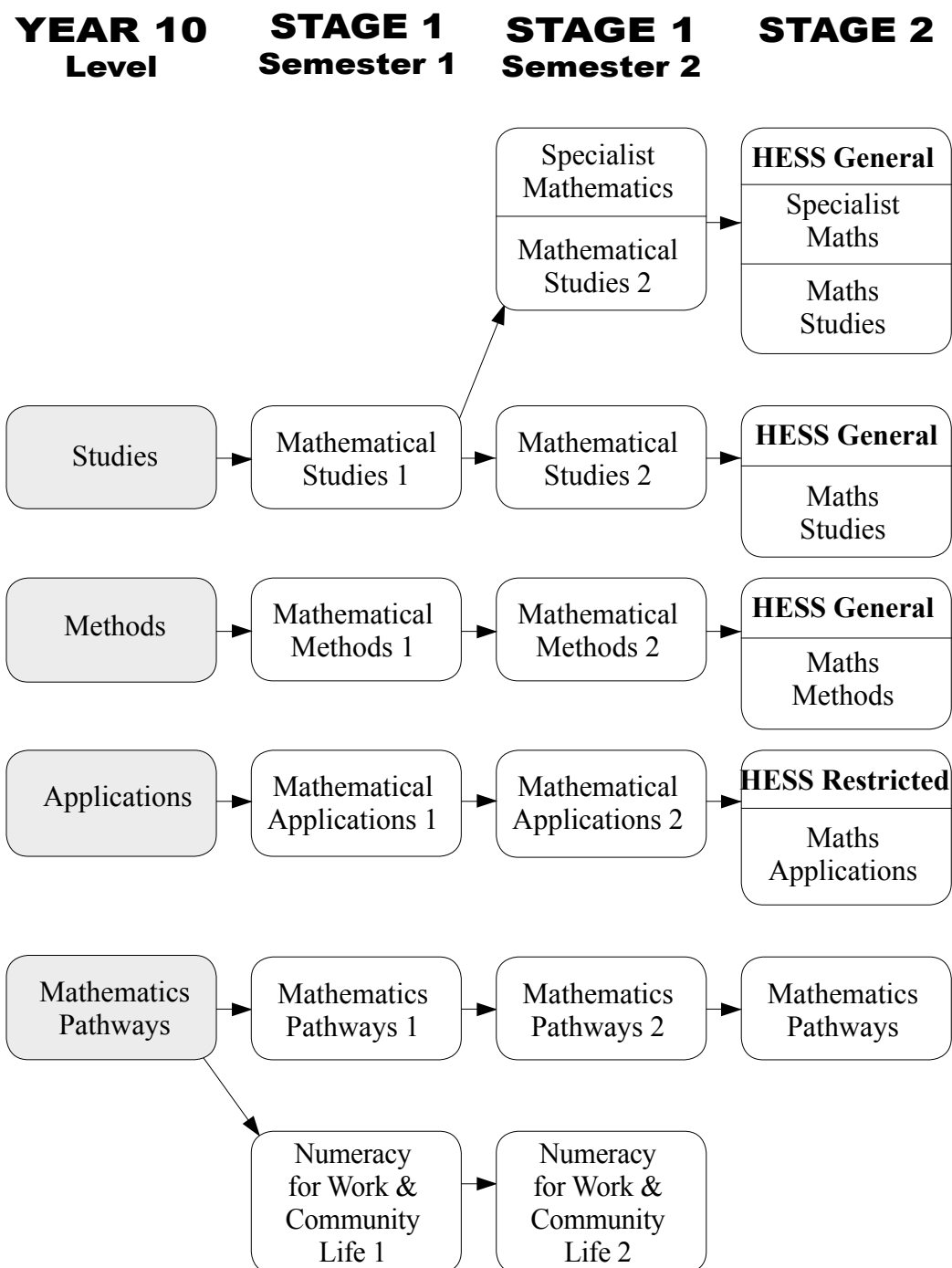


Mathematics




At the end of a semester, students may choose a different pathway. (See below). **This is a general guide only for Stage 2 – check with Career Advice Centre.**

Specialist Maths (HESS General) leads to tertiary studies in the fields of mathematical sciences, engineering, computer science, physical sciences, surveying and other mathematically related fields.

Mathematical Studies (HESS General) is for students wishing to enter areas in architecture, economics, finance and biological, environmental, geological or agricultural science.

Mathematical Methods (HESS General) is for students wishing to study accounting, management, computer studies, health sciences, business, commerce, psychology or the social sciences.

Mathematical Applications (HESS Restricted) leads to post compulsory courses in the areas of building and construction, engineering trades, aquaculture, agriculture, retail, office management, visual arts, engineering trades, small business, tourism and hospitality, nursing and paramedical areas.



Casuarina Senior College aims to provide an outstanding education and quality outcomes for all students through the provision of rich learning experiences and a varied curriculum designed to maximise student engagement.

Students are able to access all subjects without incurring tuition costs. A number of subjects also offer extended learning experiences which are optional and for which the College Council will seek the reimbursement of associated costs from parents of participating students. Examples include additional materials, excursions, etc. Indicative reimbursement costs for subjects containing extra-curricula activities are identified throughout the handbook by an asterisk (*).

For further information please contact the College on 8920 1211.

mathematics stage 1

Mathematical Studies 1

Subject Description

This unit prepares students for 11 Mathematical Studies 2 or 11 Specialist Mathematics at Stage 1.

