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ACS CERTIFICATION GUIDELINES 2024

Version: 4.6



Purpose

This document establishes a framework for the scheme for certifying persons as certified technologists and certified professionals. It provides the processes needed to establish, administer, and maintain the certification scheme.

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1. Authority

The Australian Computer Society (ACS) administers certification activity, including all procedures and activities intended to demonstrate the qualifications of ICT practitioners.

2. Scope

These guidelines apply to the scheme intended to provide certification for persons working as ICT practitioners.

3. Certification Scheme

3.1. Normative References

These guidelines are based on the following ISO Standard:

STD - <u>ISO/IEC 17024:2012</u>, Conformity Assessment – General requirements for bodies operating certification of persons

3.2. Certification Scheme Description

3.2.1. Description of an ICT Practitioner

ICT practitioners include (but are not restricted to) the following:

- those who are directly engaged in the usage and delivery of ICT for organisations including management and leadership – the practitioners (both professionals and technologists)
- those developing and delivering educational, learning and development products and services for practitioners - the educators
- those engaged in ICT research and development (new languages and utilities, new hardware and peripherals, fundamentally new applications, new techniques and tools for IT practitioners) including
- those in ICT supplier organisations as well as academic institutions the researchers
- those who regulate, support (including legal and commercial) and represent practitioners and their organisations effectively another set of people who collectively own ICT related knowledge assets the supporters

3.2.2. Definition of Professional

The definition of a professional given by Professions Australia stresses both the possession "of special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level" as well as the possession of a Code of Ethics (Professions Australia, 2007).

ACS' view of a professional is one who:

• Possesses an underlying core body of specialised, in-depth, knowledge;



- Adheres to a code of ethics;
- Possesses the capacity for independent action, operating with a high level of responsibility and autonomy; and
- Engages in continuing professional development, enhancing relevant technical and professional skills.

3.2.3. Professional ICT standards

The ACS established a Professional ICT standard for the certification scheme. The key features of the ACS Professional ICT standard include the following:

- The standard is vendor neutral and independent
- The Skills Framework for the Information Age (SFIA) is the reference document for establishing the minimum standard of competency.
- Maintenance of competency is through continuing professional development.
- The standard is supported by a disciplinary code with a process for public complaint and sanctions.

3.2.4. Roles and Responsibilities – Certified Technologist (CT)

A CT may be someone who has chosen a career as a technologist or is an early career professional without the necessary experience and or/ qualifications with which to meet the professional category of certification.

A CT focuses mainly on practical applications – they may be 'expert' in installing, testing and monitoring particular systems or applications of computing, in the operation and maintenance of a particular system or application and even in supervising people (including trainees) in these activities. In some cases they may even be involved in selecting systems and applications to meet required specifications. It is unlikely that they will be involved in developing the specifications except in small, less complex systems and applications.

A CT would be familiar with standards and codes of practice and become adept in their interpretation and application in a variety of situations. In some cases a CT will have a greater knowledge on detailed aspects of a system component or application than the Certified Professional (CP). Often this detailed knowledge will be attained through a vendor certification in relation to the system, system component or application.

CTs will have a basic grounding in the fundamentals underlining ICT supplemented by experience in a particular system or application or a certification of knowledge and competencies in a particular system, component or application supplemented with some training in standards, codes of practice and the nature of systems (especially principles and analysis). Training and education is more likely to be competency-based, competencies that will allow them to implement, operate and maintain systems, components and applications under the control of standards and knowledge available in the public domain. Some may also have basic people management skills that allow them to lead or manage teams in these tasks.

3.2.5. Roles and Responsibilities – Certified Practitioner (CP)



A CP is often required to deliver high-quality solutions to clients (internal or external) in response to varying business requirements. They utilise a wide variety of product, technology, industry, architectural, and business skills. A CP utilises IT to add value to the organisation.

A CP will often use tools to manage, analyse, design, and implement solutions. CPs have an indepth understanding of the technology, products, offerings, and services within their specialist area.

