

COURSE GUIDE · NATIONALLY ACCREDITED TRAINING

Cyber Security & *Cloud Engineering*

ICT50220 Diploma of Information Technology (Cyber Security & Cloud Engineering)

Real people. Real education.

EQC Institute of Technology · RTO 45758 · CRICOS 03952E

EQC INSTITUTE

01 · ABOUT EQC

Study *different*.

One of Australia's leading, government-accredited tech colleges, helping people start careers in cyber security, coding and cloud.

Our lead team has over 30 years in education. We started EQC to deliver quality education that treats every student as a person, with their own goals and direction. That's why our education team writes all of our own curriculum, and why our trainers are people who work in the industry. There's no tick-box, minimum-standards approach here. Every course, lesson and conversation is built to give you the care, precision and simplicity you deserve.



★★★★★

"I highly recommend EQC Institute to anyone looking to build a career in IT or Cyber Security."

SABERA, EQC STUDENT

4.9
★★★★★
Google rating

6,000+
Students taught by our founders

7
Campuses Australia-wide

Government-accredited training provider
RTO 45758 · CRICOS 03952E

Nationally recognised
A diploma recognised Australia-wide.

40+ expert educators
People who've done the job.

1% We hire only approximately 1% of course coach *applicants*.

We select the best training team, so the people coaching you are engaging, real and quality educators who know the industry.

- Passion for education
- Real industry expertise
- Great communication

1:1

Personalised mentoring. Genuine experts.

Forget crowded classrooms and generic feedback. Every student gets one-on-one mentoring from people who know the industry inside out.

Checking

We follow up and love to chat.

Most providers go quiet once you've enrolled. We don't. We keep checking in until you cross the finish line.

Real

Supporting you every step of the way.

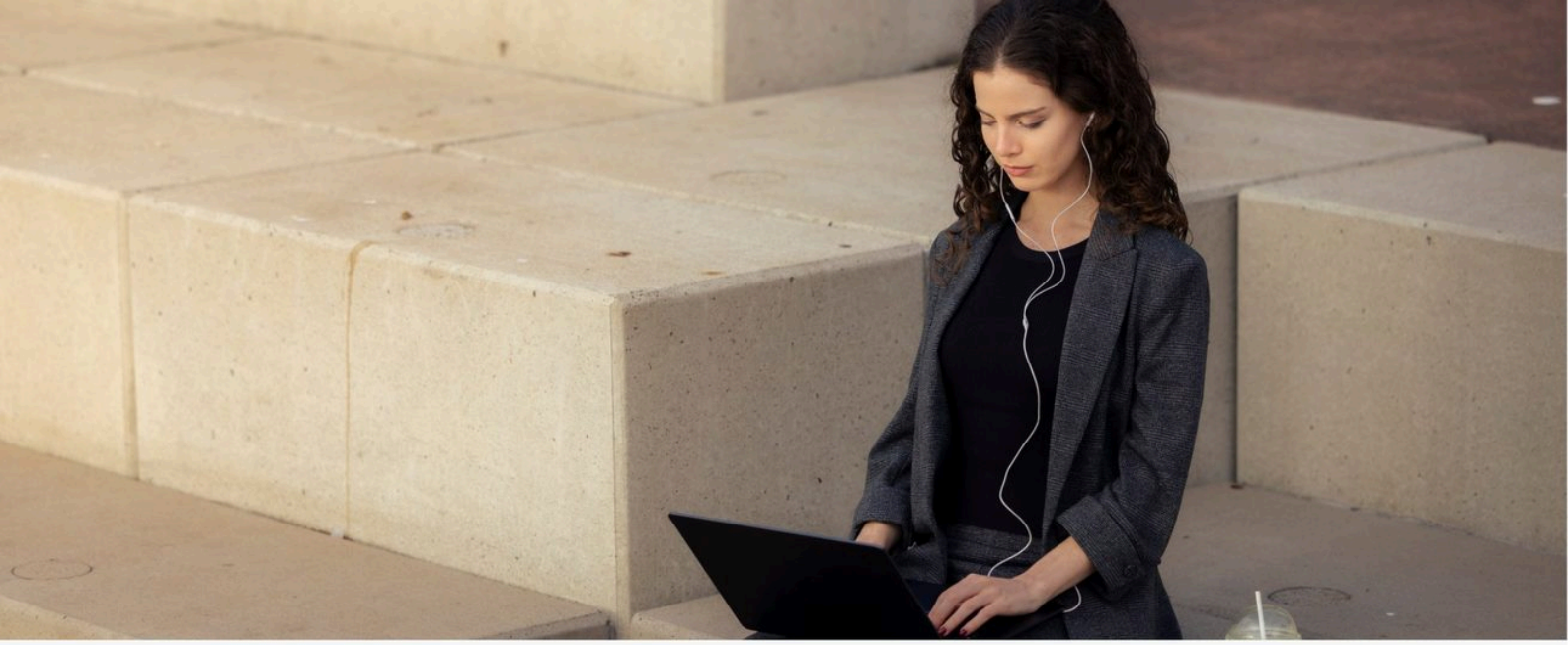
A real person who knows your name, your goals and wants you to achieve your goals.

