



Certificate IV in Information Technology (Programming)

National Code: ICT40120-06V02

On-Campus Delivery

COURSE DESCRIPTION:

This course will allow you to acquire the skills and knowledge required to effectively communicate with others while solving problems encountered in writing computer software applications using industry-standard programming languages, database environments, integrated development environments, and computer aided software engineering tools.

You will learn how to program using C#.NET and JavaScript and to design and create databases using Microsoft SQL Server. Gain skills in ICT analysis, managing workplace cyber security and object-oriented analysis & design (using UML).

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:

Completion of this certificate will provide you with the skills to apply for the Diploma of Advanced Programming.

Entry Requirements:

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

- Completed Certificate III in IT or equivalent with a clear understanding of:
 - ✓ How to operate a computer
 - ✓ How businesses work
 - ✓ Some understanding of Programming
 - ✓ How to install and configure software
 - ✓ A very good knowledge of software applications such as Word Processing and Spreadsheets with above average typing speed
 - ✓ How to manage files and folders on a computer, and a good typing skills.
- Language, Literacy and Numeracy (LLN) skills at Level 3 (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, 18 hrs/week.
Delivered in **Face-to-Face** class mode.

Part-Time Day: 12 months, 9 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 (7 core & 13 elective) units of competency. Subjects/ Units delivered are:

Introductory Scripting (JavaScript)

- ICTWEB431 Create and style simple markup language documents
- ICTPRG440 Apply introductory programming skills in different languages

Relational Database Design & SQL

- ICTDBS416 Create basic relational databases
- ICTPRG431 Apply query language in relational databases

Analysis & Design

- ICTPRG444 Analyse software requirements
- ICTPRG441 Apply skills in object-oriented design

Object-Oriented (C#.NET) Programming & Testing

- ICTPRG302 Apply introductory programming techniques
- ICTPRG430 Apply introductory object-oriented language skills
- ICTPRG439 Use pre-existing components
- ICTPRG432 Develop data-driven applications
- ICTPRG433 Test software developments

Mobile Application Development

- ICTPRG436 Develop mobile applications
- ICTPRG437 Build a user interface
- ICTICT449 Use version control systems in development environments

ICT Analysis & Workplace Security

- BSBCRT404 Apply advanced critical thinking to work processes
- ICTICT426 Identify and evaluate emerging technologies and practices
- ICTSAS432 Identify and resolve client ICT problems
- ICTICT443 Work collaboratively in the ICT industry
- BSBXCS404 Contribute to cyber security risk management
- ICTICT451 Comply with IP, ethics and privacy policies in ICT environments

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**

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

Nationally Recognised Training

This training is subsidised by the NSW Government **(Not a Free Course)**.

Course Workload

- ✓ 18 hours per week face-to-face class attendance (Full Time).
- ✓ 9 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:

C#.NET Programming

- Learn intermediate-level programming skills in C#.NET, and build user interfaces for software applications.
- Utilise the C#.NET APIs and class libraries to automate business processes.
- Develop data-driven Application in C#.NET, and test software applications.
- Analyse software requirements, design Object-Oriented solutions using the Unified Modelling Language (UML) and implement the design in application development.

JavaScript

- Learn introductory, through to intermediate-level front-end programming skills in HTML, CSS & JavaScript languages.
- Utilise Scripting skills in the development of software applications.

Mobile App

- Learn introductory, through to intermediate-level programming skills in React Native using JavaScript and develop a small mobile application.

Database

- Analyse, model, and build relational databases for specific business requirements.
- Define and manipulate data and data structures using SQL.

ICT Analysis and Workplace Cyber Security

- Gain skills in ICT Analysis and Managing Workplace Cyber Security.



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



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