Table 1: Criteria for CT and CP Eligibility

3.2.6. Criteria for Eligibility

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Certified Technologist	Certified Professional			
They can operate effectively at SFIAlevel 3 generic capability	 They can operate effectively at SFIA level 5 generic capability 			
 They can demonstrate in-depth competence in at least one specialism at SFIA level 3 	 They can demonstrate in-depth competence in at least one specialism at SFIA level 5 			
They have demonstrated a breadthof knowledge of ICT	 They have demonstrated a breadthof knowledge of ICT 			
 They have an understanding of and commitment to the ACS codes and standards 	 They have an understanding of and commitment to the ACS codes and standards 			
• They are committed to undertaking 20 hours each yearof CPD to maintain certification. This can include studies towards CP certification.	 They are committed to undertaking 30 hours of CPD each year, to maintain certification. 			
 have been actively practising in the profession for the required number of years in accordance with 4.2.7 and provide two referees who can attest to their professional activity. In the case of a specialism certification the practice must have been in the specialism. 	 have been actively practising in the profession required number of years in accordance with 4.2.8 and provide two referees who can attest to their professional activity. In the case of a specialism certification the practice must have been in the specialism. 			



An effective CT typically possesses and exhibits the following competencies:

	Table 2: Certified Technologist Generic Competencies
Autonomy	 Works under general direction. Receives specific direction, accepts guidance and has work reviewed at agreed milestones. Uses discretion in identifying and responding to complex issues related to own assignments. Determines when issues should be escalated to a higher level. Plans and monitors own work (and that of others where applicable) competently within limited deadlines.
Influence	 Interacts with and influences colleagues. May oversee others or make decisions which impact routine work assigned to individuals or stages of projects. Has working level contact with customers, suppliers and partners. Understands and collaborates on the analysis of user/customer needs and represents this in their work. Contributes fully to the work of teams by appreciating how own role relates to other roles.
Complexity	 Performs a range of work, sometimes complex and non-routine, in a variety of environments. Applies a methodical approach to routine and moderately complex issue definition and resolution. Applies and contributes to creative thinking or finds new ways to complete tasks.
Business Skills	 Demonstrates effective oral and written communication skills when engaging on issues with colleagues, users/customers, suppliers and partners. Understands and effectively applies appropriate methods, tools, applications and processes. Demonstrates judgement and a systematic approach to work. Effectively applies digital skills and explores these capabilities for their role. Learning and professional development - takes the initiative to develop own knowledge and skills by identifying and negotiating appropriate development opportunities. Security, privacy and ethics - demonstrates appropriate working practices and knowledge in non-routine work. Appreciates how own role and others support appropriate working practices.
Knowledge	 Has sound generic, domain and specialist knowledge necessary to perform effectively in the organisation typically gained from recognised bodies of knowledge and organisational information. Has an appreciation of the wider business context. Demonstrates effective application and the ability to impart knowledge found in industry bodies of knowledge. Absorbs new information and applies it effectively.



An effective CP typically possesses and exhibits the following competencies:

	Table 3: Certified Professional GenericCompetencies
Autonomy	Works under broad direction.
	Work is often self-initiated.
	 Is fully responsible for meeting allocated technical and/or group objectives. Analyses, designs, plans, executes, and evaluates work to time, cost and quality targets.
	 Establishes milestones and has a significant role in the assignment of tasks and/or responsibilities.
Influence	 Influences organisation, customers, suppliers, partners and peers on the contribution of own specialism.
	 Makes decisions which impact the success of assigned work, i.e. results, deadlines and budget.
	 Has significant influence over the allocation and management of resources appropriate to given assignments.
	 Leads on user/customer and group collaboration throughout all stages of work.
	 Ensures users' needs are met consistently through each work stage. Builds appropriate and effective business relationships across the organisation and with customers, suppliers and partners.
	 Creates and supports collaborative ways of working across group/area of responsibility.
	Facilitates collaboration between stakeholders who have diverse objectives.
Complexity	 Implements and executes policies aligned to strategic plans.
	 Performs an extensive range and variety of complex technical and/or professional work activities.
	 Undertakes work which requires the application of fundamental principles in a wide and often unpredictable range of contexts.
	 Engages and coordinates with subject matter experts to resolve complex issues as they relate to customer/organisational requirements.
	 Understands the relationships between own specialism and customer/organisational requirements.



