

THE INSTITUTION OF SURVEYORS, AUSTRALIA

**MANUAL FOR THE ACCREDITATION OF
UNIVERSITY PROGRAMS**

DRAFT

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DEVELOPMENT OF THIS DOCUMENT

ISA has maintained a list of approved university programs for many years. The small number of universities offering programs, the relatively stable program content, the participation of state ISA representatives and Surveyors Board representatives on university committees, and the cadastral registration processes have, until recently, meant that regular, formal accreditation procedures have not been of paramount importance.

The profession has in recent years witnessed an increasing breadth of application of the surveying and spatial information sciences – so that there is now a wide acceptance that the profession is less narrowly focussed and that the criteria for membership of the ISA needs to reflect this change. At the same time there has been a significant increase in the diversity of university programs. Several universities have established three-year programs and might choose to apply for ISA accreditation of these programs. The content and specialisations of some of the four-year programs has changed – for example, with GIS specialisations introduced. The articulation paths into and through university programs are becoming more flexible.

This document reflects ISA's understanding of the changes occurring in the profession and in the university sector. It is intended to stimulate innovation, experimentation, diversity and quality assurance both in courses and their delivery.

PURPOSES OF ACCREDITATION

The mission of the Institution of Surveyors Australia (ISA) is to:

- promote the common good and welfare of its members in their activities in the profession of surveying;
- maintain the highest possible standards of professional ethics and practices;
- promote public faith in surveyors and their work.

Accordingly, membership of the ISA is restricted to appropriately qualified applicants. The ISA evaluates courses or programs leading to the award of professional degrees by Australian universities, and accredits programs that are judged to prepare their graduates adequately for entry to the profession and admission to membership of ISA in the grade of Graduate.

ISA publishes National Competency Standards for Professional Surveyors. Graduates of accredited degrees are deemed to have attained the competencies of a Stage 1 Professional Surveyor without further assessment.

Accreditation provides:

- the first of the two prerequisites for corporate membership of the ISA: completion of an approved educational qualification (the second prerequisite is attainment of practice competencies through at least two years of satisfactory experience);
- public identification of programs that have been evaluated by a relevant professional body;
- a guarantee of standing that university departments can offer to prospective students and graduates, Australian and international;
- a basis for international comparability, reciprocal recognition, and graduate mobility;
- a statement to governments and universities of the basic requirements of a professional education, and the level of resources reasonably required to meet these requirements;
- consultative feedback on the design of new programs, modes of delivery, and assistance in the promotion of innovation and good educational practice.

ACCREDITATION COMMITTEE

The policy on accreditation university programmes is laid down by the Council of the ISA, and may only be varied by the Council's authority. Implementation of the Policy is the responsibility of an Accreditation Committee. The Committee comprises the President of ISA plus six other members appointed by the Council of ISA. One of the seven shall be appointed Chair of the Committee. At least two shall have substantial experience in organisations (other than universities) employing graduates in significant numbers, and at least one shall be a person with senior academic experience.

In appointing the members of the Committee, the Council shall seek to maintain a reasonable spread of expertise across the various branches of practice, and a broad representation from different States.

The Accreditation Committee:

- oversees all operational arrangements, and appoints any visiting member(s);
- receives evaluation reports on university programs, and determines whether accreditation should be granted and on what conditions;
- responds to any complaints or appeals concerning the accreditation process and to any proposals for change;
- oversees the development and operation of accreditation and mutual recognition agreements for universities from other countries, making recommendations to the Council;
- fosters the dissemination of developments and best practices in university education;
- advises the Council on public statements or representations that should be made in relation to university education;
- acts as a channel of communication and consultation between ISA and all university departments providing ISA approved degrees on matters relating to accreditation;
- periodically reviews the effectiveness of the accreditation process;
- when appropriate, recommends changes to the policy, guidelines or operating procedures;
- acts to foster the dissemination of developments and best practices in university education.

BASIS OF ACCREDITATION

1. ISA considers programs for accreditation at the request of the university offering the degree concerned.
2. Accreditation is accorded to professional programs, not to degrees, universities, or schools. For a program to be accredited, all pathways available to students for its completion must be included in the evaluation and must meet the criteria.
3. Where a particular award is available by two or more different routes, involving substantially different curricula, staff, or facilities, the university may choose to designate these as different programs to be evaluated separately for accreditation purposes. Alternatively, where the Committee has reason to believe that different routes to an award differ substantially in their compliance with the criteria for accreditation, it may decide to evaluate them as separate programs. This would normally be a matter for consultation with the university.
4. Programs are not ranked or merit-graded: they are either accredited, or not.
5. Accreditation of professional programs by ISA is governed solely by the Policy, Criteria, and Procedures set down in this document and its successive revisions.

TERMINOLOGY

Recognising the increasingly international character of university education, the following terminology is adopted:

<i>University</i>	The term university is used to denote a body authorised by legislation to award degrees.
<i>University School</i>	The entity responsible for the design and delivery of the educational program/s to be accredited. In Australia this entity is usually, although not always, a School or Department of Surveying, Spatial Information Science, Geomatics, Geoinformatics, or Land Information.
<i>Academic Staff</i>	The staff responsible for teaching the program leading to the award of a university degree.
<i>Degree</i>	The professional university degree in Australia is commonly entitled Bachelor of Surveying, Bachelor of Geomatics, Bachelor of Geomatic Engineering, Bachelor of Engineering (Geomatics) or Bachelor of Geoinformatics.
<i>Program</i>	The sequence of structured educational experiences undertaken by the student, leading on completion, and on satisfactory assessment of performance, to the award of a degree.
<i>Specialisation</i>	(or specialist field): The branch or discipline studies at a more advanced level in a particular program and featured either in the title of the degree, or as a major field of study in the graduate's transcript or statement of academic record (eg, a Land Surveying or GIS specialisation).
<i>Unit</i>	A unit is a single component of the programme – typically a one-semester class that comprises eg, 12.5% or 25% of a year's enrolment.
<i>Assessment</i>	Judgement of a student's work by the university.
<i>Stakeholders</i>	All groups with a key interest in university education (or a particular program) and its outcomes: e.g. students, employers and the profession generally, staff, universities, other professions and the wider community, school educators and career advisers, key interest groups within the profession.

ACKNOWLEDGMENTS

The document is in-part derived from the following sources:

Manual for the Accreditation of Professional Engineering Programs, The Institution of Engineers, Australia, October 1999

Quality Assurance in Surveying Education, FIG Publication No. 19, Morgan P, Hodgkinson R, Enemark S.; FIG Commission 2 Working Group on Quality Assurance, September 1999.

Benchmarking: A Manual for Australian Universities McKinnon KR, Walker SH, Davis D, Department of Education, Training and Youth Affairs, February 2000.

Criteria for Accrediting Engineering Programs Engineering Accreditation Commission, Accreditation Board of Engineering and Technology, Inc, USA, March 2000

PREAMBLE

University education provides the learning base upon which competence for a professional career is built. Accreditation of a university program by the Institution of Surveyors, Australia (ISA) gives confidence to the students, the universities and the profession that the education will provide a graduate with the required attributes. Through the process of accreditation of university education, as the representative of the profession, ISA will:

- ensure that graduates from an accredited program are adequately prepared to enter and to continue professional practice;
- promote best practice;
- promote the standing of accredited programs to members and potential members of the profession in Australia.

The ISA accreditation policy recognises the significant changes facing the profession and the critical and distinctive attributes needed by graduates for the future. It seeks to stimulate innovation, experimentation, diversity and quality assurance both in programs and their delivery.

