NZ DIPLOMA IN WEB DEVELOPMENT & DESIGN

LEVEL 5 120 Credits, Year 1

Websites are an essential tool for todays successful business, requiring up-to-date technology and effective user experience design.

This course is designed for those wishing to start their own web design business, want to work within an established organisation or up-skill their own level of understanding of web design. The programme takes you from determining client needs to choosing a CMS, utilising databases, designing the user experience and configuring a website.

It also covers programming and IT technical support, to maximise the graduate employment opportunities and allow them to determine which specific aspect they wish to ultimately specialise in. From here, graduates can move into our level 6 Diploma in Software Engineering and Design to become a 'Full Stack' developer.

AIM:

This programme aims to equip learners with knowledge and skills in website design and web programming including HTML, CSS, scripting, and the use of a specialist programming language so that they are prepared for employment in entry level roles in web development and design.

GRADUATE PROFILE:

Graduates are equipped with knowledge and skills in website design and web programming, including HTML, CSS and scripting, and use of a specialist programming language and are prepared for employment as web designers. Graduates are awarded the New Zealand Diploma in Web Development and Design.

DELIVERY: FULL-TIME **CAMPUS: AUCKLAND** **DURATION: 9 MONTHS**

INFORMATION:

CAREER OPTIONS	Graduates of this qualification will have the skills and knowledge to work in the IT industry in an entry level role in an organisation that provides web development and/or design services, particularly in the customisation of packaged software solutions, or in a graphic design organisation; or work in such fields in a self-employed capacity.
FURTHER STUDY	New Zealand Diploma in Software Development (level 6)
AWARD(S)	New Zealand Diploma in Web Development and Design.
COMPLETION REQUIREMENTS	120 credits, as listed in the programme structure.
ENTRY REQUIREMENTS	Applicants must be over 16 years of age, hold the National Certificate in Computing (Level 3) or have equivalent prior learning or Form 6 or Year 12. A background in Mathematics to NQF Level 2 is preferred. A minimum of 4 years secondary education is preferred. IELTS 5.5 for international students with no band lower than 5.0.

COURSE PRESCRIPTORS:

WEB PROGRAMMING AND INTERFACE ANALYSIS AND DESIGN

At the successful completion of this course, students will be able to: Determine client requirements for a web application; Carry out responsive design (with device and platform independence) of user experience (Ux) and implement principles of design; Optimise media for the web; Apply programming skills using web programming languages; Apply Test Driven Development Methods; Implement Rich User Interfaces with a Scripting language

CONTENT MANAGEMENT SYSTEMS AND FRAMEWORKS

At the successful completion of this course, students will be able to: Successfully contribute to the publishing of a solution in a web publishing platform

IT SUPPORT

At the successful completion of this course, students will be able to: Apply the core IT technical skills and knowledge addressed in the NZ Certificate in Information Technology Ref: 2595; Install and configure systems and application software; Foundation networking, including internet concepts; Hardware and software diagnostic testing, maintenance, technical and customer support across a range of devices; Support end user requirements; Security concepts, tools and techniques

DATABASE DESIGN AND INTEGRATION

At the successful completion of this course, students will be able to: Design relational databases using SQL or suitable Data Access Service; Design relational databases using entity-relationship modelling; Demonstrate their understanding of database concepts through the creation of practical database solutions; Perform a range of Query Language queries; Design and implement appropriate application data access, management, and storage technologies to match the application domain; Integrate databases with web applications using a Data Access Service

INTRODUCTION TO SOFTWARE PROGRAMMING

At the successful completion of this course, students will be able to: Write clean quality code using the best coding conventions; Identify the characteristics and benefits of and apply structure diagrams, pseudo code, flow charts and knowledge of iterations to solve software problems; Create accurate and clear technical and user documentation; Create and run Unit Tests

SOFTWARE TESTING AND SECURITY

At the successful completion of this course, students will be able to: Design a variety of tests including unit and system tests, usability testing, user acceptance tests; Test on a range of platforms, eg, multiple devices and environments; Move a solution from a test environment to a live platform; Produce user training material

PROFESSIONAL PRACTICE

At the successful completion of this course, students will be able to: Demonstrate professional behaviour; Demonstrate communication, information design skills, report and technical writing; Demonstrate personal and interpersonal skills, including teamwork, customer service