Career-ready

Real-world learning for real-world careers.

Hands-on training built around the tasks you'll face on the job. You won't just be exam-ready. You'll be career-ready.

★★★★★ "They are very knowledgeable and actively work in the fields they are teaching." MATTHEW, EQC STUDENT



03 · THE COURSE

Cybersecurity Course Breakdown

ICT50220 Diploma of Information Technology (Cyber Security & Cloud Engineering)

6	20
Subjects	Units

01 Fundamentals of Cyber Security

Pull apart real phishing campaigns and spot the AI scams most people miss.

02 Cyber Security Application

Launch a live web app, then defend it against a real DDoS attack.

03 Cloud Security

Build your own AWS environment and lock it down like an enterprise.

04 Network Security & Hardware

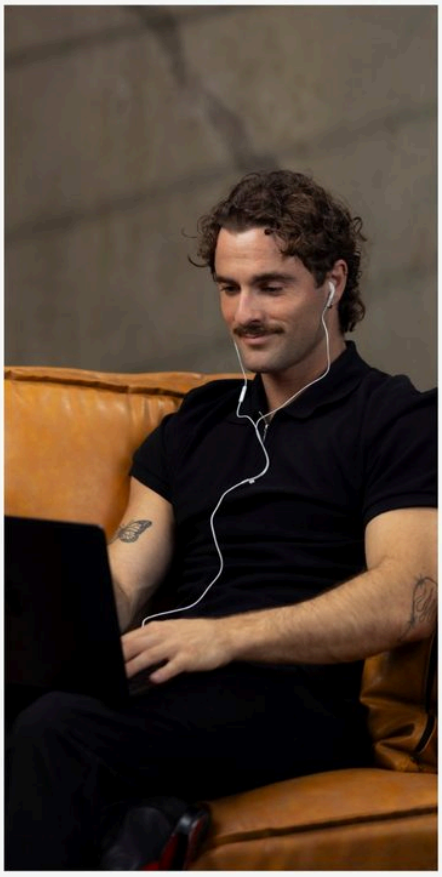
Scan networks with Kali Linux and watch a live DDoS attack in Wireshark.

05 Cyber Investigations

Preserve evidence and trace stolen money through banks and blockchains.

06 Cyber Security Business Application

Run a full penetration test, from recon to report.



SUBJECT 01

Fundamentals of Cyber Security

See what attackers see. You'll pull apart real phishing campaigns and learn to spot the AI-generated scams most people miss.

WHAT YOU'LL EXPLORE

- The modern threat landscape and who's behind it
- Anatomy of a phishing campaign
- AI-generated scams most people can't spot
- OSINT: what attackers can see about you
- Social engineering, deepfakes and voice cloning

TOOLS YOU'LL USE

Linux terminal · KnowBe4 · OSINT toolkits · AI tools · Risk registers

SUBJECT 02

Cyber Security Application

Launch a live web app on Cloudflare, then defend it against a real DDoS attack while it's running.

WHAT YOU'LL EXPLORE

- Deploying a live web application
- Identity and access management
- Next-gen firewalls and custom rules
- Defending against live DDoS attacks
- SSL, TLS and secure HTTPS

TOOLS YOU'LL USE

Cloudflare · Web application firewall · IAM · SSL / TLS · Essential Eight



★★★★★ "The course offered a great balance of theory and practical skills." — CHIAKI, EQC STUDENT



SUBJECT 03

Cloud Security

Make your own AWS environment from a blank account, then lock it down the way enterprise teams do.

