Verification

To ensure fairness and adequate transparency the following measures are taken:

- Actual or potential deficiencies, concerns, comments and constructive criticism must be raised with the Head of Department and relevant academic staff during the accreditation visit or, if identified during the compilation of the report, before the submission of the draft report.
- The draft report is sent to the TEO for correction of any factual errors.
- IPENZ will inform the TEO of the decisions by letter to the Vice Chancellor/Chief Executive, copied to the Dean of the Engineering School. A copy of the Accreditation Report will be attached to the letter.

9.4 Formation Aspects of Accreditation

While the accreditation team and IPENZ have a duty to the profession and to the public to withhold accreditation from programmes that do not satisfy IPENZ requirements, there is a complementary duty to encourage programmes that are currently deficient to improve and attain accreditation status. IPENZ therefore requires accreditation panels to formulate their reports in a firm but constructive way.

Accreditation reports should clearly outline **'requirements'** which must be met if the programme is to continue to be accredited. They should also specify any **'recommendations'** that the TEO may wish to consider to improve the quality and relevance of their programmes. Subsequent accreditation visits will assess whether previously specified requirements or recommendations have been actioned. For further information on Accreditation Reports refer to Section 10.

9.5 Appeals

If the TEO or engineering school wishes to appeal against a refusal to accredit a programme, 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 less 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 be given within eight weeks of receipt of the appeal.

10 ACCREDITATION REPORTS

Each Accreditation Panel is expected to produce a report. If there is more than one panel an Executive Summary, written by the Accreditation Team Leader or Director Learning and Assessment, summarises the key findings of each panel and outlines issues that were common to all their reports.

The report may be reviewed by the various accord bodies to which IPENZ belongs. These bodies will generally not be familiar with the context of New Zealand engineering education. The reports should therefore include sufficient background, generally no more than a paragraph, to clarify the context of the programme.

10.1 Panel Report Content

Accreditation Reports need to include:

- Commentary on the programme, including perceived strengths and weaknesses, including supporting statistics where appropriate.
- Requirements if any. "Requirements" are defined as those aspects that **MUST** be fulfilled by the TEO if the programme is to continue to be accredited or, in the case of accreditation being denied, before the programme will be considered for accreditation in the future. The reports need to specify a time by which the Panel expects the requirements to be met. If no time frame is given requirements will be followed up on the next accreditation visit. The reasons for any requirements must be given.
- Recommendations: "Recommendations" are defined as suggestions provided by the Panel as advice, indicating how they believe the quality and relevance of the programme could be improved. There is normally no timeframe associated with recommendations, but subsequent accreditation visits will investigate what progress has been made on them. The reason for any recommendations should be given.
- Overall recommendations to IPENZ as to whether or not the programmes evaluated should be accredited, and whether provisionally or fully.
- Any follow-up action that is recommended outside the accreditation visit framework. This might include the appointment of a monitor, or an annual report from the TEO to IPENZ about progress on requirements and recommendations etc.

- A recommended time for the next accreditation visit. This may vary from one to five years depending on circumstances, for example whether the programmes in question are offered by a new or an established TEO, whether provisional accreditation or full accreditation is at issue, and the nature and extent of the requirements made in the report.

10.2 Style of Report Writing

Panel reports should be concise, and are typically between six and eight A4 pages in length. Requirements and recommendations should be phrased precisely, leaving no room for interpretation and therefore confusion. The tone of the report should be formal, informative and constructive. Careful attention should be given to the way criticisms are worded, so that they are interpreted as *constructive* criticism.

10.3 Report Format

Panel Reports should largely follow Part B of the relevant 'IPENZ Academic Requirements' policy, and so have the following headings:

1. Background: state the purpose of the visit; list programmes being reviewed, new programmes, major changes to programmes; give brief background to the provider, school and programme.
2. Previous accreditation visit (if applicable): Provide a summary of actions taken to address requirements and recommendations from the previous visit and specific comment on any matters of ongoing concern.
3. The programme
 - Outcomes to be achieved
 - The curriculum
 - Admission standards
 - Assessment
4. Institutional Infrastructure and Staffing
 - Academic staff
 - Technical staff
 - Laboratories
 - Independent study facilities
5. Management structures and quality systems to sustain and enhance the programme and its delivery
 - Management structure
 - Institutional support
 - Advisory structures
 - Education Culture
 - Quality Processes
6. Summary

7. Overall Recommendation: state whether or not the programme/s should be granted accredited status and if so for what period and any conditions

Requirements and recommendations should be listed after the relevant section of the report and reproduced in the summary.

