

# Mathematics Methods

**Course Code:** 2MHS20

**Level:** Stage 2

**Learning Area:** Mathematics

**Duration:** Full Year

**Prerequisite:** C grade or better in Stage 1 Mathematics Methods

**Additional Cost:** None

## Further Enquiries:

- Please contact Mathematics coordinator Mr Shane Loader
- Phone: 8647 3300

## Who Is This Course For?

Students interested in contributing to and influencing society using mathematical approaches to the ever changing challenges of today's world. Students explore, describe and explain aspects of the world around them in a mathematical way.

Stage 2 Mathematical Methods can lead to tertiary studies of economics, computer sciences, and other sciences. It prepares students for courses and careers that may involve the use of statistics, such as health or social sciences.

It is assumed students undertaking this course have a high level of achievement in Stage 1 Mathematics Methods or the equivalent.

## What Will I Learn?

1. You will study topics that support your:

- Capacity to problem solve and apply your mathematical knowledge
- Ability on how to approach new challenges by investigation, modelling and reasoning
- Communication skills to describe the relationships observed in situations requiring mathematical reasoning

### Topics are:

- Further Differentiation and Applications
- Discrete Random Variables
- Integral Calculus
- Logarithmic functions
- Continuous Random Variables and the Normal Distribution
- Sampling and Confidence Intervals

## **How will I be assessed?**

You will demonstrate evidence of your learning assessed as Stage 2 through the following assessment types:

- Six skills and applications tasks - 50%
- One mathematical investigation - 20%
- One 3 hour examination - 30%