CHANGES IN THE NATURE OF UNIVERSITY PROGRAMS

The ISA recognises that a university education must equip graduates with a broad range of knowledge and skills. As well as soundly-based technical knowledge, graduates must have developed an understanding of the overall environment, a capacity to interact effectively with the other disciplines and viewpoints, a capacity to grapple with ill-defined and broadly-based problems and to apply sound methods to their solution. Modern approaches recognise that the depth of knowledge and understanding, both technical and contextual, that are fundamental to real capability, come from equipping graduates to learn for themselves. Programs may become less content focussed, provide more scope for reflection and self-directed learning, and develop the capacity and motivation for the lifelong learning that will be essential whatever the content of the first degree. They should give prominence to social, economic, environmental, interpersonal and management issues, as well as scientific and technical.

Nationally, the range of programs offered may provide for increasing flexibility of occupational opportunity, recognising the ever-widening range of disciplines. Some programs may emphasise technical specialisation in a particular field; some may provide a broader technical exposure, drawing on several disciplines; and some may emphasise management themes while maintaining a surveying core. All should develop the ability to engage with complex technical issues at an advanced level, and in a real-world context.

PRINCIPLES

The aims of the accreditation policy are to maintain program standards and stimulate innovation and diversity, while making the most economical use of resources available to the ISA and to the universities for accreditation purposes. To this end:

- The ISA will review the accreditation of each program at five-year intervals.
- The policy focuses on the essential graduate outcomes, and on evidence of their attainment. It does not prescribe detailed program content or process, but invites innovation.
- The accreditation process requires schools to have in place their own mechanisms for validating and continually updating program objectives and for assuring and improving quality. So far as possible, the accreditation process evaluates the mechanisms in place, rather than acting as a mechanism itself. As universities develop internal processes that cover common ground with the professional accreditation undertaken by ISA, there is scope for improved efficiency by minimising duplication in the two processes.
- While the ISA does not prescribe in detail how the graduate outcomes are to be attained, it nevertheless wishes to be informed of the means actually employed, and reserves the right to judge them inadequate.
- The ISA recognises that the accreditation process is likely to highlight innovations in university programs that require the ISA to review and amend the accreditation criteria or, for example, the National Competency Standards. Where this occurs, the discrepancy between the university

activity and the ISA policy and procedures should not disadvantage the university's application for accreditation or renewal.

Previous approaches to accreditation of professional programs have tended to put much effort into input and process, but relatively little into connecting the outcomes to their ultimate purpose. A clear focus on the latter encourages flexibility in the former, but does not render it unimportant.

THE ATTRIBUTES OF A GRADUATE

GENERIC ATTRIBUTES

The generic attributes of a graduate are described by the *General Range Statement for Stage 1* of the ISA Competency Standards. That is:

- They will be capable of participating in professional work under the supervision of experienced professional colleagues and of demonstrating expertise and professionalism within one or more functional areas set out under the ISA definition of a surveyor.
- They will have developed sound technical skills during their tertiary education and will be capable of demonstrating their ability to apply these technical skills in the workplace.

SPECIFIC COMPETENCIES

Specific competency based criteria are provided in the *Sections 1.1 to 1.11* of the ISA Competency Standards.

SPECIALIST ATTRIBUTES

Programs that offer a specialist stream and which provide a degree with nomenclature that describes that specialisation will be required to document those attributes for the purposes of accreditation.

3. PRINCIPAL ELEMENTS OF THE ISA ACCREDITATION PROCESS

Assessment of teaching and learning is recognised as a challenging task. The educational strength of a school can only be monitored using multiple indicators, many of which are difficult to quantify. They include assessment of its planning for teaching and learning; the learning environment provided for students; the teaching quality; the student progression rates; student satisfaction; graduate employment rates, and the quality assurance measures in place.

There are three principal elements in the ISA accreditation system that are seen as essential in determining whether the attributes of the graduate are being achieved. These are:

- the teaching and learning environment;
- the academic program being offered;
- the exposure to professional practice.

These three elements are described below.

THE TEACHING AND LEARNING ENVIRONMENT

The following must be in place within the teaching and learning environment:

- an identifiable structure responsible for surveying and spatial information science education;
- capabilities in terms of staffing and resources to ensure that the stated objectives can be met;
- an effective advisory mechanism involving industry participation.

THE ACADEMIC PROGRAM BEING OFFERED

The following elements of the academic program are seen as critical to ensuring that students acquire the generic attributes identified above:

Program Philosophy and Objectives

There must be a clear statement of the mission and the objective for each program and of the broad characteristics expected of a graduate.

Program Structure and Content

The program structure and content must be such that the graduates acquire the generic attributes identified above and achieve the program objectives. In Australia, the minimum duration of an accredited undergraduate program has been four-years full-time or equivalent. The ISA recognises that three-year programs may also be considered for accreditation, given the increasing diversity of programs and the broadening of the profession.

A professional program will contain an appropriate mix of fundamental science (mathematics, physics), surveying or measurement science, surveying practice, and broadening studies (environmental studies, political science, etc). The program should ensure that graduates meet or exceed the specific competency based criteria provided in the Sections 1.1 to 1.11 of the ISA Competency Standards in order to be granted unconditional accreditation.

Program Standard

The university must employ some method of external benchmarking to ensure that the program material and standards reflect relevant best practice.

EXPOSURE TO PROFESSIONAL PRACTICE

The students must be exposed to professional practice integrated throughout their program to enable them to develop an appropriate approach and ethos, and to gain an appreciation of professional ethics.

This exposure may include:

- use of staff with industry experience;
- exposure to lectures on professional ethics and conduct.
- use of guest lecturers;
- use of industry visits and inspection;
- industry based projects.

4. CRITERIA FOR ACCREDITATION

In these criteria, statements variously employ the words *must* and *should*. Statements containing *must* denote absolute requirements for the program to be accredited. Statements containing *should* are not individually binding, but for accreditation to be granted it is expected that the program will meet a high proportion of them.

THE TEACHING AND LEARNING ENVIRONMENT

IDENTIFIABLE STRUCTURE

There must be an identifiable structure responsible for surveying and spatial information science education within the university awarding the degree. Most commonly this will take the form of a school (or department or faculty): a substantial organisational entity whose prime focus and responsibility is on surveying and spatial information science education and scholarship. Other forms of organisation may be acceptable but it is unlikely, for example, that a program would be accredited if it were taught and managed by a group of staff, otherwise undifferentiated, within (say) a Faculty of Science or a Faculty of Information Technology.

It would normally be expected that the school would have responsibility – subject to university approval processes – for the design, principal content, and delivery of programs; for the management of associated resources; and for the appointment and professional activity of staff. If this is not the case, the university will need to demonstrate how sufficient expertise is brought to bear on decisions in these areas.

CAPABILITIES AND RESOURCES

Staff

The teaching staff must be sufficient in number and capability to assure the quality of the program and the attainment of its stated outcomes. The number of core teaching staff will depend on the availability of staff and appropriate service units from outside the school and the involvement of part-time external lecturers. The university must be able to demonstrate that there are sufficient staff to teach all specialist units within the program.

In gauging the capabilities of the staff, the Committee will look for evidence in such areas as qualifications (both in surveying and in education); surveying experience; teaching experience; scholarship; contributions to the advancement of knowledge, practice and education; involvement in professional societies; effective participation in professional development opportunities and programs, and participation in the university's teaching appraisal program. It is considered desirable that the staff should come from a diversity of backgrounds, embodying a mix of academic experience and practice; experience in non-academic environments, preferably international as well as Australian. The school's research and/or professional activities should include significant interaction with industry and community.

As well as the full-time academic staff, schools are encouraged to engage guest or sessional staff who are practising professionals in surveying and related fields. There must also be sufficient qualified and experienced members of technical and administrative staff to provide adequate support to the educational program.

It is likely that programs will increasingly be staffed and delivered in a variety of modes. These may involve non-traditional channels for student-staff interaction; student activity and staff support in locations other than the host campus, including offshore elements; and networking and contracting among universities and between universities and other providers. The university awarding the degree will be considered responsible for assuring the capabilities of all staff involved, and the Committee may require evidence of how this is done.

