SYDNEY INSTITUTE OF TECHNOLOGY AND ENGINEERING

COURSE BRIEF

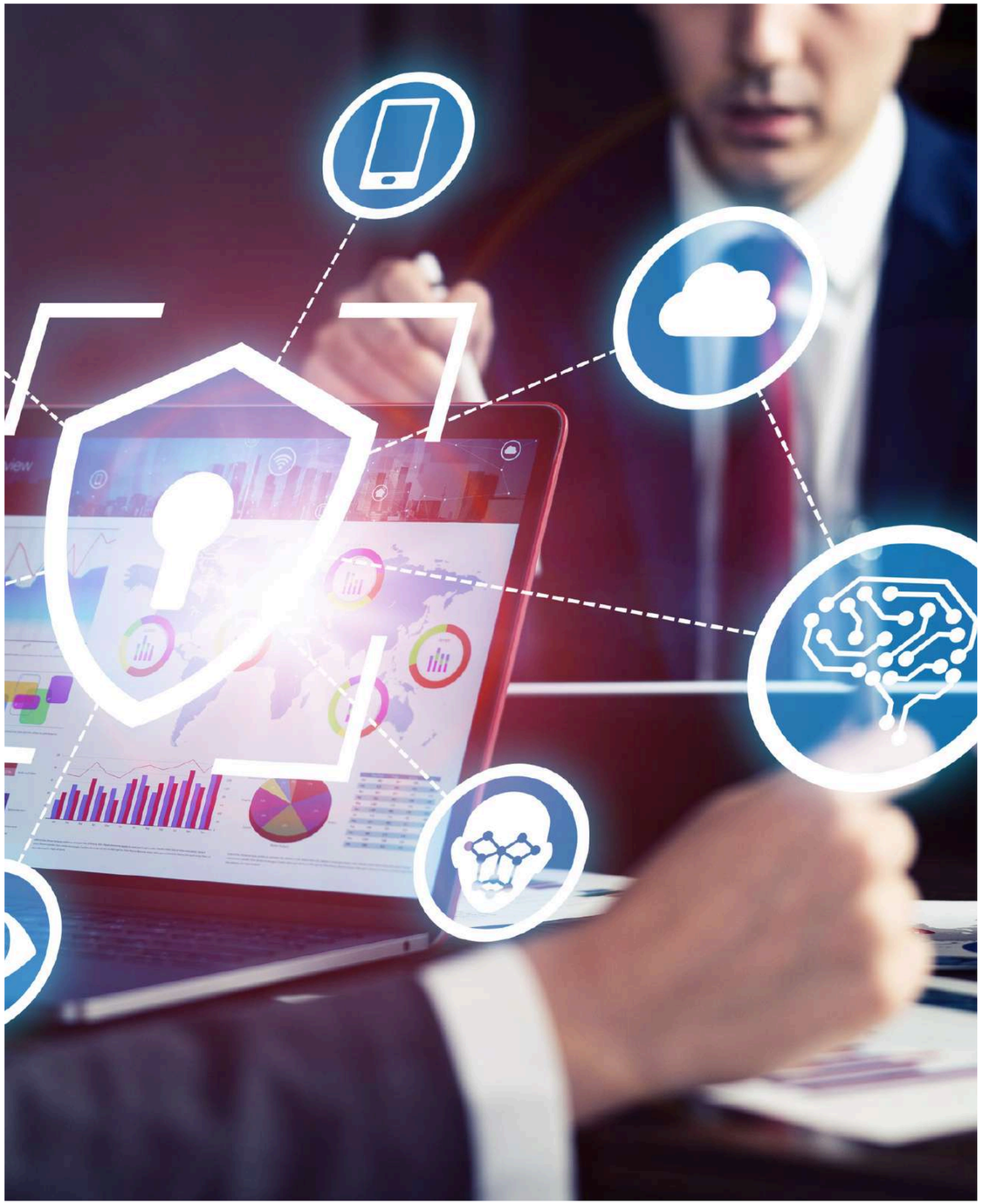
2025 MARCH

TEQSA: PRV 14388 CRICOS CODE: 04339G

“IN THE NEAR FUTURE, AS EVERYTHING BECOMES INTERCONNECTED, THE NEED FOR IOT TALENT WILL SKYROCKET.” – KEVIN ASHTON

Kevin Ashton is a British technology pioneer best known for coining the term “Internet of Things“ (IoT). He played a significant role in developing RFID technology and was a co-founder of the Auto-ID Center at MIT, which laid the foundation for tracking and connecting objects digitally. His work has been influential in shaping the modern understanding of how everyday objects can be interconnected and communicate with each other.

