Why does ACS undertake accreditations?

The *Australian Computer Society (ACS)* is the recognised accrediting body for information and communications technology (ICT) courses in Australia.

We conduct a process of accrediting tertiary courses for *professional level* membership of the Society.

The ACS accreditation service is *designed to assist educational institutions* who are providing students the appropriate preparation for professional practice in ICT.
Threats
Toughening up

- AQF
- ACS
- TEQSA
Complex computing problems
(Seoul Accord)

- involve wide-ranging or conflicting issues
- no obvious solutions; require conceptual thinking and innovative analysis
- require in-depth computing &/or domain knowledge and an analytical approach based on well-founded principles
- involve infrequently-encountered issues
- outside problems encompassed by standard practice
- involve diverse stakeholders with widely varying needs
- have significant consequences in a range of contexts
- are high-level problems including many sub-problems
- have requirements that are hard to identify
The *ten graduate attributes* of the Seoul Accord are:

1. Academic Education
2. Solving Complex Computing Problems
3. Problem Analysis
4. Design/Development of Solutions
5. Modern Tool Usage
6. Individual and Team Work
7. Communication
8. Computing Professionalism and Society
9. Ethics
10. Life-Long Learning
Back to TEQSA

- Seeking cooperation with professional societies
- Risk driven
- Not process oriented
- Largely outcome oriented
- Accreditation as evidence
A few accreditation issues

- Panel membership
- Declined accreditations
- Global outcome specifications
  - Body of Knowledge
  - Local Expertise
  - Academic Judgement
Some more global issues

• Changing attendance patterns
• A new federal government
• Strong criticisms of current practice
  • Meyer: Australian Universities – a portrait of decline
  • Hil: Whackademia
  • Davidson: If we profs don’t reform higher ed we’ll be re-formed (and we won’t like it)
Discussion...

Contact: michael.johnson@acsmail.net.au

Leaving today at 3:30 (sorry)
Some issues (?) in three lines

• Panel membership
• Declined accreditations
• Global outcome specifications
  • Body of Knowledge
  • Expertise
  • Academic Judgement
The accreditation process evaluates both the programs and the educational institution itself, ensuring that *quality assurance processes* are in place to cover physical resources, library resources, technical support, research activity and educational technology.

Accreditation panels evaluate the adequacy of staff resources and the ability of the ICT industry and practitioners to have ongoing input to *course design and delivery*.

Accreditation is usually *undertaken every five years* by a panel of academics and practitioners, and a report is made available to the ACS Accreditation Committee with a recommendation.
Key ICT references for accreditation

ACS accreditation utilises three main devices to benchmark program development:

- *ICT Profession Core Body of Knowledge (CBOK)*
- *Skills Framework for the Information Age (SFIA)*
- *Seoul Accord Graduate Attributes*
ICT Profession Core Body of Knowledge (CBOK)

The ACS *does not* present a detailed syllabus of study for educational institutions to follow.

It is expected that there is a requirement for *professionalism and ethical behaviour* to be taught.
A **CBOK** can be a syllabus or a list of things to study.

However, the document from the ACS is presented as a **framework** on which to base both a breadth and depth of ICT study.

The CBOK ‘list’ is the **breadth** of study expectation that should pertain to a program of study with the requirement that **depth** will be achieved in a particular specialist area of ICT with advanced units, including a **Capstone Unit** such as a project, in the latter part of the program.
Skills Framework for the Information Age (SFIA)

SFIA is a *competency skills framework* for aligning a workforce to deliver the needs of an organisation.

It is the recognised *international standard* for ICT talent management.

Using SFIA gives individuals and companies a *common language* to describe the capabilities required to deliver business outcomes – how to identify skills and knowledge to get the job done.

It is also the *basis* for the professional grades, accreditation and programs of the ACS.
Seoul Accord Graduate Attributes

ACS bachelor degree accreditation is also subject to the Seoul Accord, an agreement between international accrediting bodies to recognise the processes and results of accreditation.

Current signatories are the following organisations: ACS, BCS (United Kingdom), CIPS (Canada), JABEE (Japan), ABEEK (Korea), ABET (USA), HKIE (Hong Kong) and IEET (Taiwan).
The ten graduate attributes of the Seoul Accord to be referenced are:

1. Academic Education
2. Solving Complex Computing Problems
3. Problem Analysis
4. Design/Development of Solutions
5. Modern Tool Usage
6. Individual and Team Work
7. Communication
8. Computing Professionalism and Society
9. Ethics
10. Life-Long Learning
In addition, the ACS supports the specific institution-based graduate attributes that may be in place, alongside other curriculum references such as:

- Institute of Electrical and Electronics Engineer’s (IEEE) Software Engineering Body of Knowledge (SWEBOK) and Engineers Australia competency standards for Software Engineering programs
- Association of Computer Machinery (ACM) and IEEE Computer Science curriculum
- ACM and Association for Information Systems (AIS) curriculum guidance for Information Systems programs
- Australian Qualifications Framework (AQF) to ensure regulatory compliance,
- Other educational devices such as Bloom’s Taxonomy
Accreditation process

1. Request for accreditation
2. Submit initial documentation (10-12 weeks prior to the visit)
3. Accreditation visit
4. Draft visit report issued (6-8 weeks after the visit)
5. Final report & recommendations issued to the university
6. Accreditation approved
1. Request for accreditation

If the program has *already been accredited* and is due for re-accreditation in the following year:

- The ACS will issue a courtesy reminder to the awarding Institution in October that re-accreditation is due in the next year, in order that the Institution can make the necessary preparations.

