

# MATHEMATICAL METHODS

Focuses on the development of an increasingly complex and sophisticated understanding of calculus and statistics. Calculus: essential for developing understanding of the physical world through rates of change. Statistics: used to describe and analyse phenomena involving uncertainty and variation.

PREREQUISITES: FOR STAGE 2, SUCCESSFUL COMPLETION OF STAGE 1 MATHEMATICAL METHODS

## WHAT WILL YOU LEARN?

01. Explore, describe, and explain aspects of the world around you mathematically.
02. Gain a conceptual grasp of calculus and use its techniques in applications.
03. Develop a basic understanding of how and why statistical decisions are made.

Transferable Skills	
•	Using a range of communication formats to express ideas logically and fluently
•	Using mathematical skills
•	Managing own learning
•	Being prepared to invest time and effort in learning new skills

Assessment	
Stage I	N/A
Stage II	50% Skills and Applications Tasks; 20% Mathematical Investigation; 30% Examination



### VOCATIONAL PATHWAYS

- Certificate III in Engineering - Technical
- Certificate IV in Building Design Drafting
- Diploma of Electronics and Communications Engineering



### TERTIARY PATHWAYS

- Bachelor of Engineering (Civil) (Honours)
- Bachelor of Teaching (Secondary) with Bachelor of Mathematical and Computer Sciences
- Bachelor of Medical Studies



### CAREERS

- Engineer
- Astronomer
- Mathematician
- Medical Scientist
- Industrial Designer



SACE STAGE 1  
NOT AVAILABLE



SACE STAGE 2 | 20 CREDITS  
FULL YEAR



ATAR SUBJECT