

Bachelor of Science

PATHWAY B – 120 UNIT PHYSICS MAJOR – Standard Pathway

Students Requiring MATH1002 see page 2

 Commencing in Semester 1 2019  Studying at Callaghan and Central Coast

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 prior advice from your [Program Advisor](#) to ensure you remain on track.



Semester 1

Year 1	SCIE1001 Professional Scientific Thinking	SCIE1002 Multidisciplinary Laboratories	PHYS1210 Advanced Physics I	MATH1110 or MATH1210
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Year 2	SCIE2001 Professional Employment Skills	PHYS2111 Classical Physics 1	PHYS2211 Modern Physics I	ELECTIVE** 1000/2000/3000 level
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Year 3	SCIE3001A Transdisciplinary Capstone: Planning and Implementing	PHYS3112 Photonics	PHYS3111 Biophysics	MATH3820 ++
				ELECTIVE** 2000/3000 level

Semester 2

Year 1	STAT1070 Statistics for the Sciences	PHYS1220 Advanced Physics II	MATH1120 or MATH1220	ELECTIVE** 1000/2000/3000 level
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Year 2	SCIE2002 Interdisciplinary Challenges	PHYS2112 Classical Physics 2	MATH2310 Calculus of Science and Engineering	ELECTIVE** 1000/2000/3000 level
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Year 3	SCIE3001B Transdisciplinary Capstone: Implementing and Communicating	PHYS3211 Quantum Information Science	ELECTIVE** 2000/3000 level	ELECTIVE** 2000/3000 level
			MATH3242 ++	

Program Plan Key:  = Core  = Major  = Directed  = Elective

** Elective Options include: Science Elective Pathways or any unrestricted courses offered within the university.

++ Students must successfully complete either MATH3820 or MATH3242 as part of their major requirements and complete an elective in the alternate semester.

Note: Students choose their 1000 level MATH courses based upon their previous mathematical background. If you do not have the required background knowledge to enrol in MATH1110 please follow the program plan on page 2. If you have not completed any MATH courses in Semester 1 please email programadvice@newcastle.edu.au for advice.

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PATHWAY B – 120 UNIT PHYSICS MAJOR – MATH1002 PATHWAY

 Commencing in Semester 2019

 Studying at Callaghan and Central Coast

See the last page for some helpful hints & tips!



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	Semester 1				Semester 2			Summer Term
Year 1	SCIE1001 Professional Scientific Thinking	SCIE1002 Multidisciplinary Laboratories	PHYS1210 Advanced Physics I	MATH1002 Foundation Studies in Mathematics	STAT1070 Statistics for the Sciences	PHYS1220 Advanced Physics II	MATH1110 Mathematics for Engineering, Science and Technology 1	MATH1120 Mathematics for Engineering, Science and Technology 2
Year 2	SCIE2001 Professional Employment Skills	PHYS2111 Classical Physics 1	PHYS2211 Modern Physics I	ELECTIVE** 1000/2000/3000 level	SCIE2002 Interdisciplinary Challenges	PHYS2112 Classical Physics 2	MATH2310 Calculus of Science and Engineering	ELECTIVE** 1000/2000/3000 level
Year 3	SCIE3001A Transdisciplinary Capstone: Planning and Implementing	PHYS3112 Photonics	PHYS3111 Biophysics	MATH3820 ++ ELECTIVE** 2000/3000 level	SCIE3001B Transdisciplinary Capstone: Implementing and Communicating	PHYS3211 Quantum Information Science	ELECTIVE** 2000/3000 level MATH3242 ++	ELECTIVE** 2000/3000 level

Program Plan Key:  = Core  = Major  = Directed  = Elective

** Elective Options include; Science Elective Pathways or any unrestricted courses offered within the university.

++ Students must successfully complete either MATH3820 or MATH3242 as part of their major requirements and complete an elective in the alternate semester.

Note: If you have not completed any MATH courses in Semester 1 please email programadvice@newcastle.edu.au for advice.

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 - 80 units (including 10 units of MATH directed*).
- ✓ Major - 120 units (Students who complete either MATH1110 or MATH1210 as their Mathematics Directed course can also count this towards their major requirements).
- ✓ Electives - 50 units - Choose from Science Elective Pathways or any unrestricted courses offered within the university. Refer to the Science Elective Pathway documents located on the [Program Handbook](#) or visit the [Course Handbook](#) to see a list of available Electives.
- ✓ Students must complete a minimum of 40 units at all levels (1000, 2000, and 3000), and can complete a maximum of 100 units at 1000 level.
- ✓ The duration of this program is 3 years full time study (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](#).

* Students choose their MATH Directed course based on previous mathematical background. See the Enrolling in mathematics - Maths placement test section of this page.



The [Program Handbook](#) has valuable information on program structure and requirements, if you are intending on studying part time or varying from this program plan please seek prior advice from your [Program Advisor](#).

Helpful Hints & Tips

ENROLMENT HELP



Need help? >>
Ask UON >>



How do I use the Web Timetable? >>

RULES

It is important to follow this Program Plan.
You cannot repeat a course you've passed to try and get a better grade.
You cannot enrol in any extra courses not required by your program >>

INFO FOR NEW STUDENTS



First year undergraduate students usually only enrol in 1000 level courses >>

New Postgraduate students should only enrol in 6000 level courses >>



Find out all you need to know about getting started at uni >>

UNDERSTANDING COURSES & PROGRAMS



Not sure what courses to study? >>



Understanding program and course jargon >>



Understanding UON Jargon >>

PRIOR STUDY



Check you have met the assumed knowledge and requisites for courses before enrolling >>



Have you studied elsewhere or transferred programs? Don't forget to apply for credit >>

CONSIDERING A BREAK?



Need to take a break? This is called a 'leave of absence'. Check if you are eligible >>



Planning on going overseas? Keep electives free, so it's easier for you to receive credit for your overseas studies >>



UON offers a range of support services to assist with your health and wellbeing >>

MORE QUESTIONS?

We are here to answer questions about your program. Talk to us your way!

Ask UON

1300 ASK UON

Visit Student Central

Message us on Facebook

or Twitter

UONline via myUON