The IPENZ Director – Learning and Assessment will issue each Panel with an Accreditation Report template to ensure that all reports are consistent in their format.

11 TEO DOCUMENTATION – GENERAL GUIDELINES

11.1 General Guidelines

The purpose of the documentation is to demonstrate that the programme meets in a robust manner the criteria outlined in the relevant IPENZ Academic Requirements. The documentation must describe the following:

- the systems and resources in place to address each of the IPENZ accreditation criteria.
- the broad objectives of the programme as revealed to students
- how the programme addresses these objectives, including the development of the relevant set of IPENZ graduate competencies

11.2 Use of Existing Documentation

It should not be necessary to develop extensive documentation specifically for the purpose of accreditation. The purpose of accreditation is to evaluate the systems already in place, not to require their creation. In a well-managed TEO most of the documentation requested should already exist.

A good submission is likely to comprise a collection of existing documents, plus a coherent overview or self-review, which should address each of the criteria outlined in the relevant IPENZ Academic Requirements Policy.

Submissions must be comprehensive and easy to read, and exhibit a high standard of presentation.

If the initial submission is not considered to meet these guidelines the TEO may be asked to resubmit it.

11.3 Structure of Information Presentation

To simplify assembly and reading of the information provided it is suggested that information be presented in two volumes or sections:

1. General Data on the TEO, the engineering faculty/school or department. To avoid repetition where information is common to all programmes this should be included in this volume (e.g. this possibly could include aspects of admission, support services and facilities, quality systems etc)
2. Specific programme information.

12 GUIDELINES ON INFORMATION TO BE PROVIDED BY THE TEO

This section gives detailed guidance on the type of information that must be provided by the TEO. It is not the intention of this section to be prescriptive in describing the format in which information should be produced. Wherever possible standard formats readily available in the TEO concerned should be used as long as the information is presented in a logical and coherent form. Suggestions and examples in this section as to formats should be taken as a guide not as rigid requirements.

The content is mandatory the format is not.

The information relating to the institution, school, or department level which is common to all programmes within that institution, school or department need only be presented once but must be in format accessible to all relevant panels. Information could be presented in two parts i.e. common information and programme specific information.

12.1 General Information

This should include:

- the name of the TEO seeking accreditation of its programme/s.
- brief background information on the TEO, the school and the programme (and majors).
- documentation outlining the organisational structure of the TEO, including:
 - title of the Vice Chancellor/Chief Executive and name of incumbent
 - name of the principal academic entity responsible for engineering education (e.g. Faculty of Engineering)
 - title of head of the engineering school and name of incumbent
 - title of person at corporate level to whom the head reports and name of incumbent
- The organisational structure of the engineering school including titles, names of incumbents and their responsibilities.
- the title of each programme to be accredited (and majors), and abbreviation/s and brief background information on each.
- For any new programme or major, briefly explain the rationale for its introduction. As supplementary documentation it would be helpful to provide panels with any previous papers or reports on the development and introduction of the programme or major.
- a list of all education programmes (undergraduate and post-graduate) for which the engineering school or department has principal responsibility and the qualifications it awards.
- A list of any programmes for which another entity has principal responsibility but in which the engineering school has a significant role.

- Details of any substantial changes that have occurred since the last visit, or that are planned for the next academic year.

12.2 Self Review

- A succinct self review of the systems in place and evidence available to satisfy each of the accreditation criteria set out in the relevant Requirements for Initial Academic Education document.
- The self review should include clear links to supporting evidential documents.
- If a previous programme review by IPENZ specified any requirements and/or recommendations, the self review should start by referencing these and indicating the action taken. Explanations should be given if any such requirements or recommendations have not been actioned.
- The self review should then systematically address each of the accreditation criteria and the following guidance is offered in respect of **some of the** evidence that could be provided to address each criterion.

12.3 The Programme

12.3.1 Programme Outcomes

- Describe how the programme and curriculum impart each of the generic elements of the IPENZ graduate capability profile. This may be done in tabular form and should be available for each programme for which accreditation is sought.
- This summary analysis should also be reflected in course descriptors and assessment practices to provide confidence that the expected graduate attributes are formally addressed and assessed within the programme.
- Data on Graduation and Honours statistics as indicated in Table 1 in Appendix 2 for the current year and the four previous years. The data should be provided for each programme to be accredited and also the summary data for all programmes to be accredited. Provide data on the proportion of degrees awarded with honours.

