

Senior Math Pathways

We Believe. We Strive. We Achieve.

BREMER
STATE HIGH SCHOOL



Year 10 Mathematics

Essential
Mathematics

General
Mathematics

Mathematical
Methods

Specialist
Mathematics

Essential Mathematics

Future Pathway

Essential Mathematics is designed for students heading into:

- Trades and apprenticeships
- TAFE or vocational pathways
- Employment after school
- Practical, real-world careers

Topics focus on everyday maths skills such as:

- Budgeting and finance
- Measurement and scales
- Rates and percentages
- Data and practical problem solving

Students still receive:

- **4 QCE points**
- The **numeracy requirement** for the QCE

This subject is very important for students entering trades, and many trade-based pathways should choose Essential Mathematics.

General Mathematics

Future Pathway

General Mathematics is aimed at students considering:

- University pathways
- Business, health, education, psychology, science, or similar courses
- Careers needing solid mathematical and analytical skills

Topics include:

- Data analysis and statistics
- Networks and matrices
- Financial mathematics
- Measurement and applied problem solving

Recommended prerequisite:

- **B or higher in Year 10 General Mathematics**

Students should understand that General Mathematics is still an academic subject. It requires:

- Consistent homework and revision
- Strong algebra skills
- Independent study habits

Students generally cannot “cruise through” General Mathematics without regular effort.

Mathematical Methods

Future Pathway

Mathematical Methods is the most advanced common senior maths pathway and is suited to students considering:

- Engineering
- Medicine
- Physics
- Computer science
- Higher ATAR university degrees (law, Vet Science)
- STEM-related careers

Topics include:

- Advanced algebra
- Functions and graphs
- Calculus
- Statistics

Recommended prerequisite:

- **B or higher in a Year 10 Extension or General**

Methods is a demanding subject and requires:

- Strong problem-solving ability
- Confidence with algebra
- Regular study and practice outside class
- Persistence with challenging concepts

Students choosing Methods should expect a significant workload and should not assume they can pass without consistent effort.

Specialist Mathematics

Specialist Mathematics is designed for students heading into:

- Engineering
- Physics
- Mathematics and advanced STEM degrees
- High ATAR university pathways
- Careers involving advanced problem solving and analytical thinking

In order to do Specialist Mathematics, you MUST do Mathematical Methods as well.

Topics focus on advanced mathematical concepts such as:

- Vectors and matrices
- Complex numbers
- Advanced calculus
- Proof and reasoning
- Mathematical modelling and problem solving

It is the highest-level senior maths subject

Strong algebra skills are essential

Regular homework, revision, and independent study are required

This subject is best suited to highly capable and motivated mathematics students who enjoy challenging and abstract mathematical thinking.

Things to consider when choosing maths subject:



YOUR strengths and confidence in Mathematics



YOUR future career or university goals



YOUR willingness to commit to the workload required (ask someone about this if unsure)



A higher-level maths subject is not always the “best” choice. The best choice is the one that supports your future pathway while allowing you to succeed confidently.

Who to speak to about what math to choose?

Your current math teacher



The HOD of Mathematics
(D Block)