

Bachelor of Science (Laser Physics and Technology)

These rules should be read in conjunction with Academic Program Rules parts 1, 2, and 3 of the Bachelor of Science.

These Program Rules should be read in conjunction with the University's policies (<http://www.adelaide.edu.au/policies>).

1 Qualification requirements

- 1.1 To qualify for the degree a candidate shall pass courses, listed in 1.2 below, to the value of 72 units, which satisfy the following requirements:
- a a candidate shall present passes in courses to the value of 24 units at each of Level I, II and III
 - b a candidate may substitute an appropriate course chosen from Level II to fulfil the requirements of Level I, or from Level III to fulfil the requirements of Level I or II
 - c a candidate shall complete a major in a discipline as set out in Academic Program Rule 4.4 of the degree of Bachelor of Science.

1.2 Academic program

1.2.1 Level I

Level I courses, which shall include:

- i passes in core courses

Semester 1

PHYSICS 1100 Physics IA 3

MATHS 1011 Mathematics IA..... 3

Semester 2

PHYSICS 1200 Physics IB 3

MATHS 1012 Mathematics IB 3

- ii passes in additional Level I courses to the value of 12 units chosen from:

Semester 1

COMP SCI 1012 Scientific Computing I..... 3

CHEM 1100 Chemistry IA..... 3

ELEC ENG 1009 Electrical & Electronic Engineering IA..... 3

Semester 2

CHEM 1200 Chemistry IB..... 3

COMP SCI 1101 Introduction to Programming 3

ELEC ENG 1010 Electrical & Electronic Engineering IB 3

STATS 1005 Statistical Analysis and Modelling I..... 3

or

courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 4.2, 4.5.1 and 4.5.2 for the degree of Bachelor of Science.

1.2.2 Level II

Level II courses, which shall include:

- i passes in core courses

Semester 1

MATHS 2101 Multivariable and Complex Calculus 3

MATHS 2102 Differential Equations 3

PHYSICS 2510 Physics IIA 3

Semester 2

PHYSICS 2525 Physics IIB (Optics & Photonics) 3

PHYSICS 2532 Classical Physics II..... 3

PHYSICS 2534 Electromagnetism II 3

- ii passes in additional Level II course to the value of 6 units chosen from:

Semester 1

CHEM 2510 Chemistry IIA..... 3

ELEC ENG 2008 Electronics II	3
MATHS 2103 Probability & Statistics	3
PURE MTH 2106 Algebra	3
Semester 2	
CHEM 2520 Chemistry IIB	3
ELEC ENG 2007 Signals and Systems II	3
MATHS 2100 Real Analysis	3
PHYSICS 2530 Astrophysics II	3
or	
courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 4.2, 4.5.3 and 4.5.4 for the degree of Bachelor of Science.	

1.2.3 Level III

Level III courses, which shall include:

i passes in core courses

Semester 1

PHYSICS 3542 Physics III	6
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Semester 2

PHYSICS 3537 Experimental Physics III (Optics & Photonics)	3
PHYSICS 3540 Optics and Photonics III	3
PHYSICS 3544 Quantum Mechanics III	3

ii passes in additional Level III course to the value of 9 units chosen from:

Semester 1

APP MATHS 3017 Waves III	3
ELEC ENG 3016 Control III	3
ELEC ENG 3018 RF Engineering III	3
PHYSICS 3532 Atmospheric and Astrophysics III	3
PHYSICS 3006 Advanced Dynamics and Relativity III	3

Semester 2

ELEC ENG 3019A/B Practical Electrical and Electronic Design III	3
PHYSICS 3534 Computational Physics III	3

or

courses selected in consultation with the Program Coordinator and in accordance with Academic Program Rules 4.5.5 and 4.5.6 for the degree of Bachelor of Science.

1.3 Unacceptable combinations of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty, contains a substantial amount of the same material, and no course or portion of a course may be counted twice towards an award.

Note: A list of unacceptable combinations of courses is available from the Faculty of Sciences.

1.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

2 Special circumstances

When in the opinion of the Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.