12.3.2 The Curriculum

- Statements of educational objectives for each programme (and majors) to be accredited. This should be supplemented by the information provided to students on:
 - objectives and outcomes at both a programme and course level
 - the structure for the programme and majors. This information should explain the requirements for the

award of the qualification, including both mandatory and optional courses.

- List all courses and educational experiences offered, and what level of credit each carries towards the award of the degree. This should be supplemented by:
 - a summary contribution analysis demonstrating the contribution that each course makes to achieving curriculum requirements and elements of the relevant Graduate Capability Profile.
 - a brief description of each subject or course including its level and prerequisites; its scope, coverage and educational objectives; and the mode/s in which it is available to students (lecture, tutorial, laboratories, problem-based or self-directed learning, individual or team project work, distance interaction etc). This could take the form of calendar or handbook entries, with additions if necessary.

- A description of the overall pedagogical approach to addressing each of the core curriculum requirements areas within the programme (foundation studies, synthesis and design, professional practice and sustainability).

- A description of the processes for ensuring that students satisfy the requirement for practical experience.

- A description of all modes and all pathways by which the qualification requirements may be completed and their normal duration including:
 - attendance at multiple or alternative campuses
 - distance education or work-based learning
 - articulation from other post-secondary qualifications
 - partnering arrangements with other TEOs
 - on-campus attendance modes, full-time and part-time
 - conjoint programmes
 - accelerated pathways

- Comment, as appropriate on how the required graduate capabilities are developed for students on any of these 'alternative' pathways.

- Describe how the early stages of the programme are designed to suit candidates' backgrounds at admission. Describe any special pathways offered to students from particular backgrounds and any special support programmes to cater for disadvantaged or unconventional backgrounds, language difficulties or inadequate preparation in particular subject areas.

12.3.3 Admission

- Information summarising the entry standards for:

- admitting NZ resident students
 - admitting international fee-paying students
 - admitting students with advanced standing
 - admitting students by transfer from other TEOs or other post-secondary programmes
 - recognition of prior learning
- a summary analysis of any trends in enrolment statistics, along with information on any planned changes or future targets. This should be supplemented, for each programme to be accredited, by **Admissions and Enrolments** data for the current year and the four previous years on
 - the number of students in each year
 - number of commencing enrolments
 - number of continuing enrolments
 - number of overseas fee paying students
 - number of female students
 - For an established programme, explain the process used to identify students for admission who have a reasonable chance of succeeding in the programme. .
 - For a new programme, indicate the minimum admission qualifications sought and the projected commencing and total enrolments for each year to steady-state.
 - An outline of the **progression and exclusion rules** for enrolled students, the options available to students who fail in their assessment, and any remedial facilities or programmes offered.
 - A description of the **special support services** available to students, such as individual or small-group learning support systems, support for students for whom English is a second language, student counselling services etc.

12.3.4 Assessment

- Describe the approach taken to assessment of student attainment and performance with particular reference to:
 - the outcomes of the programme as a whole and their relationship to the stated objectives
 - the uses made of self, peer and mentor assessment
 - attainment of the generic graduate capability profile
 - attainment of the knowledge and capability associated with any specialist programme title
 - attainment of the learning outcomes relating to engineering practice
 - processes for the moderation of assessment
- Describe the criteria for the award of honours and the processes for determining honours gradings.

12.4 Programme Resources

- Describe the arrangements for funding the engineering school and/or engineering programmes.
- Indicate how resources are allocated to programmes within the engineering school.
- Discuss the adequacy of available resources to meet the objectives of the school and the programmes to be accredited. Comment on any recent or prospective trends in the school's financial situation and their impact on programme effectiveness. Indicate steps taken to address any perceived inadequacies.

