PROGRAM PLAN
BACHELOR OF MATHEMATICS

PROGRAM OPTION:
SINGLE MAJOR PATHWAY

START DATE:
Semester 2, 2021

LOCATION:
Callaghan

This Program Plan is an enrolment guide to ensure you are on track to graduate. If at any time you wish to vary from this program plan seek advice from your Program Advisor to ensure you remain on track.

PROGRAM HANDBOOK
COURSE HANDBOOK

NAME:

STUDENT NO.:

COURSE STATUS KEY
C = Completed
En = Enrolled
NS = Not Started

YEAR 1	SEMESTER 1				
	SEMESTER 2	MATH1110 Mathematics for Engineering, Science and Technology 1 — CORE	MATH1800 Mathematical Modelling — CORE	STAT1300 Fundamentals of Statistics — CORE	ELECTIVE 1000/2000/3000 Level — ELECTIVE
YEAR 2	SEMESTER 1	MATH1120 Mathematics for Engineering, Science and Technology 2 — CORE	PROGRAMMING DIRECTED COURSE — DIRECTED	STAT1100 Data Wrangling and Visualisation — CORE	ELECTIVE 1000/2000/3000 Level — ELECTIVE
	SEMESTER 2	MATH2310 Calculus of Science and Engineering — CORE	STAT2020 Predictive Analytics — CORE	MAJOR — MAJOR	ELECTIVE 2000/3000 Level — ELECTIVE
YEAR 3	SEMESTER 1	MATH2340 Linearity and Continuity 1 — CORE	MAJOR — MAJOR	ELECTIVE 1000/2000/3000 Level — ELECTIVE	ELECTIVE 1000/2000/3000 Level — ELECTIVE
	SEMESTER 2	MATH2350 Linearity and Continuity 2 — CORE	MAJOR 3000 level — MAJOR	MAJOR 3000 level — MAJOR	ELECTIVE 2000/3000 Level — ELECTIVE
YEAR 4	SEMESTER 1	MAJOR 3000 level — MAJOR	MAJOR 3000 level — MAJOR	ELECTIVE 2000/3000 level — ELECTIVE	ELECTIVE 3000 level — ELECTIVE
	SEMESTER 2				

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To be eligible to graduate make sure you have completed 240 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- Core courses – 90 units
- Directed Programming Course - one 10 unit course.
- Major – 60 units (20 units of Core Courses are also included in the major for a total of 80 units).
- Electives – 80 units visit the **Course Handbook** to see a list of available Electives or choose from the Suggested Electives on the **Program Handbook**.
  Note: Double Majors are permitted within this program. Students interested in the Double Major pathway, please see the Bachelor of Mathematics Double Major Program Plan.
- Students must not exceed 100 units at 1000 level.
- Students must take a minimum of 60 units at 3000 level.
- The duration of this program is 3 year full-time (40 units per semester) or part-time equivalent.
- The maximum time to complete this program is 8 years.

Some courses have assumed knowledge and/or requisites, please refer to the individual **Course Handbook**. Please refer to the **Program Handbook** for specific information on program structure. If you are intending varying from this program plan please seek advice from your **Academic Program Advisor**.

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DIRECTED PROGRAMMING COURSE

DIRECTED COURSES
Complete 10 units from:

ENGG1003: Introduction to Procedural Programming
INFT1004: Introduction to Programming
SENG1110: Object Oriented Programming

PURE AND APPLIED MATHEMATICS MAJOR

CORE COURSES COUNTING TOWARD MAJOR

MATH1120: Mathematics for Engineering, Science and Tech 2
MATH1800: Mathematical Modelling

COMPULSORY COURSES

MATH2242: Complex Analysis
MATH2800: Ordinary Differential Equations

DIRECTED COURSES
Complete 40 units from:

MATH3120: Algebra
MATH3170: Number Theory
MATH3205: Fourier Analysis
MATH3700: Partial Differential Equations
MATH3820: Numerical Methods

STATISTICS MAJOR

CORE COURSES COUNTING TOWARD MAJOR

STAT1100: Data Wrangling and Visualisation
STAT1300: Fundamentals of Statistics

COMPULSORY COURSES

STAT2000: Applied Statistics and Research Methods
STAT2300: Statistical Inference
STAT3030: Generalised Linear Models
STAT3040: Time Series Analysis
STAT3100: Systems Thinking for an Integrated Workforce
STAT3800: Deterministic and Stochastic Optimisation

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STUDIES IN MATHEMATICS AND STATISTICS MAJOR

CORE COURSES COUNTING TOWARD MAJOR

MATH1120: Mathematics for Engineering, Science and Tech 2
MATH1800: Mathematical Modelling

DIRECTED COURSES
Complete 20 units from:

MATH2242: Complex Analysis
MATH2800: Ordinary Differential Equations
STAT2000: Applied Statistics and Research Methods
STAT2300: Statistical Inference

DIRECTED COURSES
Complete 40 units from:

MATH3120: Algebra
MATH3170: Number Theory
MATH3205: Fourier Analysis
MATH3700: Partial Differential Equations
MATH3820: Numerical Methods
STAT3030: Generalised Linear Models
STAT3040: Time Series Analysis
STAT3100: Systems Thinking for an Integrated Workforce
STAT3800: Deterministic and Stochastic Optimisation