COMPUTING

Unit 1
Applied Computing

COURSE OUTLINE:

In this area of study students are introduced to the stages of the problem-solving methodology. Students focus on how data can be used within software tools such as databases and spreadsheets to create data visualisations, and the use of programming languages to develop working software solutions.

AREAS OF STUDY:

- Data analysis
- Programming

OUTCOMES:

On completion of this unit, students should be able to:

1. Interpret teacher-provided solution requirements and designs, collect and manipulate data, analyse patterns and relationships, and develop data visualisations to present findings.

2. Interpret teacher-provided solution requirements to design, develop and evaluate a software solution using a programming language.

ASSESSMENT:

See Unit 2

Unit 2
Applied Computing

COURSE OUTLINE:

In this unit students focus on developing innovative solutions to needs or opportunities that they have identified, and propose strategies for reducing security risks to data and information in a networked environment.

AREAS OF STUDY:

- Innovative solutions
- Network security

OUTCOMES:

On completion of this unit, students should be able to:

1. (In collaboration with other students), analyse, design, develop and evaluate an innovative solution to an identified need or opportunity involving a digital system.

2. Respond to a teacher-provided case study to examine the capabilities and vulnerabilities of a network, design a network solution, discuss the threats to data and information, and propose strategies to protect the security of data and information.

ASSESSMENT:

S or N based on the demonstrated achievement of the outcomes specified for the unit.