



DIPLOMA OF INFORMATION TECHNOLOGY (SYSTEMS ADMINISTRATION)

SGA Subject*	Purpose Statement
Basic Computer Operations	This subject defines the competency required to operate a personal computer, including starting the PC, logging in, using and understanding desktop icons and their links to underlying programs, navigating a directory structure, selecting and correctly operating peripherals, saving work, printing, and closing down the PC.
Develop Keyboarding Skills	This unit will provide the learner with the knowledge and skills to develop basic keyboard skills using touch typing techniques.
Word Processing	This subject addresses the competency required to correctly operate word processing applications and perform basic operations including the creation and formatting of documents, creating tables, printing labels and mail merge.
Spreadsheets	This subject defines the competency required to correctly operate spreadsheet applications and perform basic operations.
Databases	This subject defines the competency required to correctly operate database applications and perform basic operations.
Presentation Graphics	This subject defines the competency required to operate presentation applications and perform basic operations.
Integrate Business Applications (for IT learners)	This subject defines the competency required to produce organisational documents using application software within organisational guidelines, procedures and policies. It incorporates the manipulation, conversion and integration of data between at least two different commercial software applications, including the development of macros and templates, and other advanced features.
IT Workplace Skills	This subject focuses on the competencies required to work effectively within the IT environment of an organisation.
Database Design and Implementation	This subject will provide the learner with the knowledge and skills to analyse, design, implement and review the customisation of packaged software applications using simple programming constructs, define and document reference material to use, support and maintain system.
Systems Analysis and Design	This subject will provide the learner with the knowledge and skills to determine client business needs, generate a feasibility report, and build a model for a proposed system design.
Resource Planning	This subject will provide the learner with the knowledge and skills to apply technical knowledge in preliminary analysis of emerging technology, project communications and risk management and to assess current and future capacity requirements of a system.
Build a Server	This subject defines the competency required to choose appropriate hardware and software and to design, build, configure and test a server. It also covers connecting hardware devices, mainly personal computers, to an internet gateway.



Java Programming	This subject describes the use of basic mathematical methods and operations with real numbers and their precedence, the evaluation and construction of formulae in standard and computer notation and the use of Boolean algebra, data types and computer storage. This will lead to the cyclic process of iteration from identification of class, instance, role, and type to the final complete OO model of the application. It includes tool usage, documentation, debugging and testing techniques in support of programming activities, and identification, evaluation and incorporation of library or pre-existing components. Learners will also be required to automate solutions by using basic scripting processes and application-specific scripting options.
Operating Systems and Hardware	This subject will provide the learner with the knowledge and skills to observe safe work practices while operating in an information technology environment. The range of skills will include the connection of internal hardware components and peripherals according to specifications, as well as the installation and optimisation of system software and applications.
Systems Support/ Helpdesk	This subject addresses the determination and action of computing problems, provision of maintenance, resolution of a defined range of equipment and software problems, and maintenance of accurate records according to organisational guidelines.
Systems Security	This subject will provide the learner with the knowledge and skills to implement and manage security functions on a system.
Integrated Project	This subject will provide the learner with the knowledge and skills to manage overall project scope in the context of schedules, budgets, risk and contracts towards establishing agreed baselines for supplier/client requirements.
Systems Maintenance	This subject will provide the learner with the knowledge and skills to manage the reactive errors and failures to a live system and identify maintenance strategies and supporting processes to maintain continuity of IT operations and business functions.
Workplace Safety (for IT Learners)	This unit will provide the learner with the knowledge and skills to demonstrate awareness of OHS responsibilities of employees to implement and monitor the organisation's Occupational Health and Safety policies, procedures and programs in a small team to meet legislative requirements.
Project Management	This subject covers management of generally low risk projects that may be small scale and managed by one person or a person with a small team. It includes implementing project start-up activities, coordinating project implementation, monitoring the project and arranging follow-up activities.
Introduction to Networking	This subject defines the knowledge and skills required to transfer and apply skills and knowledge to new technology and situations, to plan, manage and support the installation of new components and protocols in a network and to convey comprehensive technical information to clients.
Network Administration	This subject will provide the learner with the knowledge and skills to manage the setting up of a network system, the network configuration and the administration of a network and networked peripheral environment in order to provide services to client users.
Web Page Authoring	This subject defines the skills and knowledge required to update web pages, as well as use development software to design, create and save basic web pages, and create a simple mark-up language document using a mark-up language and text editor rather than a code generator.
Web Server Systems Implementation and Testing	This subject will provide the learner with the knowledge and skills to identify the prerequisites needed for the installation of software, to ensure the system is operational prior to client use and to manage the hand over to client.

* Embedded within each subject is a cluster of endorsed national units of competency.