

Year 10 Mathematics (10A & 10T)

OVERVIEW

The course will prepare students for VCE, VCAL, and Numeracy for all the Pre - Apprenticeship programs.

Areas of study are Measurement, Algebra, Indices and Scientific Notation, Geometry, Straight Line graphs and Equations, Money and Financial Maths, Pythagoras's Theorem and Trigonometry.

Students wishing to do VCE maths will have the opportunity to complete a program that will give them the necessary skills and knowledge required. Also, they will have to complete a Headstart program during the summer break which will prepare them for their first SAC in VCE Mathematics.

Students complete course work, which also includes investigation tasks and assignments. They also complete an E-learning program, which is designed to improve overall maths skills and knowledge and also to prepare students for topic tests and exams.

The maths course follows the year 10 maths guideline of the three content strands of Australian curriculum. Number and Algebra, Measurement and Geometry, and Statistics and also the proficiency strands, Understanding, Fluency, Problem Solving and Reasoning.

They provide the skills and knowledge to build in the developmental aspects of the learning of mathematics.

By the end of Year 10, students recognise the connection between simple and compound interest. They solve problems involving linear equations and inequalities. They make the connections between algebraic and graphical representations of relations. Students solve surface area and volume problems relating to composite solids. They recognise the relationships between parallel and perpendicular lines. Students describe statistical relationships between two continuous variables. They evaluate statistical reports.

They find unknown values after substitution into formulas. They perform the four operations with simple algebraic fractions. They use triangle and angle properties to prove congruence and similarity. Students use trigonometry to calculate unknown angles in right-angled triangles.

Students will have been able to achieve the Numeracy skills and knowledge required for all Technology subjects, VCAL and VCE Mathematics.

ASSESSMENT

A range of formal assessment which includes topic tests, semester exams, investigation and E-learning tasks and Summary book notes.

SUBJECT PREREQUISITES

There are no prerequisites for this subject