Supporting this view, data from IDC indicates that the number of connected devices is projected to grow from 8.4 billion in 2017 to over 41 billion by 2025, illustrating the massive expansion of the IoT ecosystem.



ABOUT US

- Sydney Institute of Technology and Engineering (SITE) is a modern, innovative institution located in Sydney, NSW, dedicated to providing practical and industry-driven education in technology and engineering.
- A Curriculum Development Committee (CDC) was formed consists of experienced engineering academics and industry professionals.The CDC members have combined more than 100 years of engineering teaching & professional experience
- SITE is the first and only private tertiary institute in Australia to offer a Four-year Professional Engineering Honors degree
- Engineers Australia (EA) reviewed the proposed program and supported the application

LEADERSHIP TEAM

Emeritus Professor Aileen Cater Steel

Chairperson of the Council,SITE

Emeritus Professor Steel is an experienced TEQSA registered higher education expert with a demonstrated history as manager, educator and researcher in the information technology industry. She was the Chair of Academic Board at the University of Southern Queensland and other private Higher Education Providers, She is a Graduate of the Australian Institute of Company Directors (AICD) and Fellow of the Australian Computer Society.

Assoc Prof Jamil Khan

Academic Dean

Associate Professor Khan is an experienced research professional in Computer and wireless networks, IoT, Telecommunication systems, and Electronics design. He has published 200 international papers, supervised 22 PhD students, mentored 300+ engineering undergraduates, and collaborated with industry professionals. He also provides academic leadership in the tertiary education sector.