Facilities

There must be adequate classrooms, learning-support facilities, study areas, information resources, computing and information technology systems, and general infrastructure to meet the program objectives, enable students to learn the use of modern surveying and organisational tools, and explore beyond the formal dictates of their specific program of study.

Appropriate experimental facilities must be available for students to gain substantial experience in understanding and operating instruments and equipment and of designing and conducting surveys. The equipment must be representative of modern practice. Where practical work is undertaken at another university, or in industry, the arrangements must be such as to provide reasonable accessibility and opportunity for self-directed learning.

ADVISORY MECHANISM INVOLVING INDUSTRY

The school must secure the active participation of practising professional surveyors and leading employers of program graduates in defining program objectives.

DISTANCE EDUCATION AND FLEXIBLE DELIVERY

For programs offered wholly or partly in distance mode, or at multiple or remote locations, the school's resources must be sufficient to provide students with learning experiences and support equivalent to on-campus attendance. This includes:

- communication facilities
- quality of materials,
- ability to support distance programs,
- academic policies that support external students,
- quality controls to ensure that external students are provided with acceptable services.

THE ACADEMIC PROGRAM

Title

The title must be properly descriptive of the program content. Where it denotes specialisation in a particular discipline, the program must impart in-depth technical competence in that field to a level consistent with employer expectations and international practice generally. A program that omits coverage of substantial topics in the field implied by the title, in which a professional in that field could reasonably be expected to have competence, should not be accredited.

To be eligible for accreditation, a program *does not* need to include any particular words in its title (eg, surveying, geomatics) but must be separately identifiable for accreditation purposes. For example, a spatial information science major within a Bachelor of Science degree must be clearly identifiable within the documented programs of the university and the academic records of the graduate in order to be considered for accreditation. Specific degree nomenclature is preferred.

New program titles may be expected to arise in response to evolving industrial and professional practice. The programs may draw on several existing fields of specialisation, and may incorporate new knowledge or the application of knowledge in new practice environments. The Committee does not wish to be prescriptive about titles, nor does it wish to encourage a proliferation of specialist titles that may have transitory lifetimes. It reserves the right to query a title or field of practice that it regards as inappropriate, or to decline to accredit because of an inappropriate or misleading title.

Duration and scale

The minimum requirement for accreditation of a professional program in Australia is three years full-time equivalent, based on entry from a satisfactory level of achievement at Higher School Certificate level (twelve years of primary and secondary schooling) or equivalent. Programs offered in alternative modes (part-time attendance, distance mode, etc) must be demonstrably equivalent in terms of content and outcome, and in the learning expectations of the students.

The conventional academic year involves only some 36 weeks of formal study and examination, offering apparent scope for accelerated progression programs utilising the remainder of the calendar year. In considering any program that offers completion in significantly less than three calendar years, the Committee will wish to be assured that it provides adequate opportunity for personal development.

Admission and Retention

The admission system must adequately publicise the qualifications required for entry and ensure that only qualified candidates are admitted. The school should be able to demonstrate a reasonable relationship between admission standards and student retention and graduation rates.

Program objectives

There are two distinct requirements for accreditation. First, *all* programs must meet the generic graduate attributes and substantively meet all specific competency based criteria. Second, a program which carries a specialist title must impart technical competence in the field implied by its title, to an appropriate level.

In the case of generic attributes, programs must ensure that their graduates develop to a substantial degree the generic attributes, or capabilities, required by the Policy. The attributes of a graduate are described by the *General Range Statement for Stage 1* of the Competency Standards. That is:

- They will be capable of participating in professional work under the supervision of experienced professional colleagues and demonstrating expertise and professionalism within one or more functional areas set out under the ISA definition of a surveyor.
- They will have developed sound technical skills during their tertiary education and will be capable of demonstrating their ability to apply these technical skills in the workplace.

Specific competency based criteria are provided in the Sections 1.1 to 1.11 of the ISA Competency Standards. The school must demonstrate that graduates meet these criteria, or indicate those criteria that are not met.

Program structure and content

A program will typically include the following elements, the percentages denoting proportions of the total learning experience:

- i. mathematics, physics, information technology and other underpinning sciences. This element should not be less than 20% of the total program content.
- ii. surveying and spatial information science principles and skills, including practical experience and projects, appropriate to the discipline of study. This element should not be less than 40% of total program content.
- iii. broadening studies such as environmental studies, political science, geography, etc.
- iv. professional practice (including management and communication skills and professional ethics).

These criteria are meant as a broad guide only, and a starting point for discussions of program content. For example, for some courses, the surveying component may concentrate on land development planning, while for other courses the content may concentrate on spatial measurement. Substantial departure from these representative proportions must be justified as consistent with the program objectives and in particular, with attainment of the generic attributes.

Students should engage with complex, open-ended problems, in both individual and team capacities, and the curriculum should preferably contain several design and/or research projects at different levels. There should be substantial hands-on practical experience, so that students become fluent in understanding and operating instruments and undertaking practical work.

Educational Culture

The Committee will look for evidence of a dynamic, innovative and outward-looking intellectual climate in the school, with awareness of current educational thinking and best practice and a proactive attitude to its adoption. Staff development programs should aim at developing teaching practice as well as discipline expertise. The Institution will encourage programs that, for example, address any gender inequities, that internationalise the curriculum, or that promote community outreach.

Assessment of outcomes

The assessment process overall must demonstrate that the stated outcomes are being measured and achieved, and that the results are being applied to the continuing development of the program. Assessment methods may include subject-content examinations; project reports; self, peer, and mentor assessments of performance; student portfolios and journals; professional interviews of graduating students; and other appropriate means.

Program Standards

Schools must employ some form of benchmarking to ensure that exit-level program standards are comparable with national practice, and preferably international practice. The accreditation process will evaluate program standards, but universities should do so as part of their own setting and monitoring of program objectives and should not rely on the accreditation system alone.

Double degrees

An increasing numbers of programs take the form of combined or double degrees, in surveying/geomatics and another discipline. Examples are information technology, business or economics, law, international studies or the arts. In most instances, two degrees are awarded: eg. Bachelor of Surveying and Bachelor of Science. Typically, the double-degree program occupies substantially less time than would the two degree programs taken separately. This is achieved by identifying content and learning experiences that may validly be counted towards both qualifications.

In all cases, for accreditation, the Committee will require the present policy, criteria, and graduate attributes to be met and demonstrated in full. The representative proportions of the learning experience, cited above, should be interpreted as proportions of at least three full-time years, or their equivalent in other modes.

EXPOSURE TO PROFESSIONAL PRACTICE

Exposure to professional practice is a key element in differentiating a professional degree from other degrees. Exposure to practice must be integrated throughout the curriculum and should include some or all of:

- use of staff with industry experience;
- practical experience in a practicing environment outside the teaching establishment;
- mandatory exposure to lectures on professional ethics and conduct;
- use of guest lecturers;
- use of industry visits and inspection;
- an industry based major project.

ISA encourages schools to provide opportunities for professional experience, and to assist all students to gain placements.

Some universities offer programs in which students are required to gain substantial professional experience in industry, or other practice setting outside the university, interspersed with the academic program and complementary to it. These programs would normally include the following features:

- a professional experience requirement of six months or more taken in periods of sufficient duration for substantial work to be undertaken;
- stated and assessed learning outcomes from the practice experience;
- a formal requirement that the professional experience be completed to a satisfactory standard, as a prerequisite for the award of the degree;
- comprehensive documentation of these requirements and how they are met;
- a staff member providing assistance to students in finding suitable professional experience placements.

The Committee acknowledges these programs, and accredits them in the same way as any other professional program.

