

**DOCUMENTATION REQUIREMENTS  
FOR TERTIARY EDUCATION  
ORGANISATIONS (TEOS)  
PREPARING FOR ACCREDITATION  
(ACC 03)**

### Documentation and Version Control

Version	Action	Approver	Date
2.1	Part C – Initial Evaluation Submissions added to document	Standards and Accreditation Board	Feb 2015
2.2	<ul style="list-style-type: none"><li>• Minor changes to terminology</li><li>• Updated references to accreditation criteria numbering</li></ul>	Standards and Accreditation Board	May 2016

## **PART A: PRINCIPLES AND GENERAL ADVICE**

### **1. PRINCIPLES**

The documentation is to be presented as an annotated self-review and should systematically address each of the accreditation criteria and relevant indicators of attainment.

If a previous programme review by IPENZ specified any requirements and/or recommendations, the self-review must reference these at the appropriate place and indicate the action taken. Explanations should be given if any recommendations have not been actioned.

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 a format accessible to all relevant panels. Information could be presented in two parts i.e. common information and programme specific information.

If the documentation is provided for assessment for provisional accreditation then the self-review should make clear what is already in place and what are planned actions.

The content is mandatory the format is not.

### **2. SUBMISSION OF DOCUMENTATION**

Unless otherwise agreed, the general information and self-review documentation should be provided in both electronic (e.g. .PDF) and hard copy and should include a table of contents. The self-review should include clear cross referencing to supporting documentation, which may be provided in electronic format.

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.

### **3. INFORMATION TO BE AVAILABLE FOR INSPECTION DURING VISIT**

During the visit the Accreditation Panel must have access to a dossier of materials for all core engineering papers at each year, all final year papers and capstone papers central to the development of engineering design and professional practice skills. The information provided must include:

- 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 or capstone), relating to each programme and which relates to all Programme Graduate Outcomes. The Panel must see examples that had been graded at the pass/fail boundary
- Copies of Industry Advisory Committee Terms of Reference
- Copies of recent Industry Advisory Committee Minutes

## **PART B: EXPECTED CONTENT OF A SUBMISSION**

### **1. GENERAL INFORMATION**

This should include:

- The name of the Tertiary Education Organisation (TEO) seeking accreditation of its programme/s
- Brief background information on the TEO, the school and the programmes
- Documentation outlining the relevant 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, college or faculty including titles, names of incumbents and their responsibilities
- The title of each programme to be accredited, and abbreviation/s and brief background information on each
- A list of all education programmes (undergraduate and post-graduate) for which the engineering school, college, faculty 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, college or faculty 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

### **2. PROGRAMME STRUCTURE**

#### **2.1 STRUCTURE**

Details of the course structure for each programme. This information should explain the requirements for the award of the qualification, including both mandatory and optional courses and should be supported by a copy of any programme calendar or handbook that is issued to students

For any new programme or major, the submission should include a clear rationale for its introduction and be supported by justification documentation e.g. previous papers or reports on the development and introduction of the programme or major

##### **2.1.1 Delivery arrangements**

A description of delivery arrangements, including 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 school qualifications

- Partnering arrangements with other TEOs
- On-campus attendance modes, full-time and part-time
- Conjoint programmes
- Accelerated pathways

### **2.1.2 Advice from Industry**

A description of the formal industry advisory structures that are in place and the way they contribute to defining and reviewing targeted graduate outcomes against industry needs and providing feedback on the capabilities of graduates.

Current Industry Advisory Committee Membership, showing their affiliations.

Several recent examples of how industry advice has been implemented.