Emeritus Professor Archie James Johnston

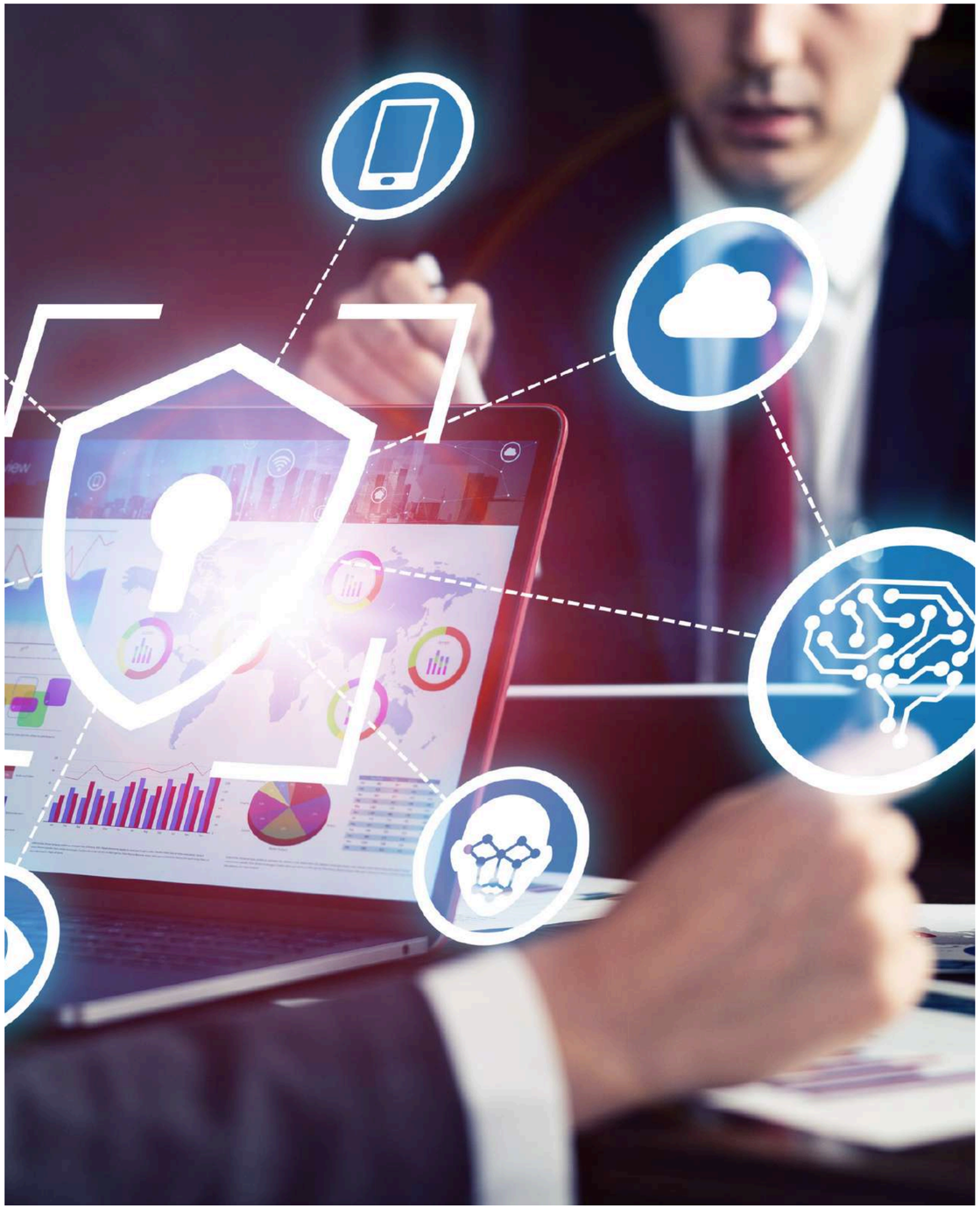
Council member and CEO,SITE

Emeritus Professor Archie Johnston has 36 years of engineering teaching experience across various Australian institutions, including the University of Sydney and the University of Technology Sydney (UTS). He served as Professor of Engineering and Information Technologies and was the Dean of Engineering & Pro-Vice-Chancellor (Research) at UTS from 1999 to 2010. Additionally, he held leadership roles such as Chair of the Sydney School of Business and the Health Sciences Division Board at the University of Sydney during the same period.

Dr Cedric Spencer

Council member of SITE and CEO of ATI

Dr Cedric Spencer is a solicitor and an academic who runs a boutique law firm in the Upper North Shore. He lives in Turramurra with his wife and young son. His qualifications include Juris Doctor; Doctor of Business Administration; Master of Business; Graduate Diploma in Laws; Graduate Diploma in Transport and Distribution Management; and Advanced Diploma in Transport.



2.DOUBLE POTENTIAL

Explore our Honours Degree options and diverse career pathways designed to enhance your potential. Potential to achieve both ACS and EA accreditations for professional credentials.

The four-year Honours degree for Professional Engineers offers a deep theoretical and research foundation for advanced design and leadership roles. In contrast, the three-year Engineering Technologists pathway focuses on practical application and technical implementation, highlighting differences in study duration and career expectations.

Bachelor Of Engineering (Honours) Networking And Internet Of Things (117510F)

Bachelor Of Networking And IoT (117512D)

Associate Degree in Networking and Internet of Things (117511E)

Diploma in Applied Technology (117513C)

3.UNIQUE COURSES & PROGRAM STRUCTURE

Bachelor of Engineering (Honours) in Networking & Internet of Things:

Duration & Credits:
A four-year, 192-credit point program (AQF Level 8) that includes a mandatory 12-week industrial training period.

Curriculum Focus:
Integrates core areas of mathematics, physics, computer engineering, electronics, IoT systems, communication networks, and engineering management along with ethics and professional practices.

Accreditation Alignment: Developed following guidelines from AQF, Engineers Australia, IEEE, and ACM.