WHAT YOU'LL EXPLORE

- Your own AWS environment, from a blank account
- Users, roles, permissions and MFA
- Encrypted storage and servers
- Containerising apps with Docker
- Private networks with VPNs

TOOLS YOU'LL USE

Amazon Web Services · IAM · S3 · EC2 · Docker

SUBJECT 04

Network Security & Hardware

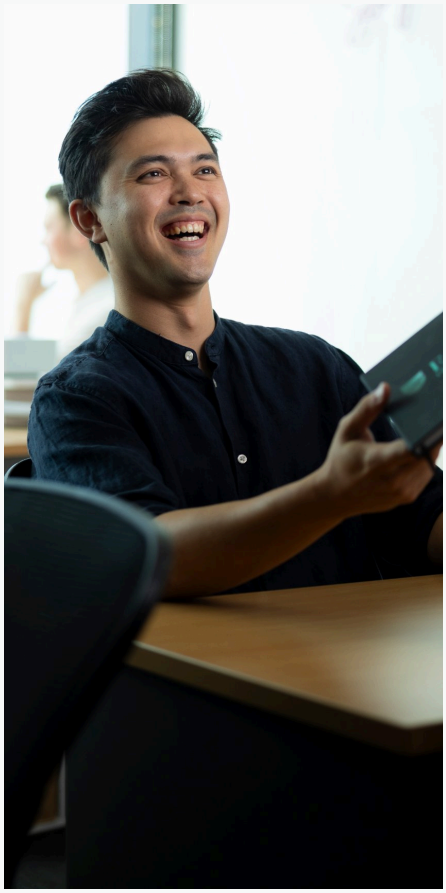
Scan networks with Kali Linux and Nmap, then watch a live DDoS attack unfold in Wireshark.

WHAT YOU'LL EXPLORE

- Networks, ports, protocols and DNS
- Wi-Fi and router security
- Reconnaissance scanning
- Capturing a live DDoS attack
- SIEM: logs, searches and alerts

TOOLS YOU'LL USE

Kali Linux · Nmap · Wireshark · Splunk · Nessus



★★★★★ "The course has been well-structured, engaging, and highly relevant to the current industry needs." — GRACE, EQC STUDENT



SUBJECT 05

Cyber Investigations

Work a case like the pros: preserve digital evidence and trace stolen money through banks and blockchains.

WHAT YOU'LL EXPLORE

- How cyber investigations work in Australia
- Frontline response: the first critical actions
- Preserving digital evidence under pressure
- Field triage and mobile extraction
- OSINT pivoting, metadata and archived web history

TOOLS YOU'LL USE

Magnet | OSForensics | Chainalysis

SUBJECT 06

Cyber Security Business Application

Run a full penetration test from recon to report, and learn to explain the risk to a business.

WHAT YOU'LL EXPLORE

- AI-accelerated threats: voice cloning and deepfakes
- LLM security and prompt injection
- Python for networking, encryption and hashing
- A full penetration test, from recon to report
- Reverse shells and password cracking

TOOLS YOU'LL USE

Python | Kali Linux | Nmap | OWASP Top 10 | OWASP Top 10 for LLMs



★★★★★ "The learning experience was engaging, practical, and gave me valuable skills and confidence for my future career." — JOHAN, EQC STUDENT

Your nationally accredited *units*.

Units are the foundation of your course, and completing them is what makes your diploma a government-accredited qualification. These are the nationally accredited units you will complete, grouped into your six subjects so there's less doubling up.

Nationally Recognised Training

ICT50220 Diploma of Information Technology (Cyber Security & Cloud Engineering)

20 units | 6 core | 14 elective

CORE UNITS

Completed by every ICT50220 student

- **BSBCRT512** Originate and develop concepts
- **ICTICT532** Apply IP, ethics and privacy in ICT environments
- **BSBXCS402** Promote workplace cyber security awareness and best practices
- **BSBXTW401** Lead and facilitate a team
- **ICTSAS527** Manage client problems
- **ICTICT517** Match ICT needs with the strategic direction of the organisation

14

Your elective units have been chosen for you.

We've selected them to give you a future-proof foundation in the industry, focused on cyber security, cloud engineering and incident response.

