Bachelor of Mathematics/Bachelor of Education (Secondary) 2020 Dual Program

Please ensure that you read and understand the following important information about your dual program.

The Bachelor of Mathematics / Bachelor of Education (Secondary) program is a four year pre-service teacher qualification that develops specialist teachers across the year levels 7 – 12 (secondary schooling phase).

It is your responsibility to ensure you complete all the requirements for each section of this dual program in order to graduate with both degrees. The following information is designed to help you plan your enrolment to meet this goal. Further information can be found in the Official Rules and Course lists under the **Program Rules and Requirements** link for each program in the Programs and Courses website: https://my.uq.edu.au/programs-courses/

You are not required to submit this program plan for approval. However, if you have any concerns about meeting degree requirements, especially in the year prior to your Professional Year, please contact the relevant Faculty for advice. For advice on the BMath component of your degree, including advice on majors and courses, please contact the Faculty of Science. For advice on the BEd(Sec) component of your degree, including information on teaching area requirements, please contact the Faculty of Humanities and Social Sciences or the School of Education.

PROGRAM GUIDELINES

The Bachelor of Mathematics / Bachelor of Education (Secondary) dual program consists of the Bachelor of Mathematics which provides the content knowledge for a Mathematics teaching area and the Bachelor of Education (Secondary) which provides the skills, knowledge and practical experience required for teacher registration and employment. You must complete a total of 64 units for the program.

Please note: if you are admitted into this dual program mid-year or obtain credit from previous studies you will need to ensure you structure your program so that you are able to enter the final year of Bachelor of Education component in Semester 1 – the final year of the BEd program is a year-long professional year commencing in Semester 1 only.

Bachelor of Mathematics component requirements:
32 units towards the BMath component comprising:

- 14 from Part A; and
- 14 from Part B or Part C or a combination of both; and
- 4 from the BMath course list, or Part A or Part B of the BSc course list, or courses approved by the Associate Dean (Academic).

- Students must gain 8 units for late year courses from Part A or Part B of the BMath course list or a combination of both.
- Students with Senior Mathematics C may complete a major in an area defined in Part B by completing an approved combination of 16 units. Students without Senior Mathematics C may complete the Pure Mathematics major only, with very careful planning and inclusion of a summer semester.
- Students must complete the requirements of the BMath and all courses in Part A of the BEd(Sec) before commencing the Professional (final) Year of the BEd(Sec).
- Please contact the Faculty of Science on (07) 3365 1888 for more information.

Note: A 'Late year' course means a course that is Level 3 or higher.

Bachelor of Education (Secondary) component requirements:

- 16 units from Part A; and
- 8 units from Part B; and
- 4 units from Part C; and
- 4 units from Part C or Part D

Part A teaches issues pertinent to teaching and schooling and is completed in conjunction with the requirements of the BMath degree. The BEd(Sec) Professional Year (Part B) develops professional expertise required for teaching and can only be commenced when the BMath and BEd(Sec) Part A requirements have been met.

This planner is intended as a guide only and is based on current scheduling of courses. Students should note that scheduling can change from year to year. You are advised to check the scheduling for the current year and contact the relevant Faculty for advice if course scheduling has changed.

Last updated: 16/10/2019

Bachelor of Mathematics / Bachelor of Education (Secondary) 2020
Dual Degree Program Planner (students with Senior Maths C) – Semester 1 Entry

