

# Accreditation

## ACDICT



# CBOK

- **The CBOK is used both to support the accreditation and certification processes. It provides:**
  - Essential ICT Knowledge required for any ICT professional. This includes ICT Professional Knowledge and ICT Problem Solving; and
  - General ICT Knowledge which provides graduates with a breadth of understanding of the ICT industry regardless of his/her ICT job role. This includes Technical Resources, Technology Building, and ICT Management.

# 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.

# ICT job role & SFIA

- **The ACS does NOT present a detailed syllabus of study for educational institutions to follow**
- **Institutions are expected to nominate one or more ICT job roles for the program**
- **Use ACS Skills white paper, QLD govt site, etc to specify key SFIA skills for each nominated job role.**

# Seoul Accord

- 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).
- ***Provisional signatories: New Zealand, Philippines, Ireland***

# Seoul Accord

- **ACS undergraduate accreditations in Australia automatically covered by Seoul Accord**
  - Out-of-jurisdiction accreditations need to be separately listed with Seoul Accord at biannual meeting
  - Currently only list overseas programs of Australian-based institutions

# Seoul Accord

- **Postgraduate programs NOT currently covered by the Seoul Accord**
  - Working party formed at recent Kuala Lumpur workshop to look at extending the Seoul; Accord to Masters programs

# How ACS satisfies the Seoul Accord graduate attributes

- **Institutions do NOT have to show how they satisfy the Seoul Accord graduate attributes**
- **Programs that satisfy the ACS accreditation criteria are accepted as satisfying the Seoul Accord**

# Professional level accreditation



# Professional level accreditation

- **Programs that prepare students for initial professional practice**
- **A qualification at AQF level 7 (or above) is a basic requirement for an ACS accredited program for initial professional practice**
  - Undergraduate degrees
    - Also conversion graduate diplomas & conversion masters
- **ACS ICT Graduate Attributes**
  - Based on AQF level 7 graduate attributes
    - Specifically reference ICT
    - Include innovation & entrepreneurship

# ACS ICT graduate attributes

- Graduates will have broad and coherent knowledge and skills for ICT professional work and/or further learning in a global economy. This knowledge should extend to being innovative and entrepreneurial as appropriate to the ICT occupation they are pursuing.
- Graduates will have broad and coherent theoretical and technical knowledge with depth in one or more disciplines or areas of practice in ICT

# ACS ICT graduate attributes

- Graduates will have well-developed cognitive, technical and communication skills to select and apply methods and technologies to:
  - analyse and evaluate information to complete a range of activities in their ICT area of expertise
  - analyse, generate and transmit solutions to unpredictable and sometimes complex ICT problems
  - transmit knowledge, skills and ideas to others
- Graduates at this level will apply knowledge and skills to demonstrate autonomy, well-developed judgement and responsibility:
  - in contexts that require self-directed work and learning
  - within broad parameters to provide specialist advice and functions

# Graduate ICT job roles

- Identify ICT job role of the graduates
- SFIA skills for the intended ICT job role of the graduates
  - ACS ICT Skills White Paper - identifies the skills profiles for twenty five common ICT job roles.
  - Queensland government Chief Information Office
    - <https://www.qgcio.qld.gov.au/products/ict-workforce-capability/careers-and-programs/ict-career-streams>
- Units that support SFIA skills identified above

# CBOK



# ICT Essential knowledge areas

- ICT Professional Knowledge
- ICT Problem Solving

# Professional knowledge

- Ethics
- Professionalism
- Teamwork concepts and issues
- Interpersonal communication
- Societal issues/Legal issues/Privacy
- Understanding the ICT discipline

# ICT problem solving

- This requires knowledge of how to use modelling methods and processes to understand problems, handle abstraction and design solutions.

# General ICT knowledge areas

- Technology building
- Technology Resources
- ICT management

# Technology building

- Human factors
- Programming
- Systems development and acquisition

# Technology resources

- Hardware and software fundamentals
- Data and information management
- Networking

# ICT management

- ICT governance and organisational issues
- ICT project management
- Service management
- Security management

# Postgraduate degrees for initial professional practice

- **Non-cognate**
- **Cognate**
  - A non-cognate masters and a cognate masters with different award names are offered and are identical with the exception that the cognate masters omits four ICT foundation units in the non-cognate version, and the non-cognate version meets the professional level accreditation guidelines.
  - Non-cognate entry to the cognate masters can be achieved by the satisfactory completion of a nested award (e.g. completion of a specific graduate certificate that provides ICT foundation skills and knowledge), such that the complete pathway meets the professional level accreditation guidelines.
  - A program takes both non-cognate and cognate entry students, but cognate-entry students are given advanced standing for up to four foundation subjects on specified CBOK topics and there is a rigorous process to manage this.

# Advanced Professional level accreditation



# **Graduate attributes expected from an Advanced Professional level accredited degree**

- **Specialised knowledge and skills for ICT research, and/or professional practice and/or further learning.**
- **An advanced and integrated understanding of a complex body of knowledge in one or more disciplines or areas of practice in ICT.**

# Graduate attributes expected from an Advanced Professional level accredited degree

- **Expert, specialised cognitive and technical skills in an body of knowledge or practice to independently:**
  - analyse critically, reflect on and synthesise complex information, problems, concepts and theories in ICT;
  - research and apply established theories to a body of knowledge or practice in ICT;
  - interpret and transmit ICT knowledge, skills and ideas to specialist and non-specialist audiences.

# Graduate attributes expected from an Advanced Professional level accredited degree

- **Ability to apply ICT knowledge and skills to demonstrate autonomy, expert judgement, adaptability and responsibility as a practitioner or learner.**

# Specific program requirements

## a) Entry to the program requires:

- An undergraduate ACS accredited degree or a course accredited by a Seoul Accord signatory, or equivalent.

and

- Ideally a minimum of 2-3 years ICT experience with a minimum of 2 years as SFIA generic level 4. Where this is not the case institutions should justify how the program can still achieve the desired SFIA level 5 skill.

# Specific program requirements

- b) Program duration equivalent to at least 18 months full time study. All units should contribute to the achievement of the designated ICT job role.**
- c) The program should address at least one ICT skill at SFIA level 5 or above in a specific area related to the intended career role.**

# Specific program requirements

- d) The program should be structured so that students have a clear progression through the program to achieve the designated SFIA job role(s).**
- e) All units should be at an advanced level with all subjects using assessments that require elements of analysis, evaluation and synthesis (Levels 4, 5 and 6) of Bloom's taxonomy.**

# Specific program requirements

- f) The program should include a capstone unit in the final semester, ideally for an industry-based client, to enable the student to demonstrate application of at least one SFIA level 5 skill.**
- g) The program should provide appropriate coverage of the Professional Knowledge area of the ACS ICT Profession Core Body of Knowledge.**

**Certification**

**Pathway acceleration**



# WIL & honours

- Work integrated learning (WIL) - Where the work-based learning extends the study period beyond the normal three year program, the WIL component may be counted towards the experience requirements for ACS professional certification.
- Honours - The honours year may be counted towards the experience requirements for ACS professional certification, provided an Honours degree in ICT is awarded in an area relevant to the SFIA level 3 specialism(s) of the applicant.
- Apply to CT and/or CP certification

# Advanced Professional level accreditation program

- Completion of an Advanced Professional degree may reduce the experience requirement by up to 2 years
- Applies to CP certification