# MATHEMATICS

# Unit 1&2 General Mathematics

## COURSE OUTLINE:

This course has been designed for students preparing for work in a service industry, banking or an administrative or clerical job. The content provides sufficient grounding for students wishing to undertake General Mathematics Units 3 & 4 as preparation for further studies in such areas as Business Studies, Economics, Social Science or Biological Science.

### AREAS OF STUDY:

- Statistics Univariate + Bivariate
- Linear Equations and Graphs
- Variation
- Shape and Measurement
- Geometry and Trigonometry
- Recursion and Financial Sequences
- Matrices
- Networks

#### OUTCOMES:

On completion of these units, students should be able to:

1. Define and explain key concepts in relation to the topics from the selected areas of study and apply a range of mathematical routines and procedures.

2. Apply mathematical processes in non-routine contexts and analyse and discuss these applications of mathematics in at least three areas of study.

3. Use technology to produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches in at least three of the areas of study.

## ASSESSMENT:

S or N based on the demonstrated achievement of the outcomes specified above. In addition, a level of achievement A+ to E or N will be reported based on results obtained in assessment tasks which include assignments and homework, tests and an exam for each unit.

## Unit 3&4 General Mathematics

## COURSE OUTLINE:

This course would suit students preparing for further study in such areas as Business Studies, Economics Courses, Social Science or Biological Science.

#### AREAS OF STUDY:

Students study a common core:

- Data analysis, recursion
- Financial modelling
- Matrices
- Networks and Decision Mathematics

## OUTCOMES:

On completion of these units, students should be able to:

1. Define and explain key terms and concepts as specified in the areas of study and use this knowledge to apply related mathematical procedures to solve routine application problems.

2. Apply mathematical processes in contexts related to the modules and to analyse and discuss these applications of mathematics.

3. Select and appropriately use technology to develop mathematical ideas, produce results and carry out analysis in situations requiring problem-solving, modelling or investigative techniques or approaches in the areas of study.

## ASSESSMENT:

S or N based on the demonstrated achievement of the outcomes specified above. The student's level of achievement for Units 3 and 4 will be determined by:

School-Assessed Coursework for Unit 3: 24%

School-Assessed Coursework for Unit 4: 16%

Two end-of-year exams: 60%