3.UNIQUE COURSES & PROGRAM STRUCTURE

Nested Course Pathways:Bachelor of Networking & IoT (AQF Level 7):

A three-year degree derived from the full engineering program, offering an early exit qualification.

Associate Degree in Networking & IoT (AQF Level 6): Granted upon successful completion of the second year.

Diploma in Applied Technology (AQF Level 5): Awarded after the first year, providing a pathway entry into higher qualifications.

	A	B	C	D	E	F	G	H
1	Semester	Unit Code	Unit Name	Core/Elective	Credits	Prerequisites	Major assessment type	Contact hours per v
2	S1	MATH101	Higher Mathematics	Core	6	HSC equivalent unit 2/3 Maths	Quiz and Exam	3 hrs Lec + 1.5 hrs Tu
3	S1	CECS121	Introduction to Computing & Programming I	Core	6	-	Project and Exam	2 hrs Lec + 1 Tut + 1.
4	S1	PHYS100	Introductory Physics	Core	6	-	Exam	2 hrs Lec + 1.5 Tut +
5	S1	EMES100	Technical Writing & Laboratory practices	Core	6	-	Report and Exam	2 hrs Lec + 1.5 Tut +
6	S2	MATH111	Engineering Maths-I	Core	6	MATH101	Quiz and Exam	3 hrs Lec + 2 hrs Tut
7	S2	ELEC130	Basic Electronics	Core	6	MATH101, PHYS100	Laboratory report and Exa	2 hrs Lec + 1.5 Tut +
8	S2	ELEC170	Digital Systems	Core	6	CECS121	Exam	2 hrs Lec + 3 hrs Lab
9	S2	CECS123	Programming-II	Core	6	CECS121	Project and Exam	2 hrs Lec + 1 Tut + 1.
10	S3	MATH212	Engineering Maths-II	Core	6	MATH111	Quiz and Exam	5
11	S3	PHYS111	Physics for Engineers	Core	6	PHYS100, MATH111	Exam	5
12	S3	ELEC232	Electronic Circuits & IoT Sensors	Core	6	ELEC130	Project and Exam	5.5
13	S3	CECS212	Operating Systems	Core	6	CECS123	Assignment and Exam	5
14	S4	STAT241	Statistical Techniques for Data Analysis	Core	6	MATH111	Exam	5
15	S4	EMES210	Principles of Ethics & Sustainability	Core	6	-	Project and Exam	5.5
16	S4	CNET250	Introduction to Communication Networks	Core	6	ELEC170, MATH111	Project and Exam	5.5
17	S4	CECS270	Introduction to Embedded Systems	Core	6	ELEC170, CECS123	Assignment and Exam	5
18	S5	EMES321	Engineering Management	Core	6	Completion of 2nd year	Quiz and Assignment	5
19	S5	CNET350	IoT Cloud Computing Architecture	Core	6	CECS270, CNET250	Assignment and Project	5.5
20	S5	CNET351	Communication Networks	Core	6	CNET250	Project and Exam	5.5
21	S5	CENT355	Wireless IoT Networks	Core	6	CNET250, CECS270	Project and Exam	5.5
22	S6	CECS325	Cyber Security	Core	6	STAT241, CNET351	Assignment	5
23	S6	IOTS361	IoT Systems & Technologies	Core	6	CNET355, CECS270	Project and Exam	5.5
24	S6	CECS326	Machine Learning for IoT	Core	6	STAT241, CECS123	Assignment and Project	5
25	S6	CECS380	Engineering Design	Core	6	Completion of 2nd year of Engineering	Project	2
26	S7	CECS450	Engineering Research & Development Project-Part A	Core	6	Completion of 3rd year of Engineering	Research and Project	2
27	S7	EMES403	Professional Practices	Core	6	3rd year of Engineering	Assignment and Exam	4
28	S7	ELEC342	Digital Signal Processing	Core	6	ELEC130, MATH212	Exam	5
29	S7		Technical Elective	Elective	6			
30	S8	CECS451	Engineering Research & Development Project-Part B	Core	6	CECS450	Research and Project	1
31	S8	WILE400	Industry Experience	Core	0	Successful completion of year 3 of the course	Report	-
32	S8		Technical Elective	Elective	6			
33	S8		Technical Elective	Elective	6			
34	S8		Technical Elective	Elective	6			
35			*List of technical electives*					
36		CNET356	Mobile Communication Networks	Elective	6	CNET250, CNET355	Project and Exam	5
37		CECS323	Database Design	Elective	6	CECS123	Assignment and Exam	4
38		IOTS460	IoT System Design	Elective	6	-	IOTS361	5
39		CECS424	Data Analytics	Elective	6	-	CECS326	5
40		CNET451	Advanced Networks & Services	Elective	6	-	CNET351	5