BACHELOR OF MATHEMATICS	Total Units	BACHELOR OF EDUCATION (SECONDARY)	Total Units
YEAR ONE		**YEAR ONE**	
Semester 1		**Semester 1**	
MATH1051 Calculus & Linear Algebra* + **MATH1061** Discrete Mathematics **MATH1052** Multivariate Calculus & Ordinary Differential Equations ++ (or can move to Semester 2)	2 2 2	EDUC1710 A Sociological Orientation to Education	2
Semester 2		**Semester 2**	
STAT1301 Advanced Analysis of Scientific Data Course from the BMath list or Part A or B of the BSc Course from the BMath list or Part A or B of the BSc	2 2 2	EDUC1650 Learning and Development for Educators	2
Summer Semester			
YEAR TWO		**YEAR TWO**	
Semester 1		**Semester 1**	
MATH2001 Advanced Calculus and Linear Algebra **MATH2400** Mathematical Analysis +++ Course from Part B or C of the BMath	2 2 2	EDUC2601 Literacies within and across the Curriculum	2
Semester 2		**Semester 2**	
Course from Part B or C of the BMath Course from Part B or C of the BMath	2 2	EDUC2604 Teachers as Educational Innovators and Agents of Change EDUC2090 Indigenous Knowledge and Education	2 2
Summer Semester			
YEAR THREE		**YEAR THREE**	
Semester 1		**Semester 1**	
MATH3401 Complex Analysis Level 3 course from Part B of the BMath Course from Part B or C of the BMath	2 2 2	EDUC3602 Numeracy across the Curriculum	2
Semester 2		**Semester 2**	
Level 3 course from Part B of the BMath Level 3 course from Part B of the BMath	2 2	EDUC3606 Building Inclusive Secondary Classrooms EDUC3605 Building Professional Knowledge	2 2
Summer Semester			
		PROFESSIONAL YEAR	
Semester 1		**Semester 1**	
		EDUC4615 Developing Professional Practice EDUC4620 Teachers as Researchers EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	2 2 - -
Semester 2		**Semester 2**	
		EDUC4607 Assessment for Teaching and Learning EDUC4625 Achieving Professional Engagement EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	2 2 4 4
Total	**32**	**Total**	**32**

Students without Queensland Senior Mathematics C or equivalent should complete MATH1050 before MATH1051 (see below)

*+ Level 1 Advanced course **MATH1071** Advanced Calculus & Linear Algebra also available*
*++ Level 1 Advanced course **MATH1072** Advanced Multivariate Calculus & Ordinary Differential Equations also available*
*+++ Level 2 Advanced course **MATH2401** Mathematical Analysis and Advanced Topics also available*

Last updated: 16/10/2019

Bachelor of Mathematics / Bachelor of Education (Secondary) 2020
Dual Degree Program Planner (students without Senior Maths C – no major) – Semester 1 Entry

BACHELOR OF MATHEMATICS	Total Units	BACHELOR OF EDUCATION (SECONDARY)	Total Units
YEAR ONE		**YEAR ONE**	
Semester 1		**Semester 1**	
MATH1050 Mathematical Foundations (Part C) **MATH1061** Discrete Mathematics Course from the BMath list or Part A or B of the BSc	2 2 2	EDUC1710 A Sociological Orientation to Education	2
Semester 2		**Semester 2**	
MATH1051 Calculus & Linear Algebra + **MATH1052** Multivariate Calculus & Ordinary Differential Equations ++ **STAT1301** Advanced Analysis of Scientific Data	2 2 2	EDUC1650 Learning and Development for Educators	2
Summer Semester			
YEAR TWO		**YEAR TWO**	
Semester 1		**Semester 1**	
MATH2001 Advanced Calculus and Linear Algebra **MATH2400** Mathematical Analysis +++ Course from the BMath list or Part A or B of the BSc	2 2 2	EDUC2601 Literacies within and across the Curriculum	2
Semester 2		**Semester 2**	
Course from Part B or C of the BMath Course from Part B or C of the BMath	2 2	EDUC2604 Teachers as Educational Innovators and Agents of Change EDUC2090 Indigenous Knowledge and Education	2 2
Summer Semester			
YEAR THREE		**YEAR THREE**	
Semester 1		**Semester 1**	
MATH3401 Complex Analysis Level 3 course from Part B of the BMath Course from Part B or C of the BMath	2 2 2	EDUC3602 Numeracy across the Curriculum	2
Semester 2		**Semester 2**	
Level 3 course from Part B of the BMath Level 3 course from Part B of the BMath	2 2	EDUC3606 Building Inclusive Secondary Classrooms EDUC3605 Building Professional Knowledge	2 2
Summer Semester			
		PROFESSIONAL YEAR	
Semester 1		**Semester 1**	
		EDUC4615 Developing Professional Practice EDUC4620 Teachers as Researchers EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	2 2 - -
Semester 2		**Semester 2**	
		EDUC4607 Assessment for Teaching and Learning EDUC4625 Achieving Professional Engagement EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	2 2 4 4
Total	**32**	**Total**	**32**

*+ Level 1 Advanced course **MATH1071** Advanced Calculus & Linear Algebra also available*
*++ Level 1 Advanced course **MATH1072** Advanced Multivariate Calculus & Ordinary Differential Equations also available*
+++ Level 2 Advanced course ***MATH2401** Mathematical Analysis and Advanced Topics also available*

