

Statement of Inherent Requirements

Faculty	Faculty of Science and Technology
Area	Information Technology & Engineering
Active Courses	Undergraduate Courses
	 Diploma of Information Technology [935AA] Bachelor of Information Technology [322AA] Bachelor of Software Engineering [560AA] Bachelor of Engineering (Honours) [ETB001] Bachelor of Business Informatics [706AA] Bachelor of Engineering Technology [ITB101] Honours in Science and Technology [NPH001]
	 Postgraduate Courses Graduate Certificate in Information Technology [840AA] Graduate Certificate in Business Informatics [841AA] Graduate Certificate in Cyber Security Management [ITC101] Graduate Certificate in Government Informatics [338JA] Graduate Diploma in Information Technology [843AA] Graduate Diploma in Business Informatics [844AA] Master of Information Technology [846AA] Master of Information Technology and Systems [973AA] Master of Engineering [354JA] Master of Data Science [ITM001] Master of Information Sciences (Research) [861AA]

Ethical Behaviour

Inherent Requirement

• Behave ethically and professionally in academic and professional environments, complying with relevant standards and codes of ethics applicable to the profession.

Rationale

• Compliance with relevant professional standards and/or codes of conduct, and commonly accepted standards of professional behaviour facilitates safe, competent interactions and relationships for students and the people they engage with in all contexts. This supports the physical, psychological, emotional and spiritual wellbeing of all.

Related Professional Requirements: <u>University of Canberra Student Charter</u>, ACS (Australian Computer Society) Code of Ethics and Code of Professional Conduct, <u>Engineers Australia (EA) Code of Ethics</u>.

Examples for specified discipline/s

Information Technology and Engineering

- Be honest and trustworthy in professional practices studying or at work.
- Pursue to the best in one's competence.

Legal Compliance

Inherent Requirement

• Comply with Australian Law, professional regulations and/or scope of practice relevant to the profession or scientific discipline.

Rationale

• Knowledge, understanding and compliance with Australian law and professional regulations facilitates effective, responsible and accountable professionals in the fields of information technology and engineering.

Examples for specified discipline/s

Information Technology and Engineering

- Comply with policies and regulations to ensure student and staff safety.
- Complete lab safety training whenever applicable.
- Comply with the relevant legislation and regulations.

Communication Skills

1. Expressive Communication Skills

Inherent Requirement

• Communicate effectively, in English, to a standard that allows clear, scholarly, and professional-level messages and text with language use and style appropriate to the audience.

Rationale

• Communication skills are an essential requirement to develop and maintain trusting relationships, and to perform effectively in an academic and complex professional environment, as well as solve problems and communicate knowledge and understanding of relevant subject matter effectively.

Examples

- Actively participate in group assessment tasks, tutorial and/or laboratory discussions.
- Constructing written documents to meet academic and professional standards.
- Responding appropriately to a request for information or support in the professional environment.

2. Receptive Language Skills

Inherent Requirement

• Internally formulate and assess conceptual meaning from verbal language and written messages and/or text, in English, using knowledge of language, background knowledge, critical thinking skills, self-reflection and other emotional intelligence markers.

Rationale

• Communication skills are an essential requirement to develop and maintain trusting relationships, and to perform effectively in an academic and complex professional environment, as well as solve problems and communicate knowledge and understanding of relevant subject matter effectively.

Examples

- Read and comprehend the required textbooks, manuals, instructions, publications, and professional standards.
- Comprehend spoken English delivered at conversational speed (including in noisy environments, such as a classroom).
- Participating in tutorial, simulation, clinical and professional placement discussions.

3. Interpersonal Communication Skills

Inherent Requirement

• Respectful communication with others, including the ability to understand, display and respect empathy, build rapport and gain trust to ensure meaningful and effective interactions with people they engage with.

Rationale

• Communication skills are an essential requirement to develop and maintain trusting relationships, and to perform effectively in an academic and complex professional environment, as well as solve problems and communicate knowledge and understanding of relevant subject matter effectively.

Examples

- Communicate respectfully with people of different gender, sexuality and age, and from diverse cultural, religious, socio-economic and educational backgrounds.
- Create and develop rapport with peers, academic and professional staff conducive to effecting working relationships.
- Cultural competence, sensitivity and willingness to work with individuals in a complex and diverse Australian educational setting.
- Perceive non-verbal communication and respond appropriately (in context).

Behavioural Stability

Inherent Requirement

• Behaviour that is adaptable to effectively manage changing situations sufficiently to maintain academic and professional relationships to acceptable standards.

Rationale

 Behavioural stability is essential in managing personal emotional responses and behaviour in academic and complex professional environments, including situations of potential human distress. It is required to work constructively in culturally and socially diverse settings and to deal with challenging issues, timelines and ambiguously defined problems.

Examples

- Responding appropriately and professionally to stressful situations and issues.
- To work constructively in culturally and socially diverse teams while dealing with challenging technical issues that may contain ambiguous and incomplete information.
- Take responsibility for their own learning, including completing multiple, competing tasks within defined timeframes.

Motor Skills

Inherent requirement

• Sufficient tactile function, strength and mobility to function within the scope of professional practice.

Rationale

• Gross motor function and fine motor dexterity is required in information technology and engineering practice to complete various tasks.

Examples for specified discipline/s

Information Technology

- Operate IT devices, including computer keyboards and mice.
- Moving IT devices may be required.
- Cabling IT devices may be required.

Engineering (in addition to the examples in Information Technology section)

- Operate electronic engineering devices, e.g., carrying the devices, turning dials, and flipping switches etc.
- Solder circuits.
- Assemble electronic parts.

Sensory Skills

Inherent requirement

• Sufficient sensorimotor skills, including visual, auditory and tactile acuity to function with the scope of practice.

Rationale

• Visual, auditory and tactile acuity are required in information technology and engineering practice to complete various tasks.

Examples for specified discipline/s

Engineering

- Recognise the colours of network cables and electronic parts.
- Smell the burning odour from a device and determine causality and solutions for remediation.
- Hear noises made by a device and determine causality and solutions for remediation.

Cognitive Skills

Inherent Requirement

• Acquire knowledge, process information, analyse, think critically and synthesise information to apply knowledge of the discipline and sufficiently meet learning outcomes and academic standards relevant to the course, utilising cognitive and literacy skills, including focus, memory, and attention to detail.

Rationale

• Cognitive skills are essential in acquisition and application of knowledge in both the academic and professional environment.

Examples

- Undertaking a range of assessment tasks such as exams, written assignments, presentations and practical applications that demonstrate knowledge of the required content.
- Ability to conceptualise and use appropriate knowledge in response to academic assessment items.
- The ability to read, decode, interpret, synthesize and comprehend information from multiple sources.

ICT Capacity

Inherent Requirement

• Acquire, and employ information and communications technology (ICT) skills in an appropriate and effective manner, utilising a range of systems in both the academic and professional setting.

Rationale

• Competent ICT skills are essential to successfully access, apply and communicate information.

Examples

- Submit assessment items online.
- Use ICT to access unit information, as required.
- Engage with peers using relevant ICT platforms and/or programs for group work assessment tasks.

Sustainable Performance

Inherent Requirement

• Perform both mental and physical tasks over appropriate time frames to meet both academic and professional course requirements.

Rationale

• Sustainable performance is a core requirement of information technology and engineering courses where the graduate is required to undertake tasks and activities that require both physical and mental performance at a consistent and sustained level.

Examples

- Performing persistently and consistently in on-campus and professional environments over a period of time
- Engaging in continual learning consistent with developments in the educational environment
- Delivering consistent outcomes within acceptable timeframes.