12.4.1 Academic Staff

- Outline the TEO's and/or engineering school's policies in relation to staff including:
 - appointment and tenure
 - promotion
 - supervision and management
 - appointment, supervision and counselling of sessional staff
 - professional development of staff
 - any merit-based reward systems
- Provide a listing of all academic staff who teach in the engineering school, showing the extent of their employment (list of programmes/majors/courses they have responsibility for and/or teach, whether they are full- or part-time etc) their qualifications and professional membership and registrations, teaching load, research activity, publications, industrial and international experience. Include adjunct staff and sessional staff who have principal responsibility for subjects/courses. A possible format for this is given in Appendix 3 but standard curriculum vitae may be provided instead, provided that publications/research contributions for the previous five years are listed.
- Indicate the proportion of teaching staff who have qualifications in education and teaching.
- Indicate briefly the school's profile in research and associated engineering activity, indicating its extent and scope, and naming principal areas of research concentration, formally-established centres and any major research collaborations with other schools, institutes or organisations.
- Comment on whether or not staffing is adequate to cover all the curriculum areas. If there are areas of weakness indicate any

strategies for remedying this. Describe how new areas of specialisation will be staffed and comment on succession planning for academic and organisational leadership.

- If a programme to be accredited specialises in a particular field of engineering indicate the areas of expertise of teaching staff concerned with that field.
- For any programme or pathway conducted substantially outside the engineering school itself (for example, contracted to another provider or conducted offshore or on another campus with different staff) describe the staffing arrangements and the methods used by the engineering school to assure itself of the competence of the staff involved.
- Describe the engineering school's arrangements for managing staff workloads.
- Comment, as appropriate, to demonstrate that no programme is critically dependent on one or two people.
- Describe the steps being taken to ensure that by 2008:
 - at least 50 per cent of the teaching staff must demonstrate active involvement with the wider engineering profession and the engineering industry sector in New Zealand. Good indicators would be involvement in consultancy, work within industry, or IPENZ Branch activities, acting as an expert witness, involvement in industry networks, and development and/or delivery of professional development activities for the engineering profession.
 - Programme Leaders should have their engineering competence formally assessed and recognised within the engineering profession. Those leading BE programmes should be MIPENZ and/or CPEng or equivalent in another jurisdiction; and those leading BEngTech programmes should be TIPENZ or MIPENZ/CPEng or equivalent in another jurisdiction.

12.4.2 Technical staff

- Indicate numbers and qualifications of technical and support staff and their main occupational role.

12.4.3 Laboratories

- Present a table itemising classrooms, laboratories, library and information resources, and computing and communication facilities and services available to students and staff; and comment on their adequacy to meet the objectives of the school and the programme/s to be accredited.

- Describe the systems in place to ensure health and safety in laboratory spaces

12.4.4 Independent Study Facilities

- A description of the independent access students have to laboratories to support project /research based study.
- A description of the access students have to sufficient library and computer resources to support their learning.

12.5 Programme Management

- In relation to engineering programmes state whether the engineering school has prime responsibility (subject to institutional approval processes) for: programme design, programme content, programme delivery, management of resources, appointment and supervision of staff, professional activities of staff. If not, describe the arrangements under these headings.

12.5.1 Institutional Support and Leadership

- Provide evidence of the TEO's long-term commitment to engineering, for example in the form of corporate mission statements and strategic plans.
- Summarise the long term strategic plans for the ongoing development of the engineering school.
- evidence of the engineering school's engagement in long-term planning processes (for example excerpts from the engineering school's strategic plans).
- A description of the systems in place to provide for the ongoing professional development of staff

12.5.2 Advice from Industry

- Outline the ways the engineering school interacts with the engineering profession, securing the active participation of engineering professionals in monitoring and evaluating programme quality and relevance. During accreditation visits minutes of Industry Advisory Committees should be made available.
- A description of the operation of industry advisory groups and their terms of reference.

12.5.3 Educational Culture

- A description of the approaches taken to learning and teaching, to student-staff interaction and to staffing key elements of the programme. Indicate the proportions of teaching and supervision provided by
 - regular members of the academic staff of the engineering school
 - staff from other parts of the TEO
 - adjunct/sessional teaching staff (e.g. practising engineers)
 - teaching assistants (senior undergraduate or postgraduate students)
 - other TEOs
- Provide information about the number of staff undertaking professional development programmes and the range of programmes.
- Comment on the mechanisms in place to enhance teaching and learning practices.