QUALITY SYSTEMS AND PROCESSES

The school and or the university must have systems in place to ensure that stated outcomes are met and that program objectives and quality are continuously reviewed and improved. Most of these have been touched on above. They should include:

- i. Documented processes for program planning, curriculum development and approval, and regular curriculum and content review.
- ii. An admissions system that ensures an acceptable standard of entry for students from secondary school and from other appropriate backgrounds.
- iii. Specific assessment processes which measure graduate capability and performance, on a program basis.
- iv. Processes for securing feedback and comment from students and employers.
- v. Participation by practising professional surveyors and leading employers of graduates in the school's forward planning and in its processes for ensuring educational quality.
- vi. A process for comparing or benchmarking program standards with those of other universities.

STUDENT OUTCOMES

Four valid student outcome measures are student progress, student satisfaction, employability, and equity group outcomes.

Student Progress

Low unit by unit success rates may be caused by problems outside the control of the school, but do indicate lower than optimal learning outcomes¹. Student retention rates, particularly for first to second year retention provide information on how well students are receiving the program. Unit success rates and student retention rates need to be considered in concert with admission cut-off scores.

Student Satisfaction

Unit and course experience questionnaires administered to students and to graduates after completion of their program of study provide some evidence of teaching quality, and indications of trends within units and courses. Schools are encouraged to undertake and make available data to indicate student satisfaction and longitudinal trends.

Employability

Employment rates are important because the aspiration of all schools should be to provide relevant courses of sufficiently high standard as to give students access to employment. It is recognised that raw figures for a school can be misleading because of geographic location and student profiles; however, schools are asked to provide recent employment data and are encouraged to provide any examples of student employment that indicate high quality outcomes. Data may be restricted to Australian students.

Equity Group Outcomes

There are a number of equity groups to consider including: low socioeconomic, women in non-traditional fields, indigenous, non-english speaking background, rural, isolated, and students with disabilities. Schools are encouraged to provide evidence of activities and outcomes that address equity issues

¹ The unit success rate is given by the number of students receiving a pass grade or better in the total of the units on offer divided by the number of students enrolled in the total of the units on offer.

5. ACCREDITATION PROCEDURES

The accreditation procedure for a program or group of programs comprises the following steps:

REQUEST FOR ACCREDITATION

The university submits a request to ISA for a program or programs to be accredited. The request may be submitted at any time but it should be borne in mind that accreditation activities are scheduled on a calendar-year basis. For a program already accredited, ISA will issue a reminder that re-accreditation is due in good time for the school to make the necessary preparations.

SCHEDULING OF PROCESS

ISA acknowledges the request and schedules a date for the receipt of initial documentation; an approximate date for an accreditation visit if one is required, to be confirmed later; and an estimated date for final decision.

SUBMISSION OF INITIAL DOCUMENTATION

The school submits comprehensive documentation addressing the Criteria for Accreditation and intended to provide evidence that the criteria are met. Guidelines on the preparation of documentation are included below.

APPOINTMENT OF CONSULTANTS

The initial documentation is evaluated by the Committee and, if the Committee deems appropriate, consultant members, one for each program specialisation not covered by the Committee's membership. A consultant's function is primarily to assess, on the basis of the documentation submitted, whether the program curriculum justifies the specialist title.

If the initial documentation is evaluated as satisfactory, any visit dates are confirmed. If the initial documentation is not considered satisfactory, the school may be asked to provide further documentation.

ACCREDITATION VISIT

The visit is normally made by a subset of the Committee, and may require just one member. Exceptionally, the visiting group may be supplemented by a consultant member for a program for which major issues have arisen in evaluating the initial documentation. The visit will normally extend over one or two days, and will focus on evaluating factors that cannot readily be described in documentation.

The visiting group will:

- i. evaluate factors such as the intellectual atmosphere in the school and university, the morale and calibre of the staff and students, and the educational culture;
- ii. discuss evidence of how well the quality processes are functioning;
- iii. discuss the assessment procedures, focussing particularly on the generic attributes.

At the immediate conclusion of the visit, the group provides a written report to the Committee.

DRAFT REPORT AND SCHOOL RESPONSE

As soon as possible after a visit, and normally within four weeks, a draft report from the Committee is prepared and sent to the school. The report is based on evaluation of the initial documentation, the visiting group's findings, and any additional documentation provided by the school and received by the Committee. Consultant Committee members have the opportunity to comment on the draft.

The school has four weeks from the date of receipt of the report, to provide a written response if it so wishes. The response is normally limited to correction of any errors of fact, to any matters to which a response is specifically requested, and to brief comment on any issue that the school feels the Committee may have seriously misunderstood. It is not an opportunity to submit further substantial documentation unless this is requested.

REPORT AND COMMITTEE DECISIONS

The report and recommendations are then finalised, noting the school's response and if necessary incorporating it in full, and considered at the Committee's next meeting. On the basis of the report and recommendations, for each program evaluated, the Committee may decide:

- i. to accord or renew full accreditation for five years;
- ii. to accord conditional accreditation for a period – normally one or two years only. Within this period the school may undertake developmental action in response to shortcomings indicated in the report, and submit further documentation. If this is adjudged satisfactory, full accreditation may be accorded for the balance of the five-year period. If the criteria are not met, accreditation ceases at the end of the one or two-year period.
- iii. to decline or withdraw accreditation. In such case, a further application is not normally considered within two years.

In cases (i) and (ii), the Committee may require that graduates of the program complete a minimum additional period of professional experience and provide evidence of meeting specified competency criteria, in accordance with the requirement that Graduate Membership of the ISA requires compliance with Stage 1 of the ISA Competency Standards.

The Committee's decision, together with the final report, is then sent to the university.

THE ACCREDITATION CYCLE

GENERAL REVIEW

So far as possible, accreditation is scheduled so that all programs offered by a particular university or school are reviewed concurrently at intervals of five years. This is referred to as a general review of all programs offered by the school. Programs which meet all criteria are accredited or re-accredited for the five-year period. A program which achieves full accreditation in the interval between general reviews is included in the next general review.

Accreditation is normally accorded on a full calendar-year basis. Should ISA be unable to schedule procedures to re-accredit within a five-year period, or should a school be unable to meet a schedule through genuine misadventure, existing accreditation will normally be extended for one further calendar year. Where a program is scheduled for closure, accreditation can normally be extended from year to year for a limited time.

NEW PROGRAMS

Given the focus on graduate outcomes, a new program cannot be given full accreditation until after the emergence of the first group of graduates. To provide the school and its students with reasonable reassurance, *provisional accreditation* may be accorded at an earlier stage on the basis of compliance with the criteria to the extent then possible. A new program is considered for full accreditation when it reaches completion (ie. graduation of its first sizeable intake of students).

For a new program in a well-established school in good standing, provisional accreditation of a new program is normally given on the basis of a desk-top assessment of the initial documentation. "Good standing" means that all programs offered by the school were accredited at the last general review without significant difficulty. If the assessment of initial documentation is satisfactory, provisional accreditation can be given concurrently with the first sizeable intake of students.

For a completely new school, or a school which experienced substantial difficulty in its last general review, or a program representing a major departure from a school's existing offerings, or where initial documentation is adjudged unsatisfactory, provisional accreditation is likely to require a visit and is unlikely to be possible until at least the second year of operation. The Committee has discretion to determine when provisional accreditation is appropriate.

When a new program reaches completion concurrently with a general review, or one year in advance, it is considered for full accreditation as part of the general review. Where full accreditation is accorded, it is made retrospective if necessary to include the first graduates. When a new program reaches completion within two years after a general review, and the school is in good standing, a visit by one Committee member may be required to recommend full accreditation.

