

Engineering Technology

Inherent Course Requirements

The inherent course requirements below relate to the following higher education courses.

Associated Higher Education Course(s)	Course Code	Course Duration	AQF Level	Notes
Bachelor of Engineering Technology (Mechanical and Manufacturing)	CRS1201286	3 years full-time	Level 7	
Bachelor of Engineering Technology (Mechatronics)	CRS1201286	3 years full-time	Level 7	

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1. Purpose

Inherent course requirements are the essential components of a course that are required to support participation, learning, assessment, and demonstration of the learning outcomes. They reflect the core abilities, knowledge, skills, and professional behaviours necessary to successfully complete the course.

2. Scope

These inherent course requirements apply to all students enrolled in the course, across all modes of delivery (on-campus, online, blended), and all learning, assessment, simulated, and work-integrated learning environments, including placements where applicable.

Inherent course requirements are distinct from Academic, English language and Course specific admission requirements.

3. Reasonable Adjustments and Equity Statement

Chisholm Institute is committed to inclusive education and equitable participation. Students may meet inherent course requirements with reasonable adjustments, provided such adjustments do not compromise academic integrity, fundamentally alter learning outcomes, or undermine professional, safety, or accreditation standards.

Students are encouraged to engage early with Chisholm Equitable Learning and Disability Support to discuss adjustment needs.

4. Inherent Requirements

4.1. Professional Behaviour and Ethical Behaviour

Rationale:

- > Engineering Technologists must uphold ethical conduct, confidentiality, and integrity in line with the Engineers Australia Code of Ethics and Engineers Australia Professional Standards Framework.
- > This framework covers: Ethical practice, Competent practice, High Value practice, Accountability and Quality Assurance Mechanisms.

Requirements:

- > Work in accordance with professional, ethical, and legal standards.
- > Apply professional judgement and decisions-making consistent with the Engineers Australia Code of Ethics.
- > Understanding of workplace responsibilities, including duty of care and confidentiality.

4.2. Legal and Regulatory Requirements

Rationale:

- > Engineering practice must comply with legislation, standards, workplace procedures and safety obligations.

Requirements:

- > Comply with relevant workplace health and safety requirements.
- > Follow industry standards, engineering codes and institutional policies.
- > Use PPE and safe work practices when working with equipment and machinery.

4.3. Behavioural Stability and Emotional Regulation

Rationale:

- > Students must behave professionally, respond constructively to feedback and adapt to changing learning and workplace contexts.

Requirements:

- > Maintain professional conduct under routine academic and project pressures.
- > Accept feedback and engage in continuous improvement.
- > Reflect on performance and learning needs.
- > Demonstrate reflective practice and self-assessment to support continuous improvement.

4.4. Communication

a. Verbal Communication

Rationale:

- > Effective spoken communication supports safety, teamwork and professional collaboration.

Requirements:

- > Communicate clearly with peers, staff and stakeholders.
- > Explain technical concepts to technical and non-technical audiences.

b. Non-verbal Communication

Rationale:

- > Professional interactions require appropriate non-verbal behaviours.

Requirements:

- > Demonstrate respectful and culturally responsive behaviour.
- > Use non-verbal cues that support effective communication.

c. Written Communication

Rationale:

- > Engineering practice relies on accurate technical documentation.

Requirements:

- > Prepare technical reports, specifications and design records.
- > Present information clearly using professional engineering conventions.

4.5. Technical Knowledge and Cognitive Capacity

Rationale:

- > Engineering Technologists apply technical knowledge, analysis and problem solving to engineering problems.

Requirements:

- > Interpret drawings, schematics, specifications and standards.
- > Perform engineering calculations and data analysis.
- > Apply engineering principles in practical contexts.
- > Consider social, environmental, economic, legal and safety factors when developing engineering solutions.

4.6. Digital Literacy

Rationale:

- > Engineering study and practice depend on competent use of digital tools and systems.

Requirements:

- > Use engineering software such as CAD, CAM and simulation tools.
- > Maintain digital records and data integrity.
- > Adapt to new technologies and software.
- > Maintain traceable engineering records and apply engineering information management practices.

4.7. Numeracy

Rationale:

- > Engineering activities require mathematical reasoning and quantitative analysis.

Requirements:

- > Apply mathematics to engineering calculations.
- > Analyse and interpret numerical and technical data.

4.8. Sensory Abilities

Rationale:

- > Students require sufficient sensory awareness to work safely and effectively in engineering environments.

Requirements:

- > Read instruments, drawings and displays with or without aids.
- > Respond to alarms, machinery operation and verbal instructions.

4.9. Strength and Mobility

Rationale:

- > Some learning activities occur in workshops, laboratories and industrial environments.

Requirements:

- > Stand, walk, bend and move safely within practical environments.
- > Handle tools, components and equipment within safe manual handling limits.

4.10. Sustainable Performance

Rationale:

- > Successful participation requires the capacity to manage workload and maintain consistent engagement.

Requirements:

- > Manage time and competing priorities.
- > Sustain participation across study, project and practical activities.
- > Commit to lifelong learning and professional development.
- > Adapt to emerging technologies, global engineering practice expectations and lifelong learning requirements.

5. References – Professional, Accreditation or Additional Context

Engineers Australia Code of Ethics

[Code of Ethics and guidelines on professional conduct](#)

Engineers Australia Stage 1 Competency standard for professional engineer

[Accreditation management system 2019: stage 1 competency standard for professional engineer](#)

Engineers Australia Professional Standards Framework

[Professional standards framework | Engineers Australia](#)

Disability Discrimination Act 1992

<https://www.legislation.gov.au/C2004A04426/latest/versions>

6. Student Acknowledgement

Students and prospective students are required to review and consider their understanding of, and capacity to meet, the inherent course requirements prior to enrolment.