ELECTIVE UNITS

Selected for this specialisation

- **ICTCYS407** Gather, analyse and interpret threat data
- **ICTICT424** Address cyber security requirements
- **ICTCLD505** Implement cloud infrastructure with code
- **ICTCLD508** Manage infrastructure in cloud environments
- **ICTCYS613** Utilise design methodologies for security architecture
- **ICTSAS526** Review and update disaster recovery and contingency plans
- **ICTICT426** Identify and evaluate emerging technologies and practices
- **ICTCYS610** Protect critical infrastructure for organisations
- **ICTNWK546** Manage network security
- **ICTCLD507** Build and deploy resources on cloud platforms
- **ICTCLD512** Respond to cloud security incidents
- **ICTSAS524** Develop, implement and evaluate an incident response plan
- **ICTCLD506** Implement virtual network in cloud environments
- **ICTICT427** Identify, evaluate and apply current industry-specific technologies to meet organisational needs

The world needs more people *like you.*

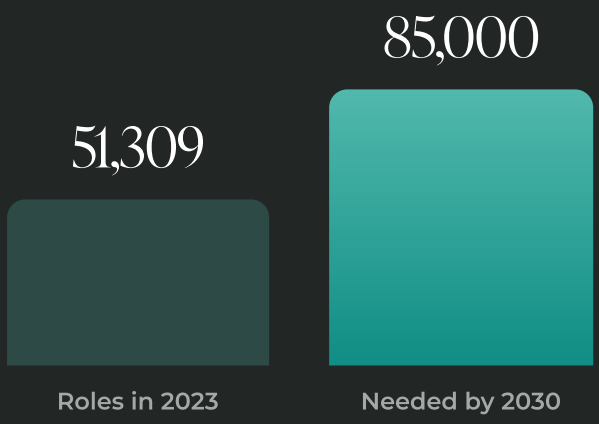
6 min

A cybercrime is reported in Australia every six minutes. There aren't enough skilled people to stop them.

Source: Australian Signals Directorate, Annual Cyber Threat Report 2024–25.

THE SKILLS GAP

Dedicated cyber security roles in Australia



+66% more roles needed by 2030.

Source: AustCyber, Australia's Cyber Security Sector Competitiveness Plan 2023. Around 33,700 more dedicated cyber roles needed by 2030.

THE DEMAND

+80%

Growth in cyber demand

Set to double by 2030.

Source: ACS, Australia's Digital Pulse 2024.

58%

Can't fill their cyber roles

Of Australian organisations.

Source: e2 Cyber, 2026.

In demand

On the shortage list

Cyber Security Engineer.

Source: Jobs and Skills Australia, 2025 Occupation Shortage List.

WHERE IT CAN TAKE YOU · AND MANY MORE

- Security Analyst
- Cloud Security
- Risk & Compliance
- Cyber Investigator
- Penetration Tester
- Security Consultant

05 · OUR STUDENTS

Your skills, your *success*.

Real skills that take you places, from your first role to your next qualification.



WHERE OUR STUDENTS WORK

Career *outcomes*.

Our students have worked at:

aws · CyberCX Part of Accenture · Booking.com · Westpac

KEEP GOING

University *pathways*.

Curtin University

Credit may be available towards eligible Bachelor programs.

ECU Edith Cowan University

Up to 1 year of credit towards eligible Bachelor courses.

Griffith University

Assessed case by case. We'll help you apply.

Each university decides the credit or entry it offers. Credit and entry are not guaranteed.

