

TTI School of Information Technology

Paper Descriptions

Certificate in Information Technology Level 4			
Paper Code	Level	Description	Prerequisites
4102	Level 4	Communication	
	Aim	Students will learn the skills of vocabulary acquisition and use reading, note taking, critical thinking, writing and oral presentation in a business context.	
4107	Level 4	Mathematics	
	Aim	Following successful completion of this paper, the student will be able to: read and interpret tables and graphs, display data in both graph and table form, estimate answers to problems, become familiar with scientific calculator operations, solve problems in context, involving decimals, percentages and money and measure accurately and use their own measurements to solve problems in context.	
4110	Level 4	System Development	
	Aim	This course covers the fundamentals of system development, Microsoft Visual Basic Application Software. To introduce students on how to use Visual Basic (VB) to design simple interface, process to build a simple programming, and translation into a simple programming language.	
4111	Level 4	System Administration	
	Aim	This course covers the fundamentals of computer hardware and software such as Operating system, Application Software, and Fundamental of OOS (Occupational Overuse Syndrome). Students who complete this course will be able to describe the internal components of a computer, understand the function of Operating System, understand how to use email to send workplace documents and they will understand the idea of Ergonomic.	
Certificate in Information Technology Level 5			
*compulsory papers			
Paper Code	Level	Description	Prerequisites
IT5x70*	Level 5	Programming Logic (15 credits)	
	Aim	To introduce students to logic and mathematical theory underpinning computer programming. To introduce students to simple computer programming tasks.	
IT5x71*	Level 5	Digital Media (15 credits)	
	Aim	To introduce students to interactive media graphic technologies.	
IT5x72*	Level 5	Internet Communications (15 credits)	
	Aim	Introduction to Communications and Internet fundamentals, the tools used to construct websites containing multimedia components.	
IT5x73*	Level 5	Hardware Fundamentals (15 credits)	

	Aim	To provide students with the knowledge and skills required to assemble and configure a computer, install operating systems and other software, and troubleshoot hardware and software problems in a remote technician role. The content of this module is based on Cisco Network Academy IT Essentials course content and is intended to prepare students for CompTIA's A+ certification examination.	
--	-----	---	--

Diploma in IT L5, Diploma in IT L6

*compulsory papers

Paper Code	Level	Description	Prerequisites
IT5x81*	Level 5	Communication Studies (15 credits)	
	Aim	To introduce students to major developments in Information Technology in New Zealand. To introduce students to the theories, principles and practical skills associated with effective communication in relation to Information Technology contexts.	IELTS 6.0 Or prescribed alternatives
IT5x82	Level 5	Fundamentals of Data Models and Databases (15 credits)	
	Aim	To introduce students to the concepts of data models and databases.	
IT5x83*	Level 5	Fundamentals of Software Development and Design (15 credits)	
	Aim	To provide students with an understanding of computer software through the study of logic methods, software development and documentation methods, and give experience in using simple programming language elements. To understand concepts of systems theory, the stages of the systems development life cycle, and concepts in systems analysis and design.	
IT5x84	Level 5	Programming (15 credits)	
	Aim	To introduce students to fundamental programming skills. To provide an opportunity to develop and maintain applications in a commonly used programming language.	
IT5x85*	Level 5	Mathematics for Information Technology (15 credits)	
	Aim	To introduce students to the concepts of discrete mathematics that are fundamental to Information Technology.	
IT5x86*	Level 5	The Information Technology Environment (15 credits)	
	Aim	To introduce students to fundamental business concepts and principles, and how these relate to the Information Technology industry. To provide students with grounding in legal, ethical and professional issues related to the Information Technology industry, and to enable them to make decisions according to accepted standards.	
IT5x87	Level 5	Fundamentals of Networking (15 credits)	

	Aim	To introduce students to the fundamental concepts and principles of computer networking systems administration. To provide an understanding of networking and data communications principles, and enable students to experience installation and troubleshooting of networks.	
IT5x89	Level 5	Introduction to Operating Systems	
	Aim	To introduce the underlying principles, evolution and the implementation of operating systems. To provide an opportunity to gain experience in using operating system instructions.	
IT6x11*	Level 6	Research and Theory in Information Technology (15 credits)	
	Aim	To introduce students to the theories of communications. To consider theories of investigation and research methodologies, and apply scientific research principles to a topic of interest. To provide practice in the basic probability and statistical principles needed in an Information Technology environment using statistical software packages.	IT5x01 or IT5x81
IT6x23	Level 6	Software Development Methods (15 credits)	
	Aim	To provide students with advanced programming skills. To allow students to gain experience in using prototyping techniques during the development of software applications	IT5x04 or IT5x84
IT6x26	Level 6	Data Models and Databases (15 credits)	
	Aim	To give students an understanding of database design. To enable students to produce data models and implement database management systems. To provide students with a thorough understanding of the features of structured query language, including recognition of its importance, management implications and integration with other components of the computing environment. To enable students to understand and apply data modelling techniques.	IT5x03 or IT5x82
IT6x28	Level 6	Evaluation and Procurement (15 credits)	
	Aim	To enable students to conduct an evaluation and procurement exercise. To enable students to determine and use appropriate information gathering techniques, assess the type of information and appropriately document and present the results.	
IT6x29	Level 6	Systems Analysis and Design (15 credits)	
	Aim	To enable students to apply current systems analysis techniques. To enable students to produce and present well-designed system inputs, outputs, and design documentation.	IT5x03 or IT5x83
IT6x30	Level 6	Internet Application Development (15 credits)	
	Aim	To introduce students to the principles of interface design and evaluation of Internet-based applications. To implement Internet-based application suitable for business purposes.	IT5x82 and IT5x84
IT6x87	Level 6	Network Technologies (double paper 30 credits)	
	Aim	To provide an understanding of Local Area Network (LAN) design, including the knowledge and skills required to configure a complex LAN. To provide students with an understanding of Wide Area Networks	IT5x17 or IT5x87

		(WAN's). To provide students with a basic understanding of network security.	
IT6x19	Level 6	Operating Systems (15 credits)	
	Aim	To understand the underlying principles of Operating Systems for desktop and server systems in a network environment. To apply the underlying principles and concepts of operating systems to the implementation and configuration of operating systems in a network environment. To apply the underlying principles and concepts of operating systems to the implementation and configuration of an operating system for a server in a network environment.	IT5x17 or IT5x89
IT6x21	Level 6	Introduction to 3D Modelling and Animation (15 credits)	None
	Aim	To introduce students to 3D graphics, animation, software and environments. Students will gain an understanding of 3D modelling, animation, texturing and rendering techniques. Students will experience a range software tools to build 3D models, develop motion and render.	