## **3. GRADUATE ATTRIBUTES PROGRAMME DESIGN, AND STUDENT ACHIEVEMENT**

The overarching requirement in the self-review is evidence of clear benchmarking of programme graduate outcomes to demonstrate substantial equivalence to the relevant International Engineering Alliance exemplar graduate attributes. The self-review must set out how the requirements and indicators of attainment set out in Part B of the IPENZ Requirements document (ACC 02) have been met. This is normally best accomplished by documentation based on the following approach:

The self-review should set out:

- The overall programme design map which shows how each course of study contributes to achievement of the graduate outcomes as a whole
- An analysis demonstrating constructive alignment between Programme Graduate Outcomes the curriculum and assessment. The analysis should set out how the programme and curriculum impart each of the programme graduate outcomes. This may include a summary contribution analysis documenting the key contribution(s) individual courses make to the progressive development of programme graduate outcomes
- A description of the processes for ensuring that students undertaking practical experience achieve the desired learning outcome from that experience (where applicable)
- Comment, as appropriate on how programme graduate outcomes are developed for students on any of the 'alternative' pathways described in section 2 above.

Note: the Accreditation Panel will be looking to see that the programme design map is reflected in course descriptors and assessment practices to provide confidence that the targeted graduate outcomes are formally and systematically developed and assessed for every student, on every pathway within each programme.

Supporting documentation must be linked in an annotated way to the overarching self-review. It should include the course descriptor for each course including its level and prerequisites; its learning outcomes; course content and teaching and learning approaches (lecture, tutorial, laboratories, problem-based or self-directed learning, individual or team project work, distance interaction etc.) and assessment plans demonstrating constructive alignment to programme graduate outcomes.

#### **4. ASSESSMENT (IF CONVENIENT THIS SECTION CAN BE COMBINED WITH SECTION 3 ABOVE)**

A self-review against section 3 of the Requirements, including:

An analysis showing how the assessment tools applied in each of the areas of learning within the programme assess for the progressive development of the programme graduate outcomes, and are appropriate to measure the learning outcomes (within a course) and programme graduate outcomes (for the programme as a whole).

(If applicable) A description of the criteria for the award of honours and the processes for determining honours grading

**Supporting documentation should include:**

The specific assessment plans for each course (which may be included with the Course Descriptor) evidencing the form and level of assessment applied are appropriate means to assess for the key learning outcomes in that course and evidence claims made within the contribution analysis over the development of relevant programme graduate outcomes

#### **5. CAPACITY AND CAPABILITY**

##### **5.1 ACADEMIC STAFF**

- A self-review against section 4.1 of the Requirements, including:
- A commentary on current academic staffing levels including information on:
  - The actual and targeted student-staff ratios and typical staff work load data
  - Adequacy of coverage of key curriculum areas
  - Any current academic staff vacancies that exist
  - Any critical dependencies. If there are areas of weakness indicate any strategies for remedying this
- A description of the approach to managing the contribution of any part time teaching staff
- An indication of the proportion of teaching staff who have qualifications in education and teaching
- A description of the engineering school's arrangements for managing staff workloads
- (For degree programmes) a brief summary of 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
- 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), a description of the staffing arrangements and the methods used by the engineering school to assure itself of the competence of the staff involved

The self-review should be supported by:

- A summary listing of all academic staff showing qualifications, professional memberships and other professional engagements and present teaching responsibilities supported by copies of brief curriculum vitae

## **5.2 TECHNICAL AND SUPPORT STAFF**

A self-review against section 4.2 of the Requirements, supported by:

- A summary of the numbers, qualifications and experience of technical and support staff and their main occupational role.

## **5.3 PRACTICAL TEACHING FACILITIES AND LEARNING RESOURCES**

A self-review against section 4.3 of the Requirements, including:

- A description of the practical teaching facilities and equipment, the capacity of such facilities to handle present and forecast student numbers, and commentary on their adequacy to meet the objectives of the school and the programme/s to be accredited
- A description of the systems, policies and procedures in place to ensure health and safety in practical teaching spaces are in line with industry good practice
- A description of the processes and responsibilities for purchasing and maintaining equipment, including an indication of the operating and capital budget allocations
- An overview of literature holdings available to students and staff

## **5.4 EDUCATIONAL AND PROFESSIONAL CULTURE**

A self-review against section 4.4 of the Requirements, including:

- A description of the student societies operating within the School and the support they receive from academic staff and management

# **6. QUALITY ASSURANCE AND MANAGEMENT SYSTEMS**

## **6.1 ADMISSION STANDARDS**

A self-review against section 5.1 of the Requirements with emphasis on demonstrating that entry criteria provide students with a reasonable chance of succeeding in the programme, supported by:

- A description of admission processes and criteria, including entry standards and processes 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 or by awarding credit for prior learning
- A summary analysis of any trends in enrolment, progression and graduation statistics for each programme, along with information on any current limits on enrolment numbers, any planned changes or future targets
- 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

- If applicable, a description of how the early stages of the programme are designed to suit candidates' backgrounds at admission
- If applicable, a description of 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
- A description of learning support services, particularly in the areas of mathematics and English language.