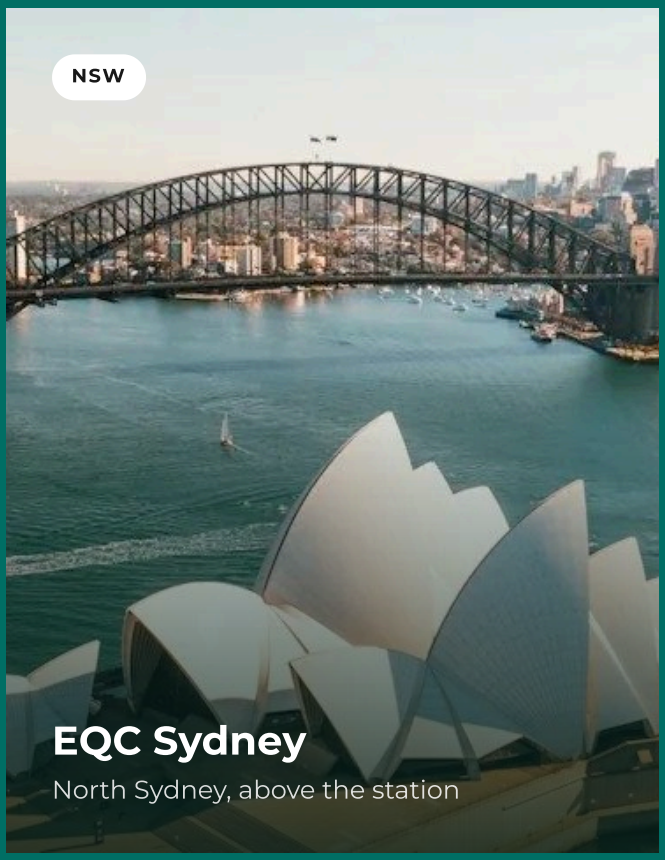
A campus in each state

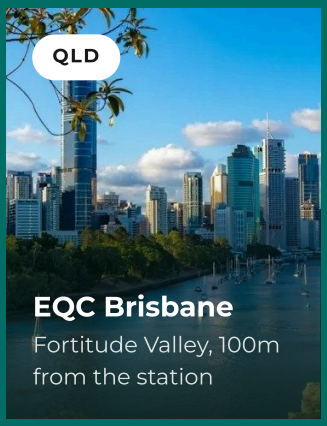
Join trainer-led classes from anywhere, or learn face to face in seven cities.

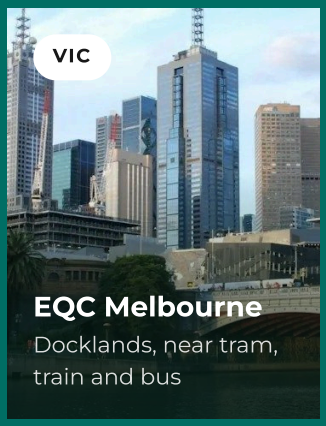
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Campuses Australia-wide

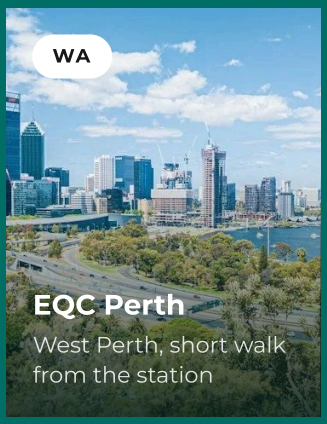
100%
Online option

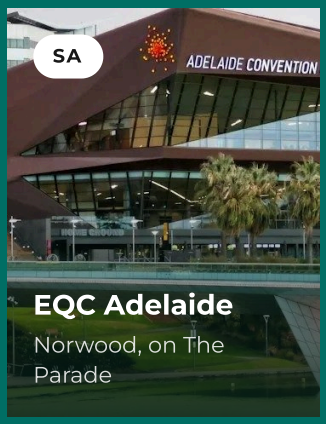
1 yr
Up to 1 year of university credit

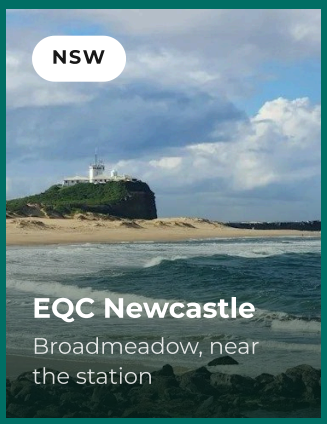


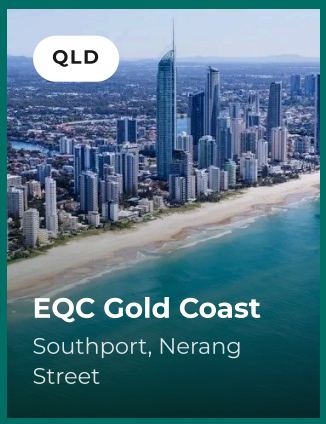















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Your graduation could be next.
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