Business	Demonstrates leadership in operational management.
Skills	 Analyses requirements and advises on scope and options for continual operational improvement.
	Assesses and evaluates risk.
	 Takes all requirements into account when making proposals.
	Shares own knowledge and experience and encourages learning and growth.
	 Advises on available standards, methods, tools, applications and processes relevant to group specialism(s) and can make appropriate choices from alternatives.
	 Understands and evaluates the organisational impact of new technologies and digital services.
	 Creatively applies innovative thinking and design practices in identifying solutions that will deliver value for the benefit of the customer/stakeholder.
	 Clearly demonstrates impactful communication skills (oral, written and presentation) in both formal and informal settings, articulating complex ideas to broad audiences.
	 Learning and professional development — takes initiative to advance own skills and identify and manage development opportunities in area of responsibility.
	 Security, privacy, and ethics — proactively contributes to the implementation of appropriate working practices and culture.
Knowledge	 Is fully familiar with recognised industry bodies of knowledge both generic and specific, and knowledge of the business, suppliers, partners, competitors, and clients.
	• Develops a wider breadth of knowledge across the industry or business.
	Applies knowledge to help to define the standards which others will apply



3.2.7. Normal pathways to CT

There are several normal pathways to becoming a CT.

	Experience (years) - total	SFIA experie nce SFIA level 3 (years)	Required to demonstratein- depth competencein at least one specialism at SFIA level 3	Required to demonstrate knowledge ofICT	Interpersonal skills
ICT degree – normal & accredited	1	1	Y	N	Y
ICT degree – normal & not accredited	2	2	Y	Y	Y
Non-ICT degree	4	3	Y	Y	Y
ICT diploma, advanced diploma AQF 5/6	3	2	Y	Y	Y
Vendor certification	4+ (depending on particular vendor certification)	3	Y	Y	Y
ICT AQF level 4 program	5	3	Y	Y	Y
Experience only	7	3	Y	Y	Y
Mutual recognition					English requirement for candidates from non-English speaking countries

Pathway Acceleration

- 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.



3.2.8. Normal Pathways to CP

There are several normal pathways to becoming a CP.

	Experience (years)	SFIA experience (years)	Required to demonstratein- depth competencein at least one specialism at SFIA level 5	Required to demonstrate knowledge of ICT	
ICT degree – normal & accredited	3	2 years level 5 (plus 1 year SFIA 4)	Y	Ν	Y
ICT degree – normal & not accredited	4	2 years level 5 (plus 2 years SFIA 4)	Y	Y	Y
Non-ICT degree	6	2 years level 5 (plus 2 years SFIA 4)	Y	Y	Y
ICT diploma, advanced diploma	5	2 years level 5 (plus 2 years SFIA 4)	Y	Y	Y
Vendor certification	7+ (depending on particular vendor certification)	2 years level 5 (plus 2 years SFIA 4)	Y	Y	Y
Experie nceonly	10	2 years level 5 (plus 2 years SFIA 4)	Y	Y	Y
Senior manager	4	4 year level 6	Demonstratein- depth competence in at least one specialism at SFIA level 6	N	Y
Academic	Employed in ICT school or research facility and holds eithera Masters by research or a PhD	2 year level 6	Demonstratein- depth competence in at least one specialism at SFIA level 6	N	Y
Mutual recognition					English requirementfor candidates from non- English speaking countries



Pathway Acceleration

For all pathways with the exception of Senior Manager and Academic:

- Completion of an Advanced Professional degree may reduce the experience requirement required for certification.
- 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 arearelevant to the SFIA level 5 specialism(s) of the applicant.

3.2.9. Membership post nominal

In accordance with National Regulations (NR 2.5.5 and 2.5.6), candidates who meet the requirements of these guidelines and are successful in their certification application are entitled to add the designation of 'Certified Technologist' or 'Certified Professional', or the respective abbreviation of 'CT' or 'CP', after their membership post-nominal.

3.2.10. CP Directory

The ACS may maintain an online directory of all current CP members on its website (www.acs.org.au) on an opt-in basis (CP Directory).

Any information related to a certification award may only be made public in the CP Directory once the ACS has notified the candidate in writing that they have been successfully awarded CP certification.

3.3. Continuing Professional Development (CPD)

A CT Member must:

- attain an annual minimum of twenty (20) CPD hours.
- be able to demonstrate that they have undertaken the minimum CPD hours upon request by the ACS.
- undertake any directed professional development as required.