12.5.4 Quality Systems and Processes

- Describe the TEO's and the engineering school's processes for programme planning, curriculum development and regular curriculum and content review.
- Provide evidence that the results of assessment of student performance and learning outcomes are being applied to the review and improvement of programme effectiveness.
- Describe the school's processes for securing wider feedback and comment from students, graduates, employers of engineers, community representatives and any other programme stakeholders. Provide evidence of the systematic application of this feedback to the review and continuing improvement of programme objectives, curriculum, assessment and quality of learning and teaching.
- Provide any available graduate employment data, alumni surveys and employer surveys of longer-term graduate performance and development.
- Describe the school's mechanism/s and arrangements for securing the advice and involvement of practising engineers and leading employers of engineering graduates in its forward planning and quality management. Provide a list of members of the industry advisory groups, showing their affiliations.

- Describe the approach taken to comparing or benchmarking programme standards against those of other TEOs. Provide evidence of comparability of standards and describe any programme improvements being undertaken as a result of inter-provider comparisons.

13 SUBMISSION OF DOCUMENTATION

The documentation specifically for the accreditation visit should be bound and should include a table of contents.

The number of copies required will depend on the number of people on the Accreditation Team. IPENZ will advise the TEO of the number of copies that will be required and the date by which this documentation should be made available. All copies should be submitted to the IPENZ Director – Learning & Assessment, who will arrange distribution.

14 INFORMATION TO BE AVAILABLE FOR INSPECTION DURING VISIT

The following documentation should be available for inspection by the accreditation panel during their visit:

- copies of all current promotional literature
- A dossier of materials for all core engineering papers at each year, all final year papers and papers central to the development of engineering design and professional practice skills. The information provided should include:
 - learning and assessment guidelines presented to students, history of student feedback and other related quality assurance records.
 - examples of assessment materials, including examination papers, and assignment and project specifications.
 - graded examples of student work including examination scripts, assignments, project reports (particularly final year), relating to each programme and which relates to all the elements of the graduate competency profile outlined in the relevant IPENZ Academic Requirements policy. The Panel would particularly wish to see examples that had been graded at the pass/fail boundary.
- records of the school's interactions with advisory groups involving employers of engineering graduates and the response to those interactions
- records associated with any strategic planning events, and with the operation of such groups as: faculty meetings, teaching and learning committees, assessment committees, examination boards, curriculum planning meetings or forums and staff/student forums.

- a recent list of publications by staff of the school and examples of research and consultancy reports if not provided in standard cv 's.

15 ACCREDITATION VISIT COSTS

- 15.1** It is acknowledged that accreditation of programmes provides a shared benefit to the TEO, to the standing of IPENZ members and assists in maintaining the quality of engineers to industry. In recognition of this the costs of accreditation are shared between the TEO, IPENZ and industry.
- 15.2** Direct costs of accreditation 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 accreditation visits. Refer to Appendix 4 for guidelines on accreditation expenses.
- 15.3** IPENZ covers costs associated with ongoing liaison with the TEO regarding the accreditation of engineering programmes, and costs associated with its role as a signatory to the Washington Accord, Sydney Accord and the international agreements that benchmark engineering practice standards – the APEC Engineer Register, EMF Register and ETMF Register. IPENZ also covers the costs of organising and managing accreditation visits.
- 15.4** Observers from other signatories of the international agreements are expected to meet their own travel and accommodation costs.
- 15.5** 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.

16. REVIEW BY ACCORD BODIES

All the 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' outlined in Appendix 5.

APPENDIX ONE - TIMETABLE EXEMPLAR

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

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

Two to three weeks prior to visit		
Period	Venue	Team Activity
1 hour	Teleconference	Accreditation Team teleconference to identify gaps in documentation and key areas of focus for visit
Afternoon or Evening Before Visit		
Period	Venue	Team Activity
Varies	Off campus	Team introductions and training of panellists if not done previously
4 hours	Off campus	Private Plenary Team Meeting chaired by Visit Leader. (Observers, if any are present)
		Private Team Dinner (Observers present)
Day One		
2 hours	Central	<p><i>Opening Session:</i> Accreditation Team meets with senior departmental staff</p> <ul style="list-style-type: none"> ▪ Introductions (15 mins) ▪ Overview presentation by Associate Dean (15 mins) ▪ Issues from Previous Accreditation Visit (15 mins) ▪ Key issues identified from document review (30 mins) ▪ Programme objectives and structure

