



THE
**Northern
Sydney
Institute**
Part of **TAFE**
NSW

Diploma of Software Development (National Code: ICT50715)

Hornsby Campus Information Technology

Is this course for me?

This course is for people who want to be competent in leading the analysis, implementation and management of emerging and converging information and communication technologies as they are integrated into the business process to support organisational strategic goals.

What skills are required before I enrol?

The preferred pathways for applicants into this qualification include:

Successful completion of ICA40511 (TAFE Course Number 10317) Certificate IV Programming or other relevant qualifications or units equivalent to the core of ICA40511 or Demonstrated vocational experience in a range of programming-related work environments in software programming, application programming, web development or similar.

How long does this course take?

And how much time do I need to put into it?

This course will take 18 weeks full time (one semester) or 36 weeks part time (two semesters, 6-9 hours per week). While you are studying you will need to spend some time outside of the classrooms working on set work and assessments. This time will vary from week to week. Full time study attendance is 18-20 hrs/week with up to 18 hrs of work outside of class. Part time study is around 6-9 hrs of attendance with around 9 hrs of work outside of class.

What will I be able to do after the course?

Graduates of this course can apply for a career in many Information and Communications Technology Industry roles with a focus on designing, developing and implementing dynamic, data driven software applications.

Other job roles include developing applications solutions to support business processes and systems, designing software solutions for businesses wishing to take on new business and assisting with the definition of an organisation's Information Technology infrastructure so that it supports their existing business processes.

Relevant job roles for graduates of this course include:

- assistant software developer
- assistant systems analyst
- chief information officer
- information systems manager
- information technology director
- information technology manager
- senior infrastructure delivery manager
- service delivery manager

When you finish this course, you may be eligible for advanced standing in ICA11 Advanced Diploma or Vocational Graduate Certificate qualifications or other higher education sector qualifications.

What will I learn?

There are five main “focus areas”

Data Modelling	Course Units
<ul style="list-style-type: none"> ✓ In this stream you will learn application of Structured Query Language to manipulate data and data structures, design, build and configure databases and model data objects for specific business requirements. 	ICTSAD501 Model Data objects ICTSAD502 Model Data Processes
Mobile Applications	Course Units
<ul style="list-style-type: none"> ✓ You will learn intermediate level skills in mobile programming on Android platform, develop multi-touch application development. ✓ Integrate mobile app into a business application. 	ICTPRG505 Build advanced user interface ICTPRG601 Develop advanced mobile multi-touch applications
Cloud Applications	Course Units
<ul style="list-style-type: none"> ✓ You will learn how to develop Cloud-based application for business solutions ✓ Integrate the Cloud-based component in business application. 	ICTPRG418 Apply intermediate programming skills in another language ICTPRG523 Apply advanced programming skills in another language ICTPRG604 Create cloud computing services ICTPRG529 Apply testing techniques for software development
Client/Server Applications	Course Units
<ul style="list-style-type: none"> ✓ In this stream you will learn intermediate, progressing to advanced, programming skills in both C#.Net ✓ How to build advanced user interfaces for complex IT systems. ✓ Learn and apply testing techniques, build OO applications, debug and monitor application performance and you will learn how to validate an application design against a requirements specification. ✓ You will learn how to develop software applications that are integrated with a database such as SQL Server or MySQL. ✓ You will also learn how to test Information Technology systems. 	ICTPRG520 Validate an application design against specs ICTPRG527 Apply intermediate object-oriented language skills ICTPRG501 Apply advanced object-oriented language skills ICTPRG503 Debug and monitor applications ICTPRG504 Deploy an application to a production environment
IT Project Management	Course Units
<ul style="list-style-type: none"> ✓ You will learn how to analyse complex software requirements, design Object Oriented systems using the Unified Modelling Language (UML) and project manage medium to large scale IT projects. 	ICTICT403 Apply software dev. methodologies ICTPRG502 Manage a project using software management tools ICTICT418 Contribute to copyright, ethics and privacy in an ICT environment

How will I be assessed?

For each stream you will need to complete some projects and tests. The projects and tests are spread out over the length of the course. Each teacher will provide you with a semester schedule which lists the assessments and due dates.

How do I enrol?

Visit <http://www.nsi.tafensw.edu.au/Courses/EnrollingAndRegistering/Default.aspx> for information on how to enrol.

What costs are involved?

Fees are set by TAFE NSW and change each year. The fees can be viewed at <http://www.nsi.tafensw.edu.au/Courses/EnrollingAndRegistering/FeesAndFinancialAssistance/Default.aspx>

Where can I get more information?

Our website contains a lot of important information. <http://infotech.hornsby.tafensw.edu.au/>

If you need to ask questions please contact the course coordinator- **Peter Panagopoulos**

Email: peter.panagopoulos@det.nsw.edu.au **Phone:** 9472 1392