A CP Member must:

- attain an annual minimum of thirty (3) CPD hours.
- be able to demonstrate that they have undertaken the minimum CPD hours upon request by the ACS.
- undertake any directed professional development as required.

CPD activities must be structured in that they have a clear set of objectives and a logical framework – they can include lectures, seminars, formal education, discussion groups and special interest groups, writing and delivering papers and conducting research.

As part of the ACS commitment to service and values in the profession, CP members are encouraged to contribute to voluntary service in the area of their expertise.

We recommend adopting a structured approach and planning your development to ensure you demonstrate your continuing commitment to your profession, and to develop the good practice of



regularly reviewing your needs and selecting relevant learning activities to help you fulfill them. As part of this, an appropriate recording system will help you to track your activities and review progress.

The ACS expects its members to be able to demonstrate, if requested, their commitment to CPD. Written evidence will be required at re-certification. At other times members may be surveyed to establish whether the ACS policies and support services for professional development are useful and effective.

3.4. Monitoring CPD compliance with requirements

The ACS may audit CPD activities of certified members on a random sampling basis in accordance with the ACS' compliance audit framework, as amended from time to time.

3.5. Sanctions for non-compliance

Certificants who do not comply with the CPD requirements may be subject to sanctions at the discretion of ACS, which may include revocation of their certification.

Any attempts to misrepresent a CPD activity may be regarded as a breach of the ACS codes and standards and be subject to disciplinary action.

The Disciplinary Committee may revoke the certification of any member following a proper enquiry under the ACS Rules and the ACS National Regulations.

3.6. Appeals

Certificants who have had their certification revoked due to non-compliance with CPD requirements may appeal such revocation by submitting a written application to ACS. This request must be received no later than 60 days after notice of revocation and should include a detailed explanation for the appeal.

Certificants who have had their certification revoked under a disciplinary proceeding by the Disciplinary Panel may only appeal in accordance with the appeal provisions found in the ACS Rules and the ACS National Regulations.

3.7. Confidentiality and disclosure

3.7.1. Confidentiality

All information relating to a candidate will be held confidential to the ACS during the certification process; that is, prior to the award of certification. This includes information related to the application form (online or paper based).

The ACS regards all information contained in a candidate's certification application as confidential information and shall not disclose in any publicly available document or to any third party by the ACS.

For clarity, the above applies irrespective of the outcome of the certification application.

3.7.2. Disclosure of Information

The ACS may disclose information relating to a member's certification application or award status in accordance with the ACS Privacy Policy, a copy of which can be found on the ACS website (www.acs.org.au).



4. Definitions and Abbreviations

For the purposes of this document, the terms and definitions given in ISO/IEC 17024:2003 and the following apply:

• body of knowledge

A collection of knowledge items generally agreed to be essential to understanding a particular subject area. A body of knowledge is particularly useful when it is collected, explained, and/or organized by a guidance document. Such a document can be used as a basis for examination or comparison.

• cognitive level

Qualitative assessment of an individual's familiarity with a given topic.

• CP

An ACS member who has been awarded the certification of Certified Professional.

• CPD

Continuing Professional Development undertaken by ACS members.

• CT

An ACS member who has been awarded the certification of Certified Technologist.

• qualification body

Entity issuing certificates of qualification under Sections 1 to 6 of this document.

stakeholder

Individual or organization actively involved in a software project or whose interests may be positively or negatively affected as a result of project execution or completion.

Refer to the Glossary and Definitions located on the ACS website (www.acs.org.au) for any further definitions and abbreviations.

5. References

B. Bloom, ed. Taxonomy of Educational Objectives: Classification of Educational Goals, Mackay, 1956.

ISO/IEC 17024:2003, Conformity Assessment – General requirements for bodies operating certification of persons.

SFIA (2011) Skills Framework for the Information Age Foundation, 8.0, SFIA Foundation, United Kingdom. URL: <u>https://sfia-online.org</u>

6. Appendices

Appendix A -Skills Framework for the Information Age (SFIA)



In developing the ACS Certification Scheme, SFIA is used as an underlying structure to help with the organization of the competence descriptions and as a resource to help in their validation. It is recommended to base competence descriptions neither on jobs (or job titles) nor on technology (software environments), as stability of profiles is of great importance.

The specifics of technology may form part of the profile description but should not influence the structure of the ACS Framework. These descriptions provide information as to what is required to be competent in a role. Levels should be attributed to the stated performance expectations.