1 hour	Departments	Accreditation Panels meet with relevant programme leaders <i>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</i>
1 hour (Lunch)	Central	Lunch with Programme Advisory Group members and stakeholders <i>Objective: review level of engagement with industry and level of stakeholder support</i>
1 hour	Departments	Panels tour facilities: lecture theatres, laboratories, library and independent study facilities
1 hour	Departments	Accreditation Panels meet with relevant academic staff <i>Objective: Consideration of issues relating to: curriculum development, teaching and learning approaches, assessment, programme objectives, IPENZ Graduate Profile, workloads, resourcing, technical support, research</i>
1.5 hours	Departments	Accreditation Panels review samples of student work/examinations/projects <i>Objective: Review learning outcomes against course descriptors and IPENZ Graduate Profile</i>
1-hour	Departments	Panels meet with selection of undergraduate students
30 Minutes	Central	Private session for Accreditation Team
45 minutes - early evening		Accreditation Panels meet with recent alumni/postgraduate students
Later evening	Off campus	Social function with academic representatives
Day Two		
1 Hour	Central	Private session for Accreditation Team <i>Objective: consolidate initial findings</i> <i>Note: Programme leaders available to discuss issues arising from day 1, as required.</i>

1 hour	Central	<p>Accreditation Team/Subcommittee meets with Vice Chancellor and Dean</p> <p><i>Objective: to review matters relating to institutional, strategy, governance and support</i></p> <p>(If required) Further opportunity to review samples of student work/examinations/projects</p> <p><i>Objective: Review learning outcomes against course descriptors and IPENZ Graduate Profile</i></p>
30 Minutes	Departments	<p>Accreditation Panels meet with technical staff</p> <p><i>Objective: Consideration of levels of administrative and technical support and associated systems</i></p>
1 hour	Central	<p>Private session for Accreditation Team</p> <p><i>Objective: Review systems documentation and identify any outstanding issues</i></p>
1 hour	Central	<p>Meeting with senior management to clarify any outstanding issues</p>
2 hours	Central	<p>Private session for Accreditation Team</p> <p><i>Objective: consolidate findings and begin to draft report</i></p>
30 min	Central	<p>Exit Meeting</p> <p><i>Objective: present verbal report on findings to Senior Management</i></p>

Note: the provider 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 TWO – GRADUATE STATISTICS

TABLE 1 – GRADUATE DATA

Information to be provided for each programme being accredited

Programme: (Name)		Year					Comment
	Unit	-4	-3	-2	-1 (Last year)	Current year	
No of Graduates							
First class honours	No(%)						
Second class Div 1	No(%)						
Second class Div 2	No(%)						
Other	No(%)						
Total number of graduates from programme	No(100%)						
Post graduate students							
PhD							
Masters by course work							
Masters (thesis)							
Total post grad students							
Summary data for all programmes being accredited							
Total number of graduating students							
Name of programme 1	No						
Name of programme 2	No						
Name of programme 3	No						
Name of programme 4	No						
<i>Etc</i>	No						
Total	No						

APPENDIX THREE - STAFF DATA SUMMARY

This form could be used for large TEO's. For smaller TEO's staff cv's plus supplementary data may suffice (Refer Section 12.9.3).

STAFF – MECHANICAL ENGINEERING

1	2	3	4	5	6	7	8		
Name	Present Post and date of joining establishment	Academic Qualifications	Membership of Professional Bodies	Professional Duties (eg. External Examiner)	Brief Resume (with approx dates) of industrial experience, including any current activity	Present teaching subject and student contact hours per year	Research a = no of research students currently supervised b= number of refereed papers published in last 5 years both national and international c= number of current consultancies		
ABC	Dean of Engineering 1 July 2002	PhD, MS (Purdue) BEng (Nottingham)	FIPENZ, FASHRAE, MASME, CPEng (NZ)	Member of the following committees:- 1.External examiner for GG 2.Chair Standards committees for XYZ 3.Chair Board of studies	2002-Present: Dean of Engineering Univ of Q 2000-2002: Professor Univ of Q 1994-2000: Research Director. Mech Eng Corp. 1979-1994: Associate Professor, Univ of Y 1973-1979: Senior Lecturer. University of Z 19^9-1976. Lecturer. University of Z	M777 Thermodynamics (Tut: 48 hrs) M456 Lab Project (15 hrs) M345 Building Energy Analysis (Lect: 13 hrs) M433 Final Year Project (30 hrs)	3	6	2
DEF									

APPENDIX FOUR 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 provider is seeking accreditation of more than one programme it may not be necessary to have an overseas representative on each panel. Providers, 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 and Hong Kong, 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 within normal daylight hours. 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 62c per kilometre.

