Mathematics Major — Enrolment advice
Why do Mathematics?

- interesting and fun
- broad employment possibilities
- graduates in high demand
- easy to combine with other interests
Who can do it?

- Multiple entry points
  - students with only a basic preparation
    - eg. Mathematics General, average 2 unit mathematics
  - students with a good preparation
    - eg. Good 2 unit mathematics result
  - students with an excellent preparation
    - eg Maths Ext 2 or good Maths Ext 1 result
Basic preparation route to second year

- Session 1: MATH130 — build a good grasp of the basics of calculus
- Session 2: MATH135 — mathematical tools everyone needs
- Next year: MATH136 — mathematical tools everyone needs
- Take a People and a Planet unit that interests you
- Take 2 other units from a related area: eg. computing, statistics, discrete maths, physics ... perhaps with a view to a second major or a minor. Enrolment guide has some suggestions, but they are only suggestions.
- This takes 18 months — but it’s still possible to graduate in minimum time
Standard preparation route to second year

- Session 1: MATH135 — mathematical tools everyone needs
- Session 2: MATH136 — mathematical tools everyone needs
- Take a People and a Planet unit that interests you
- Take 2 other units from a related area: eg. computing, statistics, discrete maths, physics . . . perhaps with a view to a second major or a minor. Enrolment guide has some suggestions, but they are only suggestions.
Excellent preparation route to second year

- Session 1: MATH132 — mathematical tools everyone needs: an in-depth look
- Session 2: MATH133 — mathematical tools everyone needs: an in-depth look
- Take a People and a Planet unit that interests you
- Take 2 other units from a related area: eg. computing, statistics, discrete maths, physics ... perhaps with a view to a second major or a minor. Enrolment guide has some suggestions, but they are only suggestions.
Second year

- Everyone needs to take MATH235
- Choice of either
  - MATH232 — Mathematical Techniques or
  - MATH236 — Introduction to Real and Complex analysis
Third year

- Capstone
  - MATH337 (algebra option) or MATH336 (analysis option)
  - At least three other eligible third year maths units.
Planet and participation units

- Two planet units
  - MATH123:
    - A mathematics toolkit unit designed for students in Business and Economics.
  - MATH109: Sex, Chaos and other mathematical pleasures:
    - A unit that provides students with a small taste of the many ways in which mathematics is used and developed. More about appreciating what Mathematics is about and can do than learning Mathematics

- Participation unit
  - MATH399:
    - Principally focuses on students communicating mathematics in appropriate placement contexts.
Advice

▶ Choose the right first year path for you. Each path carefully tailored to best suit different students.

▶ If you aren’t sure — ask a mathematics lecturer for advice (go to the Maths department on Level 2 of the Australian Hearing Hub and ask just about anyone.)

▶ It’s possible to move between paths.
  ▶ e.g. An HD in MATH135 will permit you to take MATH133.

▶ A maths major only requires 24 credit points, but its better to do more as electives for more employment or further study options.
Advanced Science units

- MATH188    MATH288    MATH388
- Content different each year
- Provides appropriate introduction to areas of current research for your level of progress
- Advanced Science Maths students must do all 3 of these in addition to the standard major.
- Students who do well in mathematics are also given access to these units in second and third year
- Vacation scholarships to work with a faculty member on a research project
Combining Mathematics with other things

- Mathematics fits very easily in double majors and double degrees.
- Double majors with mathematics are always possible. Really easy if the other major doesn’t require any mathematics.
- For combinations with majors that require mathematics (eg. Physics, engineering etc.) ask for advice early in your program to allow you to graduate in minimum time. But it’s always possible!!