



Course Information

Mathematics

Mathematics Methods | MAM



ATMAM

Unit 3 Calculus; exponential and trigonometric functions

In this unit you will study calculus with the derivatives of exponential and trigonometric functions and their applications, together with some differentiation techniques and applications to optimisation problems and graph sketching. It concludes with integration, both as a process that reverses differentiation and as a way of calculating areas. The fundamental theorem of calculus as a link between differentiation and integration is emphasised. In statistics, discrete random variables are introduced, together with their uses in modelling random processes involving chance and variation. This supports the development of a framework for statistical inference.

Unit 4 Calculus; derivative of logarithmic functions

In probability and statistics, continuous random variables and their applications are introduced and the normal distribution is used in a variety of contexts. The study of statistical inference in this unit is the culmination of earlier work on probability and random variables. Statistical inference is one of the most important parts of statistics, in which the goal is to estimate an unknown parameter associated with a population using a sample of data drawn from that population. In the Mathematics Methods ATAR course, statistical inference is restricted to estimating proportions in two outcome populations.



Prerequisites

Successfully completed (B
Grade or better)
Mathematic Methods
Units 1 and 2.
Must be in **OLNA**
category 3



Year of Study

Year 12



Type of Assessment

40% Response
20% Investigation
40% Examination



Costs

Unit Cost \$60
iLearn \$120