Table 1: The SFIA (Skills Framework for the Information Age) Framework

The **Skills Framework for the Information Age (SFIA)** provides a common reference model for the identification of the skills needed to develop effective Information Systems (IS) making use of Information Communications Technologies (ICT). It is a simple and logical two- dimensional framework consisting of areas of work on one axis and levels of responsibility on the other.

It uses a common language and a sensible, logical structure that can be adapted to the training and development needs of a very wide range of businesses – or simply used 'off the shelf'. SFIA enables employers of IT professionals to carry out a range of HR activities against a common framework of reference - including skill audit, planning future skill requirements, development Programs, standardisation of job titles and functions, and resource allocation.

It is easily accessible to:

- ICT practitioners and users
- employers
- education and training providers; and
- government

The framework provides a clear model for describing what ICT practitioners and users do. It is constructed as a two-dimensional matrix. For a full scale version of the SFIA Framework Chart, please visit: https://sfia-online.org

Skills: One axis divides the whole of ICT into 'skills'. Skills are grouped for convenience into subcategories or 'business roles'. Subcategories are grouped into six categories or work areas - strategy & planning, management & administration, development and implementation, service delivery, sales & marketing, and use.

Descriptors: The matrix shows the complete set of skills used by ICT practitioners and users.

Levels: The other axis defines the level of responsibility and accountability exercised by ICT practitioners and users. Each of seven levels - from new entrant to strategist level - is defined in terms of autonomy, influence, complexity and business skills.

For each skill at each level, 'descriptors' provide examples of typical tasks undertaken. A typical task for systems design at level 5 is 'reviews others' system design to ensure selection of appropriate technology, efficient use of resources, and integration of multiple systems and technology.'

The matrix is not fully populated, as most roles do not require people at every level of responsibility.

Skills: At the heart of the Framework are a set of skills which together aim to describe all the abilities that are needed to deliver and exploit effective information systems.

https://sfia-online.org



Candidates assessing themselves against SFIA are likely to find that they meet the SFIA criteria in several different categories.

7. Version History

Name	Revision History	Date of Issue	Version
Mr R V Hart	Initial Document	May 2008	V1.0
Mr R V Hart	Revised for open membership proposal and inclusion of CT pathways	July 2009	V2.0
Mr R V Hart	Revised for specialism and changes to CPD requirements	September 2011	V2.1
Ms R Graham	Alterations in ACS Branding	18 May 2012	V2.2
Ms R Graham	Clarification on CPD hours	2 November 2012	V2.3
Ms E Horgan	Clarification on CPD hours	5 August 2013	V2.4
Mr G Low	Streamlined pathways	25 November 2013	V3.0
Ms E Horgan	Amended CPD hours wording only under maintain CP	16 December 2013	V4.0
Berny Martinez	Amendment of voluntary service on page 12 as per the outcome of item 8 from the Oct 15 2015 PSB meeting.	17 December 2015	V4.1
Berny Martinez	Change of wording from "Advanced Masters" to "Advanced Professional" as per outcome of PSB meeting on 5 May 2016.	12 May 2016	V4.2
Henry Louey	Updated to SFIA 8 and removed references to the CPeP program	2 May 2022	V.4.3
Henry Louey	Minor administrative updates	31 August 2023	V 4.4
Henry Louey	Amended requirements for ACS Certification and minimum CPD hours to remain certified	29 February 2024	V 4.5
Anna Shin / Henry Louey	Removing the requirement for members to "report" CPD compliance, clarification of audit and other minor administrative updates (eg. deleting redundant references)	23 May 2024	V 4.6

8. Approvals

Date Approved	Version	Approved by	Date in Force
2008	1.0	Management Committee	May 2008
2011	2.1	Professional Standards Board; Management Committee	2011
05 December 2013	3.0	Professional Standards Board; Management Committee	December2013
17 June 2022	4.3	Professional Standards Board	June 2022



31 August 2023	4.4	Professional Standards Board	August 2023
29 February 2024	4.5	Professional Standards Board	29 February 2024
23 May 2024	4.6	Endorsed by Professional Standards Board	
26 June 2024	4.6	Management Committee	26 June 2024

9. Distribution

Public distribution

10. Document Control

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