4.COURSE STRUCTURE

We have compiled a comprehensive list of all the subjects included in the Bachelor of Engineering (Honours) in Networking & Internet of Things, which is a 192-credit point program. This overview provides you with a clear understanding of what we will accomplish over the next four years.

5.TEACHING ARRANGEMENTS & FACILITIES

LEARNING ENVIRONMENT

Modern labs for Electronic Engineering & Embedded Systems (EEES) and Computer Science & Simulation (CSSL), comprehensive library databases, and strong IT infrastructure.

TEACHING METHODS:

Lectures, tutorials, lab sessions (timetabled and open access), and mandatory industrial training to build real-world skills.

INDUSTRY CONNECTION:

SITE emphasizes practical experience and industry projects, ensuring graduates are well-prepared for professional engineering and ICT roles.

ANZSCO Code	Occupation Title	Relevant Subjects	Assessment Body
233111	Electrical Engineer	• Introductory Physics & Mathematics • Digital Signal Processing • Mobile Communication Networks • IoT System Design • Capstone/Final Year Project • Industrial Training	EA
263311	Telecommunications Engineer	• Introductory Physics & Mathematics • Digital Signal Processing • Mobile Communication Networks • Network Fundamentals • IoT System Design • Capstone/Final Year Project • Industrial Training	EA
263312	Telecommunications Network Engineer	• Introductory Physics & Mathematics • Network Fundamentals • Mobile Communication Networks • IoT System Design • Capstone/Final Year Project • Industrial Training	EA

6. CAREER (EA)

ANZSCO Codes for Occupation Assessment
Graduates holding SITE's Networking & Internet of Things bachelor's degree or the Bachelor of Engineering (Honours) in Networking & IoT can consider the following ANZSCO occupation codes for skills assessments when applying for Australian skilled migration:

Note: Final eligibility for specific codes depends on the graduate's completed course units, project work, and relevant work experience. Students should also review the latest Medium and Long-term Strategic Skills List (MLTSSL) and consult with migration professionals or relevant assessing bodies for up-to-date information.

263111	Computer Network and Systems Engineer	Network Fundamentals • IoT System Design • Cyber Security • Programming Fundamentals • Capstone/Final Year Project • Industrial Training	ACS
261313	Software Engineer	• Programming Fundamentals • IoT System Design • Capstone/Final Year Project • Industrial Training • (Supporting subjects: Engineering Management & Ethics for team collaboration and project lifecycle management)	ACS
261312	Developer Programmer	• Programming Fundamentals • IoT System Design • Capstone/Final Year Project • Industrial Training	ACS
261311	Analyst Programmer	• Programming Fundamentals • IoT System Design • Network Fundamentals • Capstone/Final Year Project • Industrial Training	ACS
261112	Systems Analyst	• Programming Fundamentals • Network Fundamentals • IoT System Design • Engineering Management & Ethics • Capstone/Final Year Project • Industrial Training	ACS
261111	ICT Business Analyst	• Engineering Management & Ethics • Capstone/Final Year Project • Industrial Training • (Supporting subjects: Introductory concepts in Programming and Network Fundamentals to understand ICT systems and their business applications)	ACS

6. CAREER (ACS)

ANZSCO Codes for Occupation Assessment
Graduates holding SITE's Networking & Internet of Things bachelor's degree or the Bachelor of Engineering (Honours) in Networking & IoT can consider the following ANZSCO occupation codes for skills assessments when applying for Australian skilled migration:

Note: Final eligibility for specific codes depends on the graduate's completed course units, project work, and relevant work experience. Students should also review the latest Medium and Long-term Strategic Skills List (MLTSSL) and consult with migration professionals or relevant assessing bodies for up-to-date information.

