



Aims

The aim of the General Mathematics course is to prepare students for tertiary study in a variety of areas where an ability to critically analyse information and work with data is inherent. Students with tertiary pathways into areas such as Health, Science, Psychology and Commerce would benefit from studying this course.

Learning outcomes

After successfully completing this subject students should be able to:

- > Have knowledge of content and understanding of mathematical concepts and relationships
- > Use mathematical algorithms and techniques (implemented electronically where appropriate) to find solutions to routine and complex questions
- > Apply knowledge and skills to answer questions in applied and theoretical contexts
- > Apply mathematical models to data in order to make predictions
- > Develop solutions to mathematical problems set in applied and theoretical contexts
- > Interpret mathematical results in the context of the problem
- > Understand the reasonableness and possible limitations of the interpreted results, and recognise any assumptions made
- > Develop and test conjectures
- > Communicate mathematical ideas and reasoning to develop logical arguments
- > Use appropriate mathematical notation, representations, and terminology.

Prerequisites and assumed knowledge

Mathematics to an Australian Year 11 standard.

Subject content

Week	Topic and assessment schedule
1	Orientation week
2 – 6	Linear Relations and Simultaneous Equations
7 - 9	Linear Programming
10	Matrices and Applications
Break	
11 - 13	Matrices and Applications
14 – 17	Networks and Applications
18	Revision or examination
19	Exam Week
20	Exam review, Statistical Modelling
Break	
21 - 24	Statistical Modelling
25 – 27	Financial Modelling - Models for Saving
27 – 30	Financial Modelling - Models for Borrowing
Break	
31 – 33	Discrete Models
34 - 36	Revision. SWOTVAC
37 – 38	Exams
39	Graduation and transcript collection
40	End of course



Assessment

General weightings for each assessment item are outlined below

Assessment item	Weighting	Due dates
Tests	40%	As per assessment schedule
Assignments	15%	As per assessment schedule
Mathematical investigations	15%	As per assessment schedule
Examinations	30%	As per College examination timetable