

Diploma of Information Technology (Advanced Programming)

National Code: ICT50220-04V02

On-Campus Delivery

COURSE DESCRIPTION:

Learn various aspects of software development including analysing, designing, testing, implementing, and managing emerging technologies.

Develop strong technical and problem-solving skills that go beyond programming to allow you to understand and meet client requirements with an ICT solution that fits with the organisation's ICT and business goals.

This course provides:

Learning Resources: Workbooks will be provided by teachers of all subjects.

Also available: Learner Support, Tutoring Support, Counselling, Library, & much more.

Course outcomes include:

Successful graduates of this course will be suitable for careers as junior programmers/developers or junior analysts. Graduates of this course are also eligible for entry to undergraduate university degrees in information technology courses.

Entry Requirements:

To successfully complete this course, we recommend that you have:

- Completed the Certificate IV in Programming course or equivalent knowledge and skills.
- Some Programming experience in C#.NET.
- Some Programming experience in JavaScript & React Native.
- Database design/SQL experience.
- Object-Oriented analysis & design skill using UML.
- Language, Literacy and Numeracy (LLN) skills at Level 4 (based on Australian Core Skills Framework).

LOCATION & MODE OF DELIVERY

Location: Hornsby Campus, TAFE NSW
205 Peats Ferry Road, Hornsby NSW 2077

Full-Time Day: 6 months, 20 hrs/week.
Delivered in **Face-to-Face** class mode.

Part-Time Day: 12 months, 10 hrs/week.
Delivered in **Face-to-Face** class mode.

Enrolment is required to confirm your place in the course.

INFORMATION SESSIONS

To find out more about this course, meet our teachers and receive information about enrolment and next steps, attend an information session.

Dates & Times:

Online: Wednesdays June 4, 11, 18, 25 & July 2, 2025 at 6:00pm

MS Team Link:

<https://infotech.hornsby.tafensw.edu.au/info-session-join-link>

Face-to-Face: Thursdays June 26, & July 3, 2025 at 10:00am

Location: Building G, Room G1.09

COURSE STRUCTURE:

This course requires 20 (6 core & 14 elective) units of competency. Subjects/
Units delivered are:

Project Design (Cloud Application)

- ICTICT430 Apply software development methodologies
- ICTCLD507 Build and deploy resources on cloud platforms
- ICTPRG530 Manage projects using software management tools

Mobile Application Development (REACT Native)

- ICTPRG535 Build advanced user interfaces
- ICTPRG549 Apply intermediate object-oriented language skills
- ICTPRG553 Create and develop REST APIs
- ICTPRG554 Manage data persistence using NoSQL data stores
- ICTPRG603 Develop advanced mobile multi-touch applications

Data-Driven App Project (ASP.NET + C#.NET)

- ICTDBS506 Design databases
- ICTPRG443 Apply intermediate programming skills in another language
- ICTPRG547 Apply advanced programming skills in another language
- ICTPRG532 Apply advanced object-oriented language skills
- ICTPRG555 Implement object-relational mapping framework for data persistence
- ICTPRG556 Implement and use a model view controller framework

Project Planning

- 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
- BSBCRT512 Originate and develop concepts
- ICTICT517 Match ICT needs with the strategic direction of the organisation

Timetable: The timetable is published on our section website-
<http://infotech.hornsby.tafensw.edu.au/ViewTimetable.aspx>

REGISTER YOUR INTEREST

or for more information

Phone: 131 601

Website:
infotech.hornsby.tafensw.edu.au

Email: NSI.HO.IT@tafensw.edu.au

Course Enquiry:

nirmal.chowdhury@tafensw.edu.au

Enrol Now: www.tafensw.edu.au

CONTACT US FOR MORE INFORMATION

Contact: **Michael Kirkwood-Smith**

Phone: **02 7921 3612 or 131 601**

Email: michael.kirkwood-smith3@tafensw.edu.au

Website:
<http://infotech.Hornsby.tafensw.edu.au>

Nationally Recognised Training

This training is fully subsidised by the NSW Government (FREE Course).

Course Workload

- ✓ 20 hours per week face-to-face class attendance (Full Time).
- ✓ 10 hours per week face-to-face class attendance (Part Time).

Plus, you will be required to spend an equivalent amount of time on course work outside of class time.

Learning subjects include:

Mobile Application

- Learn to manage data persistence using NoSQL data stores.
- Learn Mobile Application development using React Native.
- Using REST APIs to develop multi-touch apps.

Project Design (Cloud Application)

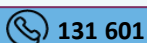
- Manage resources on a cloud platform.
- Apply industry standard software development methodologies in conjunction with the latest software development frameworks and architectures.

Data-Driven Application (ASP.NET & C#.NET)

- Design databases and implement object-relational mapping framework for data persistence for specific business requirements.
- Learn advanced programming & build advanced user interfaces for complex IT systems using advanced C#.NET language.
- Use ASP.NET to develop web applications for business solutions and integrate them as a component into a business application that is deployed to the cloud.
- Apply testing techniques and build object-oriented applications using sophisticated software architectural patterns.

Plan Planning

- Learn & promote workplace cyber security awareness and best practices.
- Manage client problems through analysing and producing ICT needs for strategic direction of an organisation.
- Learn how to lead & facilitate a team of an ICT project.



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This document is correct at the
time of printing: June 2025.
*Terms and conditions may apply.



RTO 90003