MAJOR CHANGES TO EXISTING PROGRAMS

It will happen that a school makes major changes to an existing program. These may amount to a complete re-design, or be of sufficient magnitude to change substantially the basis on which the program was last accredited. Where the Committee is satisfied that all aspects of the resulting program and supporting processes accord with the accreditation criteria, the Committee may decide to maintain existing full accreditation.

PUBLICATION OF ACCREDITATION STATUS

ISA will publish on its website a list of accredited programs, normally on an annual basis. Universities may wish to publish statements to the effect that certain of their programs are accredited by ISA. A university is responsible for ensuring the accuracy of such statements and in particular, must avoid statements which might be read as implying that certain programs are accredited where this is not the case. An example might be where a program offered at one campus is accredited, but a program offered at a different campus, though leading to the same degree, is not. The university is obliged to make such distinctions clear, and misleading statements may result in the loss of ISA accreditation.

Evaluation reports are confidential between ISA and the university concerned, and will not be published. If a report is required to be disclosed for any reason, then permission from both the ISA and the University must be sought. Excerpts taken out of context are specifically not authorised.

APPEALS

A university or the school may appeal against a decision. The appeal must be made in writing to the Chief Executive of ISA, within two weeks of receiving the decision, and must state the grounds on which it is based. Grounds for appeal are normally limited to errors of fact or breach of the Policy, Criteria and/or Procedures set down in this document.

The Council will appoint a sub-committee to consider the matter and, if appropriate, conduct a further evaluation. Following the report of the sub-committee, the Council's decision is final.

INVESTIGATION OF CONCERNS

If the Committee has good reason to believe that a program previously accredited no longer meets the criteria, it may notify the school of the reason/s for its concern and request a formal response. If the response is not considered adequate, the Committee may require one Committee member to visit the school and investigate the situation. If that Committee member is not satisfied, they will prepare a report recommending that accreditation be discontinued, with reasons. The Committee will forward the report to the school and invite further response, normally within four weeks at most. If the response is not satisfactory, accreditation will be discontinued.

In such cases the school or university may appeal to the Council as outlined above. In considering such an appeal the Council would not normally schedule a further visit, and would confine its consideration to issues of fact and process.

CONFLICTS OF INTEREST

Membership of the Accreditation Committee and appeal committees inherently creates situations that may result in conflicts of interest or questions about the objectivity of the accreditation policy and processes. All members are expected to be constantly alert to this possibility, to disclose any real or potential conflict of interest, to withdraw from any situation or activity that may constitute such a conflict, and generally to conduct themselves in accordance with the ISA Code of Ethics.

FEE CHARGED FOR ACCREDITATION

The Council may determine whether a schedule of fees should apply for consideration of a program for accreditation.

EVALUATING INNOVATIVE PROGRAMS

It is a challenge for an accreditation process to act so as to promote innovation and experimentation, and at the same time maintain standards that can be objectively certified, publicly and internationally.

The ISA accreditation system encourages innovation by minimising prescriptiveness in how the required outcomes are attained. Program evaluation will always focus on the intent of the criteria and on the demonstrated capability of graduates to enter practice at a professional level. The Committee is required both to be receptive to new approaches, and to use the best judgement available to evaluate their substance and merit.

Continuing innovation and development can be expected to lead to restatement of the Criteria and the Policy from time to time. These are not expected to be frequent occurrences.

COMMUNICATING VIEWS

The ISA may wish from time to time to provide a viewpoint to schools: for example a perceived need for new programs in certain fields, or a suggested change in direction or emphasis. Similarly, it may wish to consult with schools in forming views to put to Government or another third party. The Committee may conduct such communications directly with schools.

PROMOTING BEST PRACTICE

Accreditation acts in a general way to promote best practice. However, ISA wishes to encourage more direct mechanisms for disseminating innovation and best practice, and will facilitate and encourage such processes when possible. ISA strongly encourages universities to share educational innovations and developments in good practice. Following a decision by ISA to accredit a program, the university may be asked to give permission for examples of innovation or good practice to be communicated to other universities or for wider promulgation. This may take the form of an invitation to write an article for publication. It is appreciated that universities find themselves in competition, but shared development is in the interests of education and professional practice in Australia generally.

As noted above, accreditation reports are confidential between ISA and the university concerned. It is not appropriate for ISA to publish them; nor even to publish a selection of the reports with the relevant universities' permission, as this might imply a form of ranking.

ADVICE ON NEW PROGRAMS

A school contemplating establishing a program in a field quite new to the school, or in a new field of surveying and spatial information science, or a university contemplating the establishment of a new school, may seek advice through the Accreditation Committee. The Committee may appoint an experienced person to respond to questions, or may suggest persons who might be approached directly. Provision of such advice expressly does not constitute any guarantee of ultimate accreditation.

7. DOCUMENTATION

BACKGROUND

The purpose of the documentation is to demonstrate that the program meets the Criteria for Accreditation, set out above. The documentation must describe the following:

- the objectives of the program;
- the ways in which the program addresses those objectives, including development of the generic graduate attributes, the specific competencies, and the attributes appropriate to any specialist title;
- the assessment system, and how it ensures that each graduate meets required outcomes;
- the methods used to secure external validation and critical comment on the program, and to apply such comment to the continual improvement of the program; and must provide
- information about operating arrangements and resources relevant to the program.

ISA does not wish to specify the format of the documentation in detail. The following guiding principles should be kept in mind:

1. 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 university and school, most of the documentation requested should already exist. The ISA recognises that universities are increasingly preparing quality assurance and benchmarking documents for their own purposes, and that the format of these documents is often standardised to meet Commonwealth Government criteria. The ISA accreditation process will attempt to mirror such reporting requirements whenever possible.
2. A good submission is likely to comprise a collection of existing documents, plus a text providing a coherent overview. The overview text should address each of the criteria, and refer to the relevant supporting material. To the extent that existing documentation provides evidence that the criteria are met, so the overview text can be correspondingly brief. The overview text must address each major point in a definitive way – it is not sufficient merely to provide a collection of disparate items, or to point to a website, and leave the Committee to find the relevant information and make the connections for itself.
3. The documentation need not necessarily address in depth every detail mentioned in Section 4 above. The requirement is that it must provide an adequate basis for the Committee to form a judgement under each of the headings in that section. The Committee may at any stage request further information relevant to the criteria. It will be helpful if the initial documentation indicates, in relation to each heading, further evidence available in addition to that provided. The submission should be as brief as effectiveness demands and should not in any event exceed 50 pages of material common to the school as a whole, plus a maximum of 10 pages for each particular program. These limits include copied existing documents.

If the initial documentation is not considered to meet these guidelines, the school may be asked to resubmit it before the process is continued.

DOCUMENTATION TO BE SUBMITTED

The following sections outline the information requested, and the manner of submission.

GENERAL INFORMATION

- i. Name of the University seeking accreditation.
- ii. For each program to be accredited:
 - Title of program.
 - Degree/s awarded on completion, and abbreviation/s. Program and degree titles must match those appearing in the university's published literature. Some universities employ a formal award title, and a detailed title that appears on the testamur and/or transcript. Where such distinctions exist, they should be clarified.
 - University/ies awarding the degree/s, if different from above.
 - Any sub-sets or variants of the program to be treated separately for accreditation purposes.
 - Level of accreditation sought (re-accreditation of program previously accredited; provisional accreditation of new program; full accreditation of program already provisionally accredited).

- Year of first introduction of the program, and years of major revisions.
 - Year of last accreditation assessment, and outcome.
- iii. Name and title of the Officer responsible for this submission and contact details (mailing address, phone, fax, e-mail).
 - iv. Names and contact details of others who may need to be contacted concerning this submission, and nature of their responsibility.
 - v. Website address of the university and the school.

ACTION RESULTING FROM PREVIOUS ACCREDITATION

- i. If a previous evaluation by ISA identified any deficiencies and/or proposed any developmental action, refer to this advice and indicate the action taken. If appropriate, the action can be described in other sections of this documentation: refer to them here.