Last updated: 16/10/2019

Bachelor of Mathematics / Bachelor of Education (Secondary) 2020
Dual Degree Program Planner (students without Senior Maths C – Pure Math major) – Semester 1 Entry

BACHELOR OF MATHEMATICS	Total Units	BACHELOR OF EDUCATION (SECONDARY)	Total Units
YEAR ONE		**YEAR ONE**	
Semester 1		**Semester 1**	
MATH1050 Mathematical Foundations (Part C) **MATH1061** Discrete Mathematics	2 2	EDUC1710 A Sociological Orientation to Education	2
Semester 2		**Semester 2**	
MATH1051 Calculus & Linear Algebra **STAT1301** Advanced Analysis of Scientific Data Level 2 course from Pure Math major **(MATH2302)**	2 2 2	EDUC1650 Learning and Development for Educators	2
Summer Semester **MATH1052** Multivariate Calculus & Ordinary Differential Equations	2		
YEAR TWO		**YEAR TWO**	
Semester 1		**Semester 1**	
MATH2001 Advanced Calculus and Linear Algebra **MATH2400** Mathematical Analysis Level 2 course from Pure Math major **(MATH2301)**	2 2 2	EDUC2601 Literacies within and across the Curriculum	2
Semester 2		**Semester 2**	
Level 2 course from Pure Math major **(MATH2100)** Level 3 course from Pure Math major	2 2	EDUC2604 Teachers as Educational Innovators and Agents of Change EDUC2090 Indigenous Knowledge and Education	2 2
Summer Semester			
YEAR THREE		**YEAR THREE**	
Semester 1		**Semester 1**	
MATH3401 Complex Analysis Level 3 course from Pure Math major Level 3 course from Pure Math major	2 2 2	EDUC3602 Numeracy across the Curriculum	2
Semester 2		**Semester 2**	
Level 3 course from Pure Math major Level 3 course from Pure Math major	2 2	EDUC3606 Building Inclusive Secondary Classrooms EDUC3605 Building Professional Knowledge	2 2
Summer Semester			
		PROFESSIONAL YEAR	
Semester 1		**Semester 1**	
		EDUC4615 Developing Professional Practice EDUC4620 Teachers as Researchers EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	2 2 - -
Semester 2		**Semester 2**	
		EDUC4607 Assessment for Teaching and Learning EDUC4625 Achieving Professional Engagement EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	2 2 4 4
Total	**32**	**Total**	**32**

Students without Queensland Senior Mathematics C or equivalent who wish to complete a major, can complete a Pure Mathematics major only, by taking a reduced load of 6 units in year one semester 1, completing MATH2302 in year one semester 2 and moving MATH1052 to year one summer semester.

Last updated: 16/10/2019

Bachelor of Mathematics / Bachelor of Education (Secondary) 2020
Dual Degree Program Planner (students with Senior Maths C) – Semester 2 Entry

BACHELOR OF MATHEMATICS	Total Units	BACHELOR OF EDUCATION (SECONDARY)	Total Units
YEAR ONE		**YEAR ONE**	
Semester 1		**Semester 1**	
Semester 2		**Semester 2**	
MATH1051 Calculus & Linear Algebra* + **MATH1061** Discrete Mathematics **STAT1301** Advanced Analysis of Scientific Data	2 2 2	EDUC1650 Learning and Development for Educators	2
Summer Semester			
YEAR TWO		**YEAR TWO**	
Semester 1		**Semester 1**	
MATH1052 Multivariate Calculus & Ordinary Differential Equations ++ **MATH2400** Mathematical Analysis +++	2 2	EDUC1710 A Sociological Orientation to Education EDUC2601 Literacies within and across the Curriculum	2 2
Semester 2		**Semester 2**	
MATH2001 Advanced Calculus and Linear Algebra Course from the BMath list or Part A or B of the BSc	2 2	EDUC2604 Teachers as Educational Innovators and Agents of Change EDUC2090 Indigenous Knowledge and Education	2 2
Summer Semester			
YEAR THREE		**YEAR THREE**	
Semester 1		**Semester 1**	
Course from Part B or C of the BMath Course from the BMath list or Part A or B of the BSc	2 2	EDUC3602 Numeracy across the Curriculum	2
Semester 2		**Semester 2**	
Course from Part B or C of the BMath Course from Part B or C of the BMath	2 2	EDUC3606 Building Inclusive Secondary Classrooms	2
Summer Semester			
YEAR FOUR		**YEAR FOUR**	
Semester 1		**Semester 1**	
MATH3401 Complex Analysis Level 3 course from Part B of the BMath Level 3 course from Part B of the BMath	2 2 2		
Semester 2		**Semester 2**	
Level 3 course from Part B of the BMath (or take in Semester 1)	2	EDUC3605 Building Professional Knowledge	2
Summer Semester			
		PROFESSIONAL YEAR	
Semester 1		**Semester 1**	
		EDUC4615 Developing Professional Practice EDUC4620 Teachers as Researchers EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	2 2 - -
Semester 2		**Semester 2**	
		EDUC4607 Assessment for Teaching and Learning EDUC4625 Achieving Professional Engagement EDUC4644 Mathematics: Curriculum Studies (year-long course)	2 2 4