Note: Information could be provided with reference to the current student Prospectus or Handbook.

## **6.2 QUALITY SYSTEMS AND PROCESSES**

A self-review against section 5.2 of the Requirements, including:

- A summary of approaches taken to compare or benchmark programme standards against those of other TEOs and the outcomes of recent benchmarking activities
- Evidence of feedback loops with different stakeholder groups; including students, graduates and employers, and examples of feedback received being used to inform continuous improvement processes. Information could be provided with reference to the latest annual programme report and/or student course survey results.
- Copies of any available graduate employment data, alumni surveys and employer surveys of longer-term graduate performance and development may be annotated and attached.

## **6.3 MANAGEMENT STRUCTURE**

A self-review against section 5.3 of the Requirements, supported by:

- A description of the responsibilities (subject to institutional approval processes) for: programme design, programme content, programme delivery, management of resources, appointment and supervision of staff, professional activities of staff
- Organisational charts to show management and quality assurance structures at both a TEO and school, college or faculty level

## **6.4 INSTITUTIONAL SUPPORT**

A self-review against section 5.4 of the Requirements, supported by:

- A summary of the long term plans for the development of the engineering school, college or faculty and its programmes
- Evidence of the engineering school, college or faculty's engagement in long-term planning processes (for example excerpts from the TEO's/engineering school, college or faculty's strategic plans)

## **7. RESPONSE TO PREVIOUS ACCREDITATION REPORT**

A systematic self-review against the previous panel report showing how recommendations and requirements have been met.

## **PART C: INITIAL EVALUATION SUBMISSIONS**

Engineering programmes offered by New Zealand universities must be approved 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.

The factors considered by IPENZ in assessing the acceptability (as opposed to Accreditation) of new programmes are set out in Section 6.2.2 of the IPENZ accreditation manual “Manual for the Accreditation of Engineering Education Programmes (ACC 01)”.

Universities are required to submit the following documentation to IPENZ at the time of making application for CUAP academic approval. Universities may choose to address IPENZ information requirements directly within their CUAP submission or by the provision of supplementary material.

### **1. GENERAL**

- 1.1 Universities not currently delivering IPENZ accredited engineering programmes should provide information addressing Section B1 of these guidelines
- 1.2 Details of the programme structure, including core and elective courses and the requirements for the award of the qualification
- 1.3 A summary of the programme development process and a clear statement of the programme graduate outcomes to be achieved through the programme
- 1.4 Evidence of a resourcing plan for implementation of the programme

### **2. BODY OF KNOWLEDGE**

- 2.1 A summary articulation of the recognised body of knowledge covered by the proposed programme. This summary may be supported by comparison with:
  - descriptions published by the relevant international learned society/professional body
  - recognised/accredited programmes at an equivalent level in New Zealand or another Accord jurisdiction
- 2.2 A summary of the relationship between the proposed programme and other accredited programmes already offered by the University and other universities in New Zealand.

### **3. INDUSTRY ACCEPTABILITY/ DEMAND FOR GRADUATES**

- 3.1 A summary of the process for engaging with industry/stakeholders as part of the development process. Feedback received from stakeholders through that consultation process should include persuasive evidence of demand for graduates with the graduate profile defined for the programme
- 3.2 Where the programme is in a more specialised or emerging field of engineering practice, provide justification for its introduction as an engineering programme in New Zealand
- 3.3 Where the programme is substantially aligned with existing programmes, summarise how the programme complements/extends existing provision.

### **4. CONSTRUCTIVE ALIGNMENT**

A programme design map and course descriptors evidencing a development process aimed at achieving constructive alignment between programme graduate outcomes and the curriculum.