WASHINGTON ACCORD

The Washington Accord is an international agreement recognizing engineering programs accredited by signatory countries as equivalent. In Australia, Engineers Australia accredits programs under this framework. Key benefits include:

- Mutual Recognition**: Graduates are acknowledged for meeting academic standards in other signatory countries (e.g., U.S., U.K., Canada).
- Global Mobility**: Eases employment, registration, and further studies abroad.
- Career Expansion**: Opens broader career options internationally.

Professional Standing: Simplifies pathways to professional registration in participating countries, reducing barriers compared to non-accredited qualifications.

7. JOB DEMAND

A degree in this field offers valuable insights into earnings and the job market, opening doors to high-demand careers. Graduates gain skills that enhance employability and foster personal and professional growth, preparing them for a competitive job landscape and a secure future.

The information provided here is sourced from the internet and is intended for reference only. Users of this material should always seek the most current information from the job market.

ANZSCO Code	Occupation Title	Job Demand	Expected Salary Range (AUD)	Assessment Body
263311	Telecommunications Engineer	High – Driven by the expansion of 5G, IoT, and advanced mobile networks.	$90,000 – $130,000 per year	Engineers Australia (EA)
263312	Telecommunications Network Engineer	High – In demand for designing, deploying, and maintaining complex network infrastructures.	$80,000 – $120,000 per year	Engineers Australia (EA)
233111	Electrical Engineer	High – Core electrical skills remain essential in power systems, manufacturing, and integrated IoT.	$85,000 – $125,000 per year	Engineers Australia (EA)
263111	Computer Network and Systems Engineer	High – Increasing need for cybersecurity, network resilience, and systems integration.	$90,000 – $130,000 per year	Australian Computer Society (ACS)
261313	Software Engineer	Very High – Software development remains a core skill across various industries.	$70,000 – $120,000 per year (entry to mid-level)	ACS
261312	Developer Programmer	High – Consistent demand for building and maintaining applications and embedded systems.	$65,000 – $110,000 per year	ACS
261311	Analyst Programmer	Moderate to High – Valued for integrated systems analysis and development roles.	$70,000 – $115,000 per year	ACS
261112	Systems Analyst	High – Essential for optimizing and integrating IT systems in diverse business settings.	$75,000 – $120,000 per year	ACS
261111	ICT Business Analyst	Moderate to High – Focused on aligning ICT solutions with strategic business needs.	$80,000 – $130,000 per year	ACS

SUMMARY

Electrical and Telecommunications Roles (233111, 263311, 263312):

These roles require a strong foundation in the physical principles and signal processing (Physics & Mathematics, Digital Signal Processing) as well as a deep understanding of communications technologies (Mobile Communication Networks, Network Fundamentals). The IoT System Design subject further supports designing modern integrated systems.

ICT & Software Roles (261313, 261312, 261311):

For roles focused on software and systems development, subjects such as Programming Fundamentals and IoT System Design are critical. The capstone project and industrial training components offer practical experience that reinforces these technical skills.

Systems & Business Analysis (261112, 261111):

These roles not only benefit from technical subjects (Programming Fundamentals, Network Fundamentals, IoT System Design) but also emphasize Engineering Management & Ethics, which help bridge the technical and business sides of ICT projects.

