**Mathematics A**

Status ......................... AUTHORITY SUBJECT
QCE Credit Points ............. 4

**Recommended Requirements for Success:**
- For a realistic chance of success in Mathematics A a sound achievement (C) in Year 10 Mathematics is desirable.
- You will need to be able to work mathematically and be prepared to undertake assignments and tasks that require a reasonable amount of calculation.

**AIMS**
Mathematics is an integral part of a general education. It is important in making informed decisions on everyday issues such as:
- choosing between loan repayment schedules or insurance plans
- interpreting information in the media
- reading maps or house plans
- estimating quantities of materials

In Mathematics A, the skills needed to make decisions which affect students’ everyday lives are provided. These skills are also called on in other subjects and provide a good general background for many areas of tertiary study. The study of Mathematics A will emphasise the development of positive attitudes towards a student’s involvement in mathematics. This development is encouraged by an approach involving problem solving and applications, working systematically and logically, and communicating with and about mathematics.

**Course Outline**
Mathematics A consists of core topics and an elective topic.
The core topics are:
- Managing Money I and II, bank interest, credit cards, loans, foreign exchange, taxation, budgeting, investments
- Elements of Applied Geometry, simple trigonometry, area and volume, latitude, longitude and time zones
- Data Collection and Presentation, graphical and tabular presentations, simple methods for describing and summarising data
- Linking Two and Three Dimensions, scale drawings and plans, estimation of quantities and costings
- Maps and Compasses involving Land Measurement, practical use of a variety of maps, compass bearings, orienteering, site plans
- Exploring and Understanding Data, summary statistics, simple probability, interpretation of reports in the media
- The elective topic will be Networks and Queuing.

**Assessment**
Three Assessment instruments per Semester: Two exams (Mid and End Semester) and one Report or Extended Modelling and Problem Solving task.

**Note:**
Mathematics A is a very useful subject for many careers and courses, but cannot be used as a replacement for Mathematics B when Mathematics B is specified as essential.
- Mathematics A can be studied in conjunction with Mathematics B, and complement students knowledge in each subject.

**Future Pathways**
Mathematics A provides students with suitable grounding in the areas of mathematics required by many tertiary courses and vocations as well as for the practicalities of everyday life. Mathematics is an integral part of a general education. It can enhance understanding of our world and the quality of our participation in a rapidly changing society.

**Cost:**
The costs associated with this course are included in the Student Resource Scheme.

**Additional:**
A scientific calculator is required
Possible excursion to Dreamworld in Year 11 approximately $55