For *new programs*, major *amendments to existing programs* and the introduction of *alternative implementations* of existing programs, such as at regional or offshore campuses:

- The Institution is required to advise the ACS and request accreditation. 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.
2. Submitting the initial documentation

Documentation should be received by the ACS 10-12 weeks prior to the scheduled visit date.

*Initial documentation* consists of:

- Completed copy of Form 1: Summary of Application
- For each program that is to be accredited, completed copies of the following forms are required:
  - Form 2: Program Outline
  - Form 2A: Program Structure (Recommended Format)
  - Form 3: Mapping to CBOK (Recommended Format)
The initial documentation should be *accompanied by*:

- The Institution’s 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 ICT programs and/or website references to these items.

Applications must be submitted in *both hard copy* (one copy) and *electronic format*. 
All documentation should be sent to the **Accreditation Administration Manager** at the ACS:

**Hard copies:**
Australian Computer Society
Accreditation Administration Manager
PO Box 534
Queen Victoria Building
Sydney NSW 1230
Australia

**Electronic copies:**
accreditation@acs.org.au
3. Accreditation visit

The *visit schedule* will be finalised by the Accreditation Manager in negotiation with the Institution.

The Institution will be asked to *append* to the final visit schedule:

- The venue details for each session; and
- A listing of the names, titles and affiliations of members of the senior leadership team, the academic staff and the external constituents who will be attending sessions with the Panel.
Sample visit schedule

Day 1 of Visit

• 0830: Briefing session for new Panel members
• 0900: Welcome to Institution by host and liaison staff
• 0910: Panel discussion session
• 1230: Lunch
• 1400: Meet with Senior Institution and Senior School staff
• 1445: Meeting with senior School staff
• 1530: Panel members convene and meet in private
• 1800: Panel discussion with Advisory Board Members and graduates
• 1930: Working Dinner

Day 2 of Visit

• 0830: Panel members convene and meet in private
• 0945: Morning tea break
• 1000: Meet with teaching staff
• 1100: Meet with students
• 1200: Lunch
• 1300: Visit to computer laboratories and meet with support staff
• 1345: Panel meet to determine recommendation
• 1530: Meet with senior School staff to report recommendations to ACS Accreditation Committee
The **ANZAB Document 1: Administrative Guidelines** contain further information about:

- Main venue
- Opening and concluding sessions with the senior leadership team
- Meetings with program leaders
- Meetings with academic staff
- Laboratory and teaching facilities inspection
- Documentation and student work
- Meeting with students
- Meeting with Vice-Chancellor/CEO or representative
- General availability of leadership team members
- Final consultation
4. Draft visit report issued

Within 6-8 weeks after the visit, a report is drafted by the Accreditation Visit Manager, together with members of the Panel and the Panel Chair.

The **draft report** will be based on:

- Evaluation of the initial documentation
- Panel’s findings during the visit
- Any additional documentation provided by the School and received by the Panel as part of any requested post-visit follow up

The report will contain the **Panel’s recommendations** to the Accreditation Committee and specific recommendations to the Institution.
The Institution is given two weeks from the date of receipt of the draft report to provide a written response if it so wishes.

The response is normally limited to:

- Correction of any errors of fact
- Any matters to which a response is specifically requested
- Comment briefly on any issue which the Institution feels the Panel may have seriously misunderstood.

The response will be noted and, if necessary, incorporated within the final report and recommendations.
5. Final report & recommendations issued

The report and recommendations will be forwarded to the Accreditation Committee. For each program evaluated, the Committee may decide:

- To accord or renew full accreditation for a five year period without conditions
- To accord or renew full accreditation for five years, subject to conditions
- To accord or renew full accreditation for a period of less than five years and to require a follow up submission
- For a new program, or a program that has been substantially revised, to accord provisional accreditation with a further review of the program
- To suspend accreditation for a limited term
- To decline or withdraw accreditation.

In the last case, a further application will not normally be considered within two years.
The Committee’s decision, together with the final report, is then sent to the ACS for *ratification* and, once ratified, is communicated to the Institution.

The ACS *reserves the right* to reject the Committee’s decisions.
6. Conditions of accreditation

These accreditations are valid for students enrolling to the *end of the year specified* above.

The date specified is *five academic years* from the date of the visit.

Unless otherwise stated, this accreditation applies only to the above courses conducted at the *above named campuses and locations*.

• Where the course is offered elsewhere offshore, in other locations within Australia, by distance learning, by joint ventures or franchises, or any other variation, it will need to be the subject of a separate accreditation process to ensure that the Society’s requirements for accreditation, including resourcing are met under those arrangements.
The course is accredited as *structured* and with the **content at the date of accreditation** and on the basis of the information provided by the institution which must be current at the date of accreditation.

- The structure is as outlined in the attached report of the meeting.
- While the Society expects and accepts some variation over time (as the course develops), where that change requires approval by University or faculty/school regulation, or otherwise results in a major structural change to the course, the details of such changes must be notified to the Society immediately.
- The Society will then consider the impact of the changes on the accreditation.
The course is accredited *as a whole course* and the accreditation *may not* extend to when undertaken by students who are granted advanced standing, credit(s) or exemption(s) by the institution.

- A course undertaken by a student granted advanced standing, credit(s) or exemption(s) will only be regarded as the accredited course where, in the opinion of the Society, credit(s) or exemption(s) are given for equivalent subjects (particularly in terms of Information Technology content) taken at an equivalent educational level in an institution of equivalent academic standing.
Conclusions
Summary process in three lines

- Application
- Triangulation
- Documentation
Some issues (?) in three lines

- Panel membership
- Declined accreditations
- Global outcome specifications
  - Body of Knowledge
  - Expertise
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