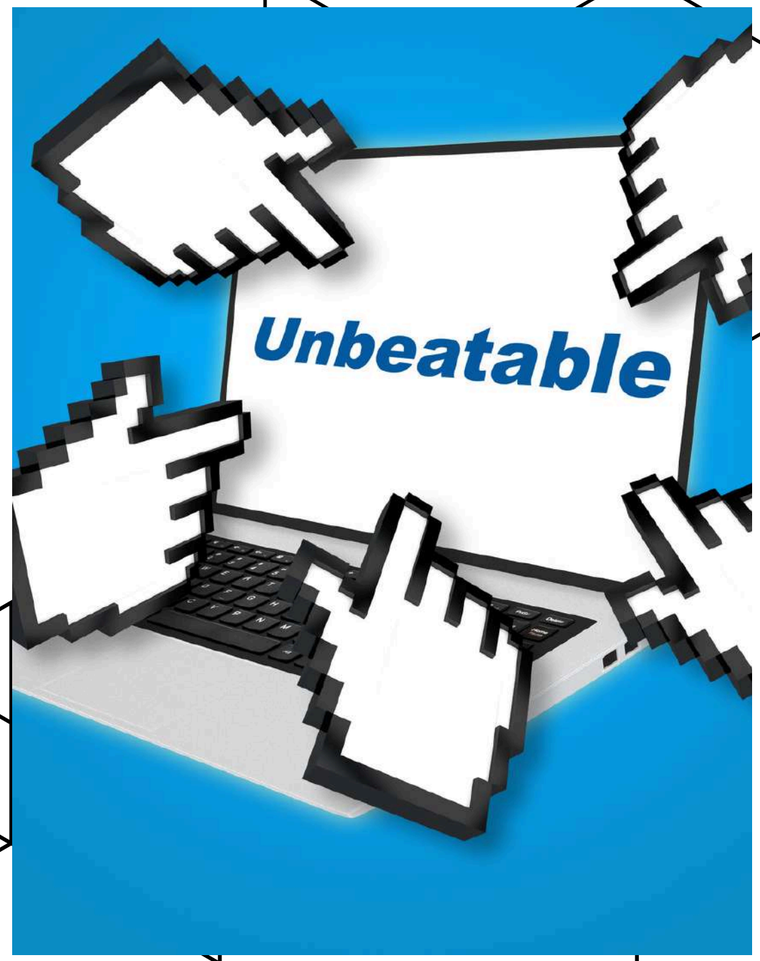
This mapping helps highlight how each occupation draws upon different aspects of the degree curriculum. It can be used to tailor competency demonstration documents (such as the CDR for Engineers Australia or RPL for ACS) by emphasizing the subjects that are most relevant to the target occupation.

8. COMPETITIVE TUITION FEE & VALUE PROPOSITION

Tuition Fee Comparison:SITE’s programs are competitively priced compared to similar degrees at traditional Australian universities.

When compared with other Australian universities, which may charge international fees between AUD 35,000 and AUD 45,000 per year for similar engineering or ICT programs, SITE presents significant cost savings, particularly for international students.

Flexible Entry & Exit Options:The nested course structure allows students multiple entry and exit points (Diploma, Associate Degree, or Bachelor’s), providing flexibility and a clear progression pathway.



