UNIT 3 & 4 FOUNDATION MATHEMATICS

Foundation Mathematics provides for the continuing mathematical development of students entering VCE. There is a strong emphasis on the use of mathematics in practical contexts encountered in everyday life in the community, at work and at study.

UNIT 3

In this unit students will use estimation, calculations and computational thinking to solve practical problems in community, business and industry contexts. Students will also undertake the study of 'Data analysis' including collection and modelling of data, the construction of tables or spreadsheets and graphs to represent data. Students will use data and statistics to make predictions, inferences and draw conclusions. Students will also study financial and consumer math including money management, investments and loans, credit and debit, comparing mortgages versus rental costs, debt consolidation, taxation, financial risk and insurance.

AREA OF STUDY

- Data analysis, probability and statistics
- Algebra, number and structure

OUTCOMES

Outcome 1: Define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

Outcome 2: Apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

Outcome 3: Apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.

UNIT 4

In this unit students study the use and application of the metric system and related measurement in a variety of domestic, societal, industrial and commercial contexts, including consideration of accuracy, precision and error. Students investigate how to interpret and use plans and elevation diagrams and to convert a range of metric units. Student investigate rates including speeds of objects and flow rates of liquids, solving related problems. Performing a range of measurements and calculations students research and model the process of renovating a house.

AREA OF STUDY

- Discrete mathematics
- Space and Measurement

OUTCOMES

Outcome 1: Define and explain key concepts as specified in the content from the areas of study and apply a range of related mathematical routines and procedures.

Outcome 2: Apply mathematical processes in non-routine contexts, including situations with some open-ended aspects requiring investigative, modelling or problem-solving techniques or approaches, and analyse and discuss these applications of mathematics.

Outcome 3: Apply computational thinking and use numerical, graphical, symbolic and statistical functionalities of technology to develop mathematical ideas, produce results and carry out analysis in situations requiring investigative, modelling or problem-solving techniques or approaches.