

Graduate Diploma in Information and Communications Technology (Software Development)

Level 7

This one-year graduate diploma will enable you to gain the skills and knowledge that are in high demand in the ICT industry.

Career opportunities exist in a variety of roles such as: software architect, software tester, software contractor, software engineer, database architect, database administrator.

PROGRAMME CONTENT

- Analyse and evaluate industry principles and practice in a professional context
- Analyse and apply ICT project management theory and practice
- Evaluate, design and construct quality software
- Design and construct applications for mobile devices
- Design, create and administer data warehousing
- Design and construct business applications
- Explore a specific topic to extend skills to a higher level



ENTRY REQUIREMENTS

Entry will be open to graduates who hold a degree in an ICT related discipline or are able to demonstrate equivalent practical, professional or educational experience in ICT. For international students, an IELTS score of 6.0 or equivalent is required.

Location:	UCOL Palmerston North Campus	
Fees:	Domestic Students:	NZD\$5,257
	International Students:	NZD\$15,323



UCOL is a New Zealand Government Funded Institute of Technology.

(The programme fees shown are per annum and are subject to change. All fees shown are in NZ dollars and include NZ Goods & Services Tax, Student Association fee and the Student Levy.)

PALMERSTON NORTH • WHANGANUI • WAIRARAPA • ONLINE

0800 GO UCOL
4 6 8 2 6 5

enquiry@ucol.ac.nz
www.ucol.ac.nz

UCOL
UNIVERSAL COLLEGE OF LEARNING



Graduate Diploma in ICT (Software Development) Level 7

Papers required: D201, D301, D303, D311, I202, I301, I309, and one optional Level 6 or 7 paper in the Software Development or Information Management field.

120 credits consisting of:
 Minimum of 5 x Level 7 papers = 75 credits
 Remaining 45 credits from Level 6 or 7 papers

MARCH ENROLMENT

Semester One	Semester Two
I301 Professional Practice	I309 Special Topic
D201 Advanced Programming	I202 IT Project Management
D311 Advanced Database	D301 Software Engineering
Optional Level 6 or 7 paper in the Software Development or Information Management field	D303 Java Mobile and Web

JULY ENROLMENT

Semester One	Semester Two
I301 Professional Practice	I309 Special Topic
I202 IT Project Management	D311 Advanced Database
D201 Advanced Programming	D301 Software Engineering
D303 Java Mobile and Web	Optional Level 6 or 7 paper in the Software Development or Information Management field

Pending ITP Quality approval. All papers approved by the New Zealand Qualifications Authority. This is intended as a general guide only. Some of the information contained in this flyer may be subject to change. This flyer supersedes all previous flyers. Please ensure you have the current flyer or check the UCOL web site for the current programme information.

CONTACT AND ENQUIRIES

Enquiries may be made to the Universal College of Learning (UCOL)

Phone: +64 6 952 7000 or 0800 GO UCOL
 Email: internationalstudent@ucol.ac.nz
 or enquiry@ucol.ac.nz
 Website: www.ucol.ac.nz



Graduate Diploma in ICT (Software Development) – Level 7
OVERVIEW OF THE PAPERS FOR 2010

Compulsory Paper	Title	Credits	Extract from Curriculum Paper Description
D201	Advanced Programming	15	To introduce standard algorithms required for business application programming. Learning Outcomes <ul style="list-style-type: none"> • Design and Construct small applications using a variety of algorithms • Devise test plans to ensure quality software • Create system maintenance documentation
D301	Software Engineering	15	To design and construct quality software ready for distribution Learning Outcomes <ul style="list-style-type: none"> • Perform object-oriented design and programming with a high level of proficiency • Secure applications so that they are ready for distribution • Conduct effective and efficient inspections • Evaluate software user interfaces for accessibility and usability • Design and implement comprehensive test plans
D303	Java Mobile and Web	15	To develop a small, enterprise-level Java application that provides support for a mobile workforce Learning Outcomes <ul style="list-style-type: none"> • Construct Java Server Pages • Design and construct a supporting application for a mobile device • Create client-side Java applications • Interface with business data held in a legacy relational database system
D311	Advanced Database Concepts	15	To enable a student to successfully design, create and administer a data warehouse using a server-based database management system. Learning Outcomes <ul style="list-style-type: none"> • Discuss and argue a given data warehousing topic • Install a server-based database management system • Design and create a data warehouse schema • Transfer and transform data from more than one data source into a data warehouse • Analyse and process data for management reporting • View pre-processed information from the data warehouse from a separate application
I202	IT Project Management	15	This paper will give an understanding of project management theory and practice as it relates to the ICT industry. Learning Outcomes <ul style="list-style-type: none"> • Analyse and discuss the nine knowledge areas of project management • Demonstrate knowledge of project teams including co-located and virtual teams • Develop a project plan for an IT related project • Demonstrate the practical application of a project management tool
I301	Professional Practice	15	To apply communication theories and practice in a professional context. Students will also source an industry project and produce appropriate documentation. Learning Outcomes <ul style="list-style-type: none"> • Analyse and evaluate applied communication principles • Demonstrate effective communication skills • Procure an industry based project • Create project scope documentation • Demonstrate ability to work in teams
I309	Special Topic	15	Pursue an area of special interest under the guidance of a UCOL academic staff member.

Please select one of the following optional papers

Optional Paper	Title	Credits	Extract from Curriculum Paper Description
D211	Database Development	15	<p>To effectively design an information system for a complex business application</p> <p>Learning Outcomes</p> <ul style="list-style-type: none">• Evaluate alternative design solutions• Design a complex information system• Create a prototype from a design• Formulate quality processes
I201	Organisational Systems	15	<p>To analyse organisational structures, systems and processes and use associated computerised tools.</p> <p>Learning Outcomes</p> <ul style="list-style-type: none">• Analyse organisational entities and structures• Analyse the business environment including legislation and ethics• Analyse functional business systems• Apply applications that support business processes