Content

Areas studied include:

- Statistics
- Geometry and Mensuration
- Models of Growth
- Quadratics and other Polynomial Functions

Assessment

- Tests
- Directed Investigation
- Project
- End of Semester Examination

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 1

Mathematical Studies 2

Subject Description

This unit prepares students for Mathematical Studies at Stage 2. It is recommended for students who intend to study architecture, economics, finance or science – biological, environmental, geological or agricultural.

Content

Areas studied include:

- Models of Growth
- Quadratics and Other Polynomials
- Co-ordinate Geometry
- Functions and Graphs and Differential Calculus

Assessment

- Tests
- Directed Investigation
- Project
- End of Semester Examination

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 2

Code

1MA811

NTCET Code

1MAT10

*Nil

Prerequisite

Satisfactory Achievement in Year 10 Studies.

Code

1MA812

NTCET Code

1MAT10

*Nil

Prerequisite

Satisfactory Achievement at Pre Mathematical Studies 1.

mathematics stage 1

Mathematical Methods 1

Subject Description

This unit prepares students for Pre Mathematical Methods 2 at Stage 1. It is recommended for students who intend to study accounting, management, computer studies, health sciences, business, commerce, psychology or the social sciences.

Content

Areas studied include:

- Algebra
- Statistics
- Functions and Graphs

Assessment

- Tests
- Directed Investigation
- Project
- End of Semester Examination

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 1

Mathematical Methods 2

Subject Description

This unit prepares students for Mathematical Methods at Stage 2. It is recommended for students who intend to study accounting, management, computer studies, health sciences, business, commerce, psychology and the social sciences.

Content

Areas studied include:

- Statistics
- Differential Calculus
- Models of Growth

Assessment

- Tests
- Directed Investigation
- Project
- End of Semester Examination

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 2

Code
1MA821

NTCET Code
1MAT10

*Nil

Prerequisite
Satisfactory
Achievement
in Year 10 Methods.

Code
1MA822

NTCET Code
1MAT10

*Nil

Prerequisite
Satisfactory
Achievement at
Pre Mathematical
Studies 1 or Pre
Mathematical
Methods 1.

mathematics stage 1

Mathematical Applications 1

Subject Description

This unit prepares students for Pre Mathematical Applications 2 at Stage 1. It is recommended for students who intend to study post compulsory courses in areas such as building and construction, engineering trades, aquaculture, agriculture, retail, office management, visual arts, small business, tourism and hospitality and nursing and paramedical services.

Content

Areas studied include:

- Measurement & Geometry
- Data in Context
- Earning and Spending

Assessment

Items include a selection from:

- Tests
- Directed Investigation
- Project
- End of Semester Examination

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 1

Mathematical Applications 2

Subject Description

This unit prepares students for Mathematical Applications at Stage 2. It is recommended for students who intend to study post compulsory courses in areas such as building and construction, engineering trades, aquaculture, agriculture, retail, office management, visual arts, small business, tourism and hospitality and nursing and paramedical services.

Content

Areas studied include:

- Networks
- Saving and Borrowing
- Statistics
- Geometry and Mensuration

Assessment

Items include a selection from:

- Tests
- Directed Investigation
- Project
- End of Semester Examination

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 2

Code
1MC811

NTCET Code
1MCN10

*Nil

Prerequisite

Satisfactory
Achievement
in Year 10
Applications.

Code
1MC812

NTCET Code
1MCN10

*Nil

Prerequisite

Satisfactory
Achievement at
Pre Mathematical
Applications 1.

mathematics stage 1

Mathematics Pathways 1

Subject Description

This unit is for students who wish to:

- prepare for non engineering type apprenticeships
- continue with mathematics in Stage 1 General & Business Mathematics.

VET competencies are embedded in this course.

Content

Practical applications will be used in the teaching of:

- Earning and Spending
- Measurement
- Budgeting
- Geometry

Assessment

- Tests
- Directed Investigation
- Project

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 1

Mathematics Pathways 2

Subject Description

This unit is for students who wish to pursue a broad-based mathematics course.

Content

Practical applications will be used in the teaching of:

- Savings and Borrowing
- Data in Context
- Statistics
- Measurement
- Geometry

Assessment

- Tests
- Directed Investigation
- Project

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 2

Code
1MP811

NTCET Code
1MPW10

*Nil

Prerequisite
Satisfactory
Achievement
in Year 10 General.

Code
1MP812

NTCET Code
1MPW10

*Nil

Prerequisite
General Maths 1
or Senior Teacher
Recommendation.

mathematics stage 1

Specialist Mathematics

Subject Description

This unit prepares students for Specialist Mathematics at Stage 2. It is recommended for students who intend to study mathematical sciences, engineering, computer science, physical sciences and surveying at tertiary level.

Content

Areas studied include:

- Planar Geometry
- Periodic Phenomena

Assessment

- Tests
- Directed Investigation
- Project
- End of Semester Examination

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 2

Numeracy for Work and Community Life 1 & 2

Subject Description

This course provides opportunities for students to meet NTCET numeracy requirements. A C grade or better earns 10 units.

Content

A choice of one or a combination of the following contexts for study:

- Numeracy for Work
- Numeracy for Community Life
- Numeracy for Daily Life
- Numeracy for Leisure
- A Negotiated Study

Credit	Subject Length	Subject Offered
10	1 x semester	Semester 1 & 2
20	2 x semesters	

Code
1MA831

NTCET Code
1MAT10

*Nil

Prerequisite
Satisfactory
Achievement in
Pre Mathematical
Studies 1.

Code
1NW811

NTCET Code
1NWC10

*Nil

Prerequisite
Satisfactory
Achievement in
Pre Mathematical
Studies 1.