PROGRAM OBJECTIVES

- i. Provide copies of the statements of educational objective for the program/s to be accredited. These must include (a) public statements to program stakeholders, and may also include (b) internal statements for the purposes of course planning and approval and for detailed curriculum development. Discuss the use of any specialist titles that are unusual or innovative.
- ii. For a new program, describe the rationale for its introduction.

PROGRAM STRUCTURE

- i. Set out the program structure, normally in the form in which it is presented to students (this may consist of an extract from a handbook or curriculum guide). Show the total student contact hours on a year-by-year basis (for off-campus units, show anticipated student time commitments).
- ii. Explain the requirements for the award of the degree, including both mandatory and optional elements.
- iii. Describe all modes and all pathways by which the degree requirements may be completed, and their normal duration, including
 - on-campus attendance modes, full-time and part-time
 - attendance at multiple or alternative campuses, in Australia and/or offshore
 - distance education or work-based learning
 - articulation from other post-secondary qualifications
 - twinning or partnering arrangements with other institutions
 - any other mode available.

*Note: The university may choose to have all modes and pathways treated under a single program accreditation. This is the preferred approach. Alternatively, if there is good reason, it may choose to have different modes/pathways evaluated and accredited as different programs. **The documentation must provide information in relation to all modes and pathways listed.***

- iv. List all units and other educational experiences offered, and state what level of credit each carries towards the award of the degree.
- v. List the staff member/s currently responsible for each unit.
- vi. Provide a brief description of each unit or educational element including its level and prerequisites; its scope, coverage and educational objectives; and the mode/s in which it is available to students (eg. lecture, tutorial, laboratory or practical exercises, problem-based or self-directed learning, individual or team project work, distance interaction, contract-based experiential learning, reflective documentation, exposition and presentation, etc). This could take the form of calendar (catalogue) or handbook entries, with additions if necessary. Include a handbook synopsis, and the detailed learning and assessment guidelines presented to students at the commencement of each offering, and examples of assessment materials including examination papers, assignment and project specifications, learning contracts etc.
- vii. Describe any special pathways offered to students from particular backgrounds, and any special support programs to cater for disadvantaged or unconventional backgrounds, language difficulties, or inadequate preparation in particular subject areas.
- viii. Describe how the program structure and content relate to the elements in Section 4: Program Structure and Content. In relation to double-degree programs, note Section 4: Double-degrees.
- ix. Describe how the curriculum provides all students with exposure to professional practice, referring to the possible approaches set out in Section 4: Exposure to Professional Practice

and any others used in the program/s in question. State whether students are required, or encouraged as an option, to gain experience in a professional practice environment outside the university, and describe any assistance provided to them to gain such experience.

EDUCATIONAL PROCESS

- i. Describe how the program justifies any specialist title it carries – refer to Section 4: Title and Field of Specialisation – and how it imparts the relevant attributes.
- ii. Briefly indicate those units or those components of the curriculum that ensure that students meet or exceed each of the generic graduate attributes in Section 2: Generic Attributes and the specific competency based criteria provided in the Sections 1.1 to 1.11 of the ISA Competency Standards. Indicate any competencies that the curriculum does not seek to impart.
- iii. Indicate the proportions of teaching and supervision provided by
 - regular members of academic staff of the school
 - staff from other parts of the university
 - sessional teaching staff (eg. practitioners)
 - teaching assistants (senior undergraduate or postgraduate students)
 - other universities or providers.
- vii. For programs or major parts of programs offered in distance mode, discuss the nature and scale of individual support available to students on an interactive or rapid-response basis.

Note: For double-degree programs, it is not necessary to treat the other discipline/s involved in the same detail as the spatial information science component. However, there should be sufficient detail to provide an appreciation of the total educational experience undertaken by the student and the outcomes expected.

ASSESSMENT

- i. Provide a description of the assessment methods. Where appropriate, make reference to the:
 - attainment of the generic attributes and specific competencies; and
 - attainment of the knowledge and competence associated with any specialist program title;
- ii. Describe the criteria for the award of honours, and the processes for determining honours gradings.

The ISA recognises that assessment of some educational outcomes can be easily measured while others are very much more difficult to measure.

QUALITY SYSTEMS

- i. Describe the school's processes for program planning, curriculum development, and regular curriculum and content review.
- ii. For a new program, describe the processes surrounding the decision to introduce the program. Provide relevant documentation, including evidence of demand and availability of resources.
- iii. Describe the approaches taken to promote awareness of current educational thinking and best practice, and their incorporation into curriculum development.
- iv. Describe the school's processes for securing feedback and comment from students, employers, or any other program stakeholders.
- v. Provide available graduate employment data, or other supporting data such as alumni surveys documenting achievement, or employer surveys of longer-term graduate performance and development.
- vi. Describe the school's advisory mechanism/s, and arrangements for securing the advice and involvement of practising professionals and leading employers of graduates in its forward planning and quality management.
- vii. Describe the approach taken to comparing or benchmarking program standards with those of other universities. Provide evidence of comparability of standards, and describe any program improvements being undertaken as a result of inter-university comparisons.

STUDENT OUTCOMES

Student Progress

- i. Provide student retention rates, particularly first to second year.

Equity Group Outcomes

- i. Provide any evidence of activities and outcomes that address equity issues.

Student Satisfaction

- ii. Indicate what student satisfaction surveys are undertaken and make available data to indicate student satisfaction.

Employability

- i. provide recent graduate employment data (limited to Australian students if preferred) and provide any examples of student employment that indicate high quality outcomes.

STRATEGIC PLANNING

Describe the strategic planning processes maintained by the school and provide any evidence of proactive, systematic changes in the organisation, teaching, or research that reflect the school's strategic planning.

PROGRAM ADMINISTRATION AND STATISTICS

Admissions and enrolments

- i. Complete *Table 1* for the current year and the two previous years, showing admissions data and commencing enrolments for each program to be accredited under the following headings:
 - Australian resident, Commonwealth/HECS-funded students:

Commencing enrolments total	headcount
Proportion female	% headcount
Entry cut-off score (ENTER)	n/100
Entry highest score	n/100
Entry median score	n/100
 - Australian fee-paying student commencing enrolments headcount
 - International fee-paying student commencing enrolment headcount
- ii. Complete *Table 2* for the current year and the two previous years for each program being accredited, showing overall enrolments under the following headings:

• commencing enrolments	EFTSU
• continuing enrolments	EFTSU
• total enrolments	EFTSU
• total enrolments	headcount
• proportion of total who are International fee-paying	% headcount
• proportion of total attending part-time	% headcount
• completions	headcount
• proportion of undergraduate completions with honours	%
- iii. For an established program, comment on the admission standard and commencing enrolments, and on any anticipated or intended increases or reductions. For a new program, indicate the intended admission standard and the projected commencing and total enrolments, each year to steady-state.

Progression and graduation

- i. Outline the progression and exclusion rules for enrolled students, the options available to students who fail in their assessment, and any particular remedial facilities or programs offered.
- ii. Comment on retention and graduation rates, and the proportion of degrees awarded with honours.

OPERATING ENVIRONMENT

Organisation of the university

- i. Outline the organisational structure of the university, including:
 - The name of the principal academic entity responsible for the program (eg. Department of Surveying).

- Title of the head of the school (eg. Head of Department) and name of incumbent.
- Title of person at corporate level to whom the head reports (eg. Executive Dean) and name of incumbent.

State whether the school has prime responsibility (subject to university approval processes) for: program design; program content; program delivery; management of resources; appointment and supervision of staff; and professional activities of staff (research, consulting, staff development). If not, describe the arrangements under these headings for the program or programs.