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.

The final evening meal is usually organised in conjunction with the TEO, as this is an occasion where views on engineering education and engineering professional issues are exchanged in open dialogue between senior representatives of the engineering profession and of the TEO.

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 provider.

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

For further information refer to:

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IPENZ National Office
Engineers New Zealand
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WELLINGTON
Telephone: ++64 4 473 9444
Facsimile: ++ 64 4 474 8933
Email: bwilliams@ipenz.org.nz
Website: www.ipenz.org.nz

APPENDIX FIVE – CONTINUOUS MONITORING PROCESS FOR ACCORD SIGNATORIES

**Procedures extracted from the consolidated Accord Procedures to be submitted for Accord Approval at International Meetings to be held in June 2007
New Zealand has opted to use Procedure B, Continuous Monitoring**

3. Periodic Monitoring of Signatories

3.1 Rolling Monitoring Programme

1. Each of the accreditation or recognition systems for which a signatory is responsible shall be subject to comprehensive monitoring and report by representatives of the other signatories at intervals of not more than six years.
2. The Committee must establish and the secretariat publish annually, no later than 1 July, a schedule for the programme of monitoring activities, this schedule covering at least the upcoming six years.
3. Upon receipt of the schedule each signatory must immediately inform the Committee whether it wishes to be monitored by periodic monitoring (designated Procedure A) or by the continuing international participation model (designated Procedure B). In the event that a signatory does not select one or other procedure then the periodic monitoring procedure is assumed to have been selected.
4. The type of procedure to be used for any individual signatory must be approved by the signatories via a suitable meeting method prior to the commencement of any monitoring actions.
5. Any signatory which effects a substantial change to its accreditation criteria, policies or procedures is obliged to report such a change to the Committee via the secretariat and thereby to provide the other signatories with the opportunity to require that the scheduled monitoring and report be brought forward.

3.2 Nomination of Persons to Form Teams

1. Upon request from the secretariat, each signatory must provide as soon as possible one or more names of persons to form part of the panel from which Monitoring Teams (Procedure A) or Accord Monitoring Teams (AMTs) under the continuing international participation model (Procedure B) may be drawn. If Procedure B is used, in determining the suitability of proposed team members signatories must note that panel members fulfil a dual role, firstly as accreditation panel members and secondly as Accord monitors. This clause 3.2 1 shall not require any

signatory to provide more than one such representative in any calendar year for any one Accord.

3.3 Procedure A

Not included as it applies to periodic monitoring

3.4 Procedure B

1. Monitoring will be continuous for the first five years of a six year period, and then, if required, in the sixth year there may be confirmatory actions.
2. The Committee will nominate the signatories from which Accord Monitoring Teams (AMTs) may be drawn, and the secretariat will inform those signatories that they will be required to nominate persons who can fulfil dual roles as accreditation panel members, and as the Accord Monitoring Team.
3. For each of not less than three accreditation visits within a five year period, where possible to separate educational providers, the signatory being monitored will indicate to the secretariat that it wishes an Accord Monitoring Team (AMT) to be formed for that visit.
 1. The AMT will be formed by the Committee and signatory being monitored jointly ensuring that a proportion of accreditation visit panel members but not less than one per visit must be from the panel set up for this purpose. The Committee will designate one of the AMT as the team leader.
 2. The signatory being monitored must ensure that at least one of the Accord monitoring teams, in the last two years of the period, meets with the accreditation/recognition agency, reviews the accreditation/recognition procedures with the agency and observes an accreditation/recognition board decision meeting.
 3. At least fifteen months prior to the end of the six year period the secretariat will circulate all Monitoring Reports from the previous five year period to all signatories.
 4. If no objections to the acceptability of the Monitoring Reports as sufficiently demonstrating equivalence are received by the secretariat twelve months prior to the end of the monitoring period the accreditation/recognition procedures and practices of the subject organisation shall be deemed to comply and the review is complete. The process will then restart in the next six year review period should Procedure B continue to apply.
5. If any of the Accord signatories are concerned that the Monitoring Reports do not demonstrate satisfactory compliance they may notify

the secretariat at least nine months prior to the end of the review period.