Last updated: 16/10/2019

		EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	4
Total	**32**	**Total**	**32**

Students without Queensland Senior Mathematics C or equivalent should complete MATH1050 before MATH1051 (see below)

*+ Level 1 Advanced course **MATH1071** Advanced Calculus & Linear Algebra also available*
*++ Level 1 Advanced course **MATH1072** Advanced Multivariate Calculus & Ordinary Differential Equations also available*
*+++ Level 2 Advanced course **MATH2401** Mathematical Analysis and Advanced Topics also available*

Bachelor of Mathematics / Bachelor of Education (Secondary) 2020
Dual Degree Program Planner (students without Senior Maths C – no major) – Semester 2 Entry

BACHELOR OF MATHEMATICS	Total Units	BACHELOR OF EDUCATION (SECONDARY)	Total Units
YEAR ONE		**YEAR ONE**	
Semester 1		**Semester 1**	
Semester 2		**Semester 2**	
MATH1050 Mathematical Foundations (Part C) **MATH1061** Discrete Mathematics **STAT1301** Advanced Analysis of Scientific Data	2 2 2	EDUC1650 Learning and Development for Educators	2
Summer Semester			
YEAR TWO		**YEAR TWO**	
Semester 1		**Semester 1**	
MATH1051 Calculus & Linear Algebra + **MATH1052** Multivariate Calculus & Ordinary Differential Equations ++	2 2	EDUC1710 A Sociological Orientation to Education EDUC2601 Literacies within and across the Curriculum	2 2
Semester 2		**Semester 2**	
MATH2001 Advanced Calculus and Linear Algebra Course from the BMath list or Part A or B of the BSc	2 2	EDUC2604 Teachers as Educational Innovators and Agents of Change EDUC2090 Indigenous Knowledge and Education	2 2
Summer Semester			
YEAR THREE		**YEAR THREE**	
Semester 1		**Semester 1**	
MATH2400 Mathematical Analysis +++ Course from the BMath list or Part A or B of the BSc Course from Part B or C of the BMath	2 2 2	EDUC3602 Numeracy across the Curriculum	2
Semester 2		**Semester 2**	
Course from Part B or C of the BMath Course from Part B or C of the BMath	2 2	EDUC3606 Building Inclusive Secondary Classrooms	2
Summer Semester			
YEAR FOUR		**YEAR FOUR**	
Semester 1		**Semester 1**	
MATH3401 Complex Analysis Level 3 course from Part B of the BMath Level 3 course from Part B of the BMath Level 3 course from Part B of the BMath	2 2 2 2		
Semester 2		**Semester 2**	
		EDUC3605 Building Professional Knowledge	2
Summer Semester			
		PROFESSIONAL YEAR	
Semester 1		**Semester 1**	
		EDUC4615 Developing Professional Practice EDUC4620 Teachers as Researchers EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	2 2 - -
Semester 2		**Semester 2**	
		EDUC4607 Assessment for Teaching and Learning EDUC4625 Achieving Professional Engagement	2 2 4

Last updated: 16/10/2019

		EDUC4644 Mathematics: Curriculum Studies (year-long course) EDUC4652 Advanced Mathematics: Curriculum Studies (year-long course)	4
Total	**32**	**Total**	**32**

*+ Level 1 Advanced course **MATH1071** Advanced Calculus & Linear Algebra also available*
*++ Level 1 Advanced course **MATH1072** Advanced Multivariate Calculus & Ordinary Differential Equations also available*
+++ Level 2 Advanced course ***MATH2401** Mathematical Analysis and Advanced Topics also available*