

What is Mathematics Methods?

This course focuses on the use of calculus and statistical analysis. The study of calculus provides a basis for understanding rates of change in the physical world, and includes the use of functions, their derivatives and integrals, in modelling physical processes. The study of statistics develops students' ability to describe and analyse phenomena that involve uncertainty and variation.

How will Mathematics Methods help me in the future?

Mathematics Methods provides a foundation for further studies in disciplines in which mathematics and statistics have important roles. It is also advantageous for further studies in the health and social sciences. In summary, this course is designed for students whose future pathways may involve mathematics and statistics and their applications in a range of disciplines at the tertiary level.

Students undertaking Mathematics Methods ATAR in Year 12 will also receive a 10% bonus of their final scaled score, towards their ATAR.

What careers can Mathematics Methods lead to?

Methods can prepare students for a range of careers, including those as a data analyst, scientist, statistician, mathematician, forensic science, environmental science, engineering, medicine, dentistry, pharmacy, physiotherapist, sports science, architecture, computer science, programmer, economist, actuary, physicist.

What content will I study in Year 11 and Year 12?

Year 11	
Mathematics Methods Unit 1 Students review basic algebraic concepts and techniques which allows an introduction to the study of functions and calculus. Students build on the concepts of conditional probability and independence. The study of the trigonometric function & its application is extended.	Mathematics Methods Unit 2 Exponential functions are introduced and their properties and graphs examined. Students understand concepts & solve problems involving Arithmetic and Geometric sequences. Students are introduced to techniques used in differential calculus.
Year 12	
Mathematics Methods Unit 3: Students continue their study of calculus with a focus on differentiation and integration of exponential & trigonometric functions. Students are introduced to discrete random variables together with their uses in modelling random processes involving chance and variation.	Mathematics Methods Unit 4: The logarithmic function and its derivative are studied. Continuous random variables are introduced and their applications examined. In this unit, students are introduced to one of the most important parts of statistics, namely, statistical inference.

Where can I find out more?

https://senior-secondary.scsa.wa.edu.au/data/assets/pdf_file/0019/1005913/Mathematics-Methods-ATAR-Y11-Syllabus-MSc.pdf

You can also talk to:

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