9.OTHER COUSE KEY INFO

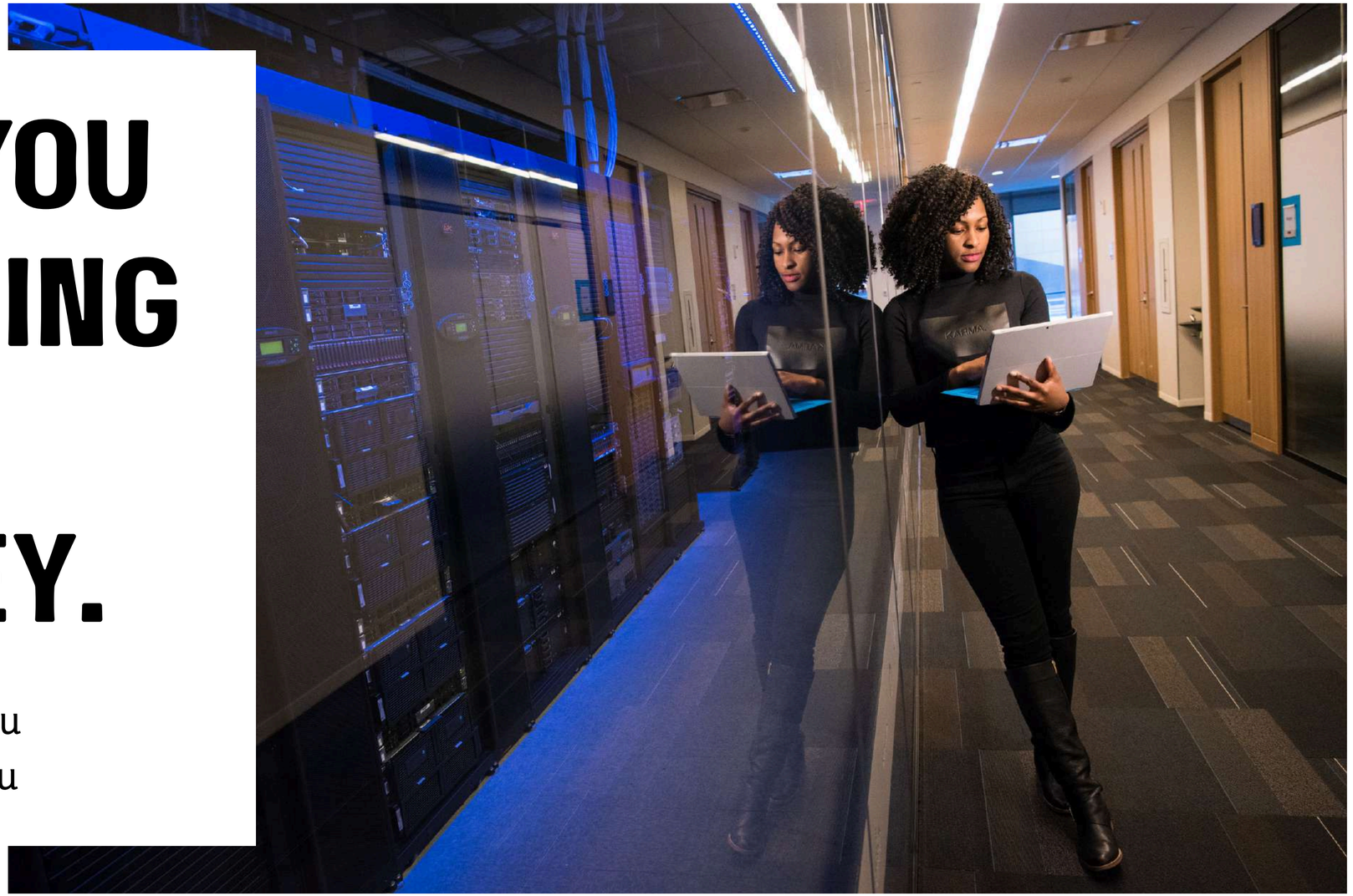
Admission Requirements

	Domestic	International
Academic Requirements	• Australian Year 12 with ATAR ≥ 73 • Band 4 Advanced Mathematics or higher (Extension I or II) • Additional bonus points for higher performance in Math, Physics, or Computing subjects • Alternatively, a higher education or VET qualification in a relevant field(AQF Level 6) with a 70% pass rate	• Equivalent Year 12 qualification from other countries • ATAR equivalent to 73 • Country-specific academic requirements (e.g., GPA ≥ 4.5 for Bangladesh, 80% in China, etc.) • Completion of International Baccalaureate Diploma with a score ≥ 27 • Completion of relevant higher education or VET qualification in a relevant field (AQF Level 6) with a 70% pass rate
English Requirements	• Exemption available if secondary or post-secondary education was completed in an English-speaking country • If no exemption, evidence of proficiency required	• IELTS 6.0 (minimum 6.0 in reading, writing, speaking; 5.5 in listening) • TOEFL iBT: 60 overall (with minimum subscores) • PTE: 46 overall (with minimum subscores) • Cambridge English CAE: 169 overall (with minimum subscores)

- 2.5 days in class hour
- April and September intake
- 30,400 / per annual , with 2025 promotion tuition fee of $24,900 / per annual

For more details, please visit https://siti.nsw.edu.au/admission-criteria/

THANK YOU FOR JOINING THIS JOURNEY.



www.siti.nsws.edu.au
info@siti.nsw.edu.au