# **Mathematics Applications ATAR**

Year 11 Course Code	AEMAA
Year 12 Course Code	ATMAA
Highly Recommended	Year 11: OLNA Category 3  Band 8 or above in NAPLAN A or B grade in Year 10A course A, B or C grade in Year 10A course or A or B grade in Year 10 course Recommendation by Head of Learning Area
	Year 12: An A, B or C grade in Year 11
Cost	\$60.00 (cost is approximate – subject to change)

### Year 11 and Year 12 Overview

This course focuses on the use of mathematics to solve problems in contexts that involve financial modelling, geometric and trigonometric analysis, graphical and network analysis, and growth and decay in sequences. It also provides opportunities for students to develop systematic strategies based on the statistical investigation process for answering statistical questions that involve analysing univariate and bivariate data, including time series data.

The Mathematics Applications ATAR course is designed for students who want to extend their mathematical skills beyond Year 10 level, but whose future studies or employment pathways do not require knowledge of calculus.

#### **Year 11 Course Structure**

### Unit 1:

- Consumer arithmetic
- Algebra and matrices
- Shape and measurement

### Unit 2:

- Univariate data and the statistical investigation process
- Applications of trigonometry
- Linear equations and their graphs

## **Year 12 Course Structure**

#### Unit 3:

- Bivariate data analysis
- Growth and decay in sequences
- Graphs and networks

#### Unit 4:

- Time series analysis
- Loans, investments and annuities
- Networks and decision mathematics