6. The Committee must then appoint an Overall Monitoring Team (OMT) to prepare an overall report. In this case the Committee will identify three international AMT members who have contributed to three different reports on the subject organisation. The secretariat will seek approval from the appropriate Accord signatories for these monitors to be members of the OMT. The Overall Monitoring Team should have representation from at least two Accord signatories.
7. The OMT will be presented with written documentation from the organisation being reviewed and be given a copy of all Accord Monitoring Reports in the period and may hold discussions with the leaders of any of the Monitoring Teams. It may observe an accreditation/recognition visit.
8. The OMT will visit the national office of the organisation being reviewed and meet with that organisation's Accreditation/recognition Board within the last year of the six year period to which the continuous review applies.
13. The Overall Monitoring Team will prepare a report and recommendations to the secretariat as soon as reasonably practicable. A copy of that report must be furnished to each signatory through the secretariat.
14. The recommendations open to the Overall Monitoring Team are as follows:
 - a. that the accreditation/recognition system in question be accepted by the other signatories, for a period of six years, (as leading to outcomes substantially equivalent to the systems known to the monitoring team); or
 - b. that the accreditation/recognition system in question be accepted by the other signatories, for a period of not more than two years, subject to the responsible signatory providing, within six months, a report which satisfies the other signatories that adequate steps are being taken to address the specific issues identified by the review team; or
 - c. that the accreditation/recognition system in question has serious deficiencies, that the signatory revert immediately to conditional status, and that urgent and specific assistance be provided by the other signatories to help address the deficiencies

3.5 Consideration of Recommendations and Requests for Reconsideration

1. Recommendations from monitoring activities under either Procedure A or Procedure B are considered by the other signatories in committee at a general meeting.
2. If a signatory has demonstrated substantial equivalence under Procedure B to the satisfaction of all signatories without the need to form an Overall Monitoring Team, the signatory will be deemed to have had its accreditation/recognition system be accepted as substantially equivalent for a further six year term from the date of the meeting.
3. Otherwise, the signatories may resolve only one of the following:
 - a. that the accreditation/recognition system in question be accepted by the other signatories, for a period of six years; or
 - b. that the accreditation/recognition system in question be accepted by the other signatories, for a period of not more than two years, subject to the signatory in question providing, within six months, a report which satisfies the other signatories that adequate steps are being taken to address specific issues; or
 - c. that the signatory revert immediately to a non-voting conditional status for a period of no more than two years, and that specific requirements to be addressed be stated.
4. A resolution for (a) or (c) shall require support from two-thirds of the signatories, and in the absence of that majority the outcome shall be (b) in which case the specific issues to be addressed must be stated.
5. The subject signatory may, within 60 days of notification of a decision, request reconsideration of a decision imposing conditional status (c), and request independent reconsideration of its case. Requests for reconsideration must be based on one or more of the following grounds:
 - a. that there was a failure to follow these Rules, and/or
 - b. that there were substantial errors of facts in the report considered by the signatories which were likely to have affected the decision reached by the signatories, and/or
 - c. that the report considered by the signatories did not include relevant information, and had that information been placed before the signatories there was a reasonable likelihood that a different decision would have been made.
6. If a reconsideration is requested, the Committee must ensure that within six months of the decision, a reconsideration panel which is

established in the same manner as a monitoring team using Procedure A, but has no membership in common with, the original monitoring team(s) is established and reports its outcomes.

7. Whilst a reconsideration is in progress the signatory will continue to enjoy the full benefits of being a signatory.
8. The reconsideration panel shall determine the procedures and criteria under which it operates, but at all times its procedures must be consistent with these Rules and procedures as far as this is reasonably possible.
9. The full costs of any such reconsideration must be borne by the subject signatory.
10. The right to request reconsideration may be exercised only once.
11. The recommendations of a reconsideration panel must be considered by the signatories by a suitable meeting method as soon as reasonably possible, and one of the following decisions made: .
 - a. that the accreditation/recognition system in question be accepted by the other signatories, for a period of six years; or
 - b. that the accreditation/recognition system in question be accepted by the other signatories, for a period of not more than two years, subject to the signatory concerned providing, within six months, a report which satisfies the other signatories that adequate steps are being taken to address specific issues; or
 - c. that the signatory revert immediately to a non-voting conditional status for a period of no more than two years, and that specific requirements to be addressed be stated.