NEWSTEAD COLLEGE
INFORMATION TECHNOLOGY

2017
SUBJECT OFFERINGS

Newstead College
Department of Education

Tasmanian
Government

Cisco PC Hardware and Software
CISCOITE0

TCE Points	15 credit points
Level	2
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	NO
Demonstrates TCE ICT standard	NO
EXTERNAL EXAM	NO
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	NO
HIGHLY RECOMMENDED	Some computing background
SUGGESTED FOUNDATION SUBJECT YR 11	Can be studied in Year 11 or 12.
EXTRA CURRICULA OPPORTUNITIES	N/A

SUBJECT DESCRIPTION

You will learn about:
Fundamentals of computer hardware and software and advanced concepts such as security, networking and the responsibilities of an IT professional.

You do this by studying:

- **Components and assembly of desktop computers.**
- **Preventative maintenance of computers.**
- **Installation and navigation of operating systems.**
- **Configuring computers and devices to a network.**
- **Hardware and software security principles.**
- **Responsibilities of an ICT professional.**

This subject:

- **Develops the skills currently expected of those employed in the I.T. industry.**
- **Prepares for roles as a remote support technician, help desk technician, call centre technician, IT specialist or IT representative.**

CISCO™
Networking Academy

Past Students Said:

"The Cisco certificate is an internationally recognised qualification and it could help me gain employment anywhere in the world."

Computer Science 2/3
ICT315113

TCE Points	15 points
Level	2/3
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	NO
Demonstrates TCE ICT standard	YES
EXTERNAL EXAM	YES
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	NO
HIGHLY RECOMMENDED	Computing 2
SUGGESTED FOUNDATION SUBJECT YR 11	Computing 2

SUBJECT DESCRIPTION

In Computer Science you will learn the Java programming language with a focus on making Applets which are small web-based programs. This course consists of project work as individuals/small team where you plan and program a small project such as an application, utility or game. Java is a simple but powerful language used by websites and some games (e.g. Minecraft is Java programmed).
In Java you will learn:

- **Basic commands – such as receiving inputs from a user and display an output.**
- **Flow control – how to vary the behaviour of the program based on inputs or calculations.**
- **Repetition – how to repeat and reuse sections of code to simplify repetitive processes.**
- **Algorithms – planning and design will ensure your program performs as expected.**
- **Higher level ideas – such as objects, listeners and interfaces and how to work with them.**
- **Computer Science also looks at the way computers work and how they store and handle data and you will cover:**
- **Binary numbers and their use in computers, including image formats.**
- **Logic systems and basic electronics.**
- **How a computer interprets and carries out commands.**

Computing 2
ICT205114   ESC205114   PRJ205113

TCE Points	15 points
Level	2
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	NO
Demonstrates TCE ICT standard	YES
EXTERNAL EXAM	NO
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	YES
HIGHLY RECOMMENDED	An interest in computing
SUGGESTED FOUNDATION SUBJECT YR 11	YES
EXTRA CURRICULA OPPORTUNITIES	YES

SUBJECT DESCRIPTION

You will complete 3 courses when completing this computing subject, each is worth 5 points.

- **ESSENTIAL SKILLS USING THE COMPUTER & THE INTERNET**
  This course is designed for learners who need to develop their everyday adult skills in the use of computers and the internet in order to achieve their educational and vocational goals.

- **COMPUTER APPLICATIONS**
  This course is designed for the competency of specific computing applications. Learners will undertake focused learning in one of the following areas (this will be build students confidence to pursue other computing subjects in year 12 particularly for preparation for Level 3 computing subjects) : Information Processing – Business – Information Management – Publishing – Multimedia – System Management and Support – Programming and Control

Past Students Said:

" I am able to build my computer skills and look towards developing them further by doing a level 3 subject."

INFORMATION TECHNOLOGY

Information Systems and Digital Technologies 3
ITS315113

TCE Points	15 points
Level	3
Demonstrates TCE literacy standard	NO
Demonstrates TCE numeracy standard	NO
Demonstrates TCE ICT standard	YES
EXTERNAL EXAM	YES
EXTERNAL FOLIO	NO
AVAILABLE THROUGH FLEXIBLE DELIVERY	NO
HIGHLY RECOMMENDED	Computing 2
SUGGESTED FOUNDATION SUBJECT YR 11	Computing 2

SUBJECT DESCRIPTION

Information Systems and Digital Technologies looks at how existing and emerging technologies are used to solve 'real world' problems and manage project tasks.

There is approximately 50% practical work and 50% theory work. Prior experience in projects in ICT is helpful.
You will study:

- **How real world projects are managed by time completion, staff, costs, etc.**
- **How data, equipment, people and procedures interact to set up efficient systems, and apply this knowledge to, for example, set up a system to manage a 'fun run'**
- **The steps involved in project management including how to start, how to do it and how to complete a project successfully.**
- **Learn many concepts that will enhance study in a wide variety of tertiary (Uni or Tafe) areas including computing, or other subjects which use computing, eg. Science/engineering, law, arts, economics/commerce/ management.**
- **Investigate and discuss many types of social, legal and ethical aspects of technology usage.**
- **Research and investigate case studies.**