Organisation of the school

- i. Describe the organisational structure of the school, including:
 - Names of sub-entities (eg. Centres for GIS) and the scope of their responsibilities.
 - Titles of the heads of sub-entities, and names of incumbents.
 - Titles of officers having responsibility across the school (eg. associate deans, subdeans, faculty registrar etc), and names of incumbents.
 - Accountabilities in relation to educational programs and to staff supervision.

Educational profile

- i. List all educational programs (undergraduate and postgraduate) for which the school has principal responsibility, and the degrees awarded.
- ii. List any programs for which another entity has principal responsibility, but in which the school has a significant role.

THE STAFF

Staff profile

- i. Provide a listing of all academic staff who teach in the school, showing their qualifications (degrees, professional memberships, honours and other post-nominals). Provide curricula vitae of staff members, in the form normally maintained.
- ii. List adjunct staff, and sessional staff who have principal responsibility for subjects.
 - i. For the adjunct and sessional staff, give the titles of their substantive appointments.
 - ii. Indicate numbers of sessional staff who perform supporting roles (ie. do not have principal responsibility for subjects) and typical occupational categories – eg. practising surveyors, other professionals, research students.
- iii. Complete *Table 3* summarising the regular teaching staff profile of the school under the headings:
 - academic levels A, B, C, D, E;
 - professional and technical staff;
 - administrative staff.
- v. Show also the approximate total teaching load for each major sub-unit.
- vii. Indicate briefly the school's profile in research and associated professional activity, indicating the extent and scope of activity and naming principal areas of research concentration, formally-established centres etc., and any major research collaborations with other areas of the university and with other universities or organisations.
- viii. Demonstrate the competency of the teaching staff to cover all areas of the curriculum, and indicate any strategies for reinforcing areas of weakness and staffing new areas of specialisation.
- ix. If the program to be accredited specialises in a particular field, indicate the particular areas of expertise of teaching staff that relate to that field.
- x. For any program or pathway conducted substantially outside the school itself (e.g. contracted to another university, or conducted at an offshore or remote campus with different staff) describe the staffing arrangements that apply, and the methods used by the school to assure itself of the capabilities of the staff involved.

Staff policies

- i. For teaching-only and teaching-and-research staff, at academic levels A, B, C, D, and E, complete *Table 4* indicating the approximate proportions of academic staff activity devoted to undergraduate teaching, postgraduate teaching, student consultation and counselling, research and research supervision, consulting and other professional activity, developmental programs and administration.

- ii. Provide information about the number of staff undertaking professional development programs, and the range of programs undertaken.

RESOURCES AND FACILITIES

Financial arrangements and resource allocation

- i. Discuss the adequacy of the resources available to meet the objectives of the school, and of the program/s to be accredited. Comment on any recent or prospective trends in the school's financial situation, and their impact on program effectiveness. Indicate what steps are being taken to address any perceived inadequacies.

Facilities and infrastructure

- i. Briefly describe the 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 program/s to be accredited. In particular, give
 - titles of laboratories in active use for teaching;
 - details of facilities available to students for project work, including field and office instrumentation and software, and technical staff support;
 - details of learning-support centres or special facilities;
 - an indication of annual commitment to maintaining the library (monographs, serials) and to acquiring documents outside the university's collection.

SUBMISSION OF INITIAL DOCUMENTATION

- i. The documentation should be bound in one or more volumes, for convenience, and should include a Table of Contents
- ii. The university should submit sufficient copies of the initial documentation to provide for
 - the Accreditation Committee (1 copy)
 - any additional consultant member(s)
 - one spare copy.The number of copies required will be advised when ISA acknowledges the request for accreditation and schedules key dates (refer Section 5 above).
- iii. The initial documentation should be accompanied by:
 - copies of all current promotional literature
 - the university Calendar
 - the Handbook, Calendar supplement, or other official publication relating to the school, and containing the public statement of program details
 - major current items of promotional literature concerning the programs and/or website references to these items. It is appreciated that some items may be available only on the Web, and not in hard copy.

All copies should be submitted to the Chief Executive Officer, ISA, who will arrange distribution.

INFORMATION TO BE AVAILABLE FOR INSPECTION DURING VISIT

- iii. Access to materials for each unit offered including handbook synopsis, detailed learning and assessment guidelines presented to students at the commencement of each unit, notes or materials distributed to students, history of student feedback, etc.
- iv. Examples of assessment materials including examination papers, assignment and project specifications, learning contracts etc.
- v. If requested in advance, anonymous examples of student work including exam scripts, assignments, project reports and theses, portfolios, professional practice logbooks etc, with indications of the marks or grades awarded.
- vi. Records of the school's interactions with program stakeholders, including particularly the advisory group/s involving employers of graduates.

8. GUIDELINES FOR VISITS

Visits, when required, will normally be conducted over one or two days.

PRELIMINARY AND FINAL EVALUATION

- i. Each Committee member and consultant first completes the *Evaluation against Criteria* (see below) in draft, on the basis of the initial documentation.
 - Committee members complete all parts, as far as it is possible to do so based on the documentation alone, and recognising that their personal expertise may not extend to verifying that the relevant curriculum elements are appropriate to a specialist program title.
 - Consultant members each complete the parts that relate to the specialist curriculum and program titles in their area of responsibility, record any other observations they feel competent to make on the basis of the documentation, and indicate any issues they recommend the visiting group to explore during the visit. These initial reports by the consultant members are available to the visiting group prior to the visit.
- ii. The Committee meets (by teleconference if possible) to discuss the findings of each Committee member. If considered necessary, a visit to the school is confirmed and a visiting Group is selected.
- iii. Following the visit, the visiting Group documents the outcomes of the visit and forward these to the Committee.
- iv. All reports as they then stand are consolidated by the Committee into a draft final report, which is forwarded to the university for its response. On receipt of the university's response, the Committee and any consultant members finalise the report and recommendations, which are then forwarded to the ISA Council.

9. FORM OF ACCREDITATION REPORT

The Committee's report shall take the following form:

GENERAL INFORMATION

- i. Name of the University seeking accreditation.
- ii. Name of school or responsible entity within the university.
- iii. Date of submission of request for accreditation. Date of receipt of initial documentation.
- iv. For each program evaluated:
 - Title of program.
 - Degree/s awarded on completion, and abbreviation/s.
 - University/ies awarding the degree/s, if different from above.
 - Any sub-sets or variants of the program treated separately for accreditation purposes.
 - Level of accreditation sought.
 - Year of first introduction of the program, and years of major revisions.
 - Year of last accreditation assessment, and outcome.
- v. Committee membership: chair, members, consultant members, visiting group.

ACCOUNT OF PROCEEDINGS

- i. Date/s of Committee meetings, visits to the university, and brief account of proceedings: meetings with staff, students, stakeholders; facilities and materials inspected; points of particular note in the process.

ACTION SINCE LAST ACCREDITATION

- i. Where the previous evaluation of a program or programs identified any deficiencies and/or proposed any developmental action, comment on the action taken by the university and its results.

EVALUATION AGAINST CRITERIA

The Committee's *final evaluation of compliance with the criteria*, after taking account of the university's response to the draft report, under the following headings and in relation to all modes in which each program is offered:

- i. **Program objectives**
 - The objectives are well stated, likely to be meaningful to students and employers, and consistent with the mission of the university and school and with the expectations of a professional degree.
 - The program title properly reflects its objectives and is professionally appropriate.
- iii. **Program structure**
 - The program structure is consistent with: *Duration and Scale Criteria* and *Program Structure and Content Criteria*.
 - The program structure at introductory level is compatible with students' backgrounds at entry.
 - Descriptions of subjects and other elements are adequate, for all modes/pathways.
 - Arrangements for exposure to professional practice meet: *Exposure to Professional Practice Criterion*.
 - For double-degree programs, the surveying component meets: *Double Degrees Criterion* and the interface between surveying and the other discipline/s involved is appropriate.
- iv. **Educational process**
 - Curriculum design is effective in addressing each of the generic graduate attributes: *Committee to evaluate in relation to each attribute*.
 - Curriculum design is effective in addressing each of the specific competency criteria: *Committee to evaluate in relation to each attribute*.
 - Curriculum justifies any specialist title carried by the program and is effective in imparting appropriate attributes and specialist knowledge.
 - The learning outcomes in relation to professional practice are appropriate and the curriculum provides adequate means for students to attain these outcomes.

- Arrangements for program delivery and student support, including staffing arrangements, are adequate: *Committee to evaluate in relation to each mode/pathway.*
- v. Assessment**
- The assessment processes effectively measure the outcomes of the program as a whole and their relationship to the stated objectives and the generic, specific and specialist attributes.
 - The assessment processes adequately ensure that each individual graduate has met the degree requirements: *Committee to evaluate in relation to each mode/pathway.*
 - The criteria and process for the award of honours are appropriate.
- vi. Educational culture**
- There is clear evidence of a forward-looking, proactive educational culture and awareness of current developments in education, consistent with: *Educational Culture Criterion.*
 - Staff are active in role-modelling the generic attributes of a professional practitioner.
 - There are active programs in place to promote these objectives and also those of gender equity, internationalisation, and community interaction.
- vi. Quality systems**
- Processes for program planning and curriculum development and review are appropriate, and involve all relevant staff.
 - For a new program, the rationale for its introduction, and evidence of demand and of availability of resources, are adequate.
 - There is clear evidence that the results of assessment of student performance and learning outcomes are being applied to the review and ongoing improvement of program effectiveness.
 - There are effective processes for securing feedback from all program stakeholders (refer Quality Systems and Processes Criterion) and applying it to the review and ongoing validation and improvement of program objectives, curriculum, assessment, and quality of teaching and learning.
 - There are effective advisory mechanisms for consulting and involving practising professionals and leading employers of graduates in forward planning and quality management.
 - There are programs in place, or under active development, for benchmarking program standards against those of other universities, nationally and/or internationally.
 - Graduate employment data and alumni and employer feedback are available and give confidence in the program, the school and the capabilities of its graduates.
- vii. Program administration and statistics**
- Admission policies are appropriate and consistent for students from all backgrounds.
 - Student numbers and trends are adequate for a viable program.
 - Arrangements for progression, graduation and the award of honours appear appropriate.
- viii. Operating environment**
- Organisational arrangements in the university and the school are consistent with: *Identifiable Structure Criterion.*
 - Evidence of long-term commitment and forward planning are consistent with: *Strategic Statement Criterion.*
- viii. The staff**
- The qualifications, experience, and professional standing of the staff are appropriate.
 - The overall staff profile demonstrates a capability to meet the objectives of the program and the school, and appears adequately distributed in relation to program/teaching commitments.
 - The staff are competent to cover all curriculum areas in relation to the program/s to be accredited, including those relating to any specialist title.
 - The staff profile demonstrates satisfactory gender balance; alternatively, active measures are being taken to improve gender balance.
 - There are adequate arrangements in place to assure the quality and capability of staff or providers outside the school who have major responsibilities in relation to the program.

- Appropriate use is made of sessional staff who provide complementary expertise to that available within the school.
- Staff are undertaking an appropriate range of professional and educational development programs.

ix. Resources and facilities

- Adequate resources are available to meet the program objectives. Future trends, or steps being taken to address them, indicate continuing viability.
- Adequate facilities and infrastructure are available to students and staff.

Compliance under each heading is evaluated as:

1. Substantial or full compliance. Any shortcomings to be noted; innovations and examples of good practice to be commended.
2. Acceptable level of compliance: shortcomings to be identified and developmental action recommended.
3. Significant deficiencies to be remedied before accreditation can be recommended.
4. Total or substantial failure to comply with criteria.

The Committee provides comments under each heading on identified shortcomings, examples of innovation and good practice, and directions recommended for future development.

In assessing compliance, the Committee will have regard to the standard of other schools and to the benchmark standards for Australian universities.²

DRAFT REPORT AND UNIVERSITY RESPONSE

This section provides an indication of how the draft report differed from this final report, the response provided by the university and the amendments made to the draft report in consequence. Where significant issues remain unresolved, the university's response is included in full.

RECOMMENDATIONS AND COMMENTS

Recommendations for accreditation action in accordance with Section 5.

GENERAL COMMENTS

² Currently, suitable benchmark criteria are contained in McKinnon, Walker, Davis (2000).

TABLE 1: ADMISSIONS AND COMMENCING ENROLMENTS

Please complete this table for each particular program to be accredited.

In each column, except entry cut-off score, please show also the overall total for all undergraduate professional surveying programs offered.

Please complete for three years: the current year, (C), last year (-1), and two years ago (-2).

Admission and enrolment data	Commonwealth/HECS-funded students																		Australian Fee-paying students			International Fee-payment students			
	Entry highest score			Entry median score			Entry cut-off score			Commencing enrolments									Commencing enrolments			Commencing enrolments			
	n/100			n/100			n/100			total headcount			% female headcount			% school-leavers headcount			headcount			headcount			
	Year	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C
Programs to be accredited:																									
Program 1:																									
Program 2:																									
Program 3:																									
etc																									
Total -																									

TABLE 2: OVERALL ENROLMENTS

Please complete this table for each particular program to be accredited.

In each column, please show also the overall total for all undergraduate professional surveying programs offered.

Please complete for three years: the current year, (C), last year (-1), and two years ago (-2).

Figures should be total of all enrolments including Commonwealth/HECS-funded, Australian and International fee-paying.

Enrolment data	Commencing enrolments			Continuing enrolments			Total enrolments			Total enrolments			% of total who are attending part-time			% of total who are International fee-paying			Degree completions			% completions with Honours			
	EFTSU			EFTSU			EFTSU			headcount			% headcount			% headcount			headcount			% headcount			
Year:	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	-2	-1	C	
Programs to be accredited:																									
Program 1:																									
Program 2:																									
Program 3:																									
etc																									
Total-																									

TABLE 3: STAFF PROFILE

Please complete this table for:.

Regular members of staff: i.e. full-time and part-time staff who are tenured or on contract, but not casual or sessional staff;

Staff associated with teaching and with teaching-and-research, but not research-only staff;

Each major sub-unit of the surveying school, plus totals for the school overall.

Please show gender distribution: F = female, M = Male, T = total.

Staff numbers	Academic Staff																		Professional and technical staff			Administrative staff			Approx teaching load	
	Level A			Level B			Level C			Level D			Level E			Total acad			F	M	T	F	M	T	EFTSU	
	F	M	T	F	M	T	F	M	T	F	M	T	F	M	T	F	M	T	F	M	T	F	M	T	EFTSU	
Major sub-units (e.g. departments)																										
Sub-unit 1:																										
Sub-unit 2:																										
Sub-unit 3:																										
etc																										
Central Staff																										
Total for the surveying school overall																										

TABLE 4: ACADEMIC STAFF COMMITMENTS

*Please complete this table for regular members of academic staff associated with teaching and teaching-and-research only:
i.e. full-time and fractional or part-time staff who are tenured or on contract, but not casual or sessional staff.*

As an average for all staff at each level, please indicate the approximate percentage of time devoted to each activity.

Staff activity	Level A	Level B	Level C	Level D	Level E
Undergraduate teaching and project supervision					
Teaching in postgraduate coursework and CPD programs					
Student consultation and counselling					
Research and research supervision					
Consultancy and other external professional activity					
Educational development and other internal developmental programs					
Administration and management					
Other (please indicate in a brief note)					
	100%	100%	100%	100%	100%