# Pathway to major in Experimental & Theoretical Physics

## Year 1 / Level I (not more than 30 units)

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>PHYSICS 1100</td>
<td>Physics IA</td>
<td>MATHS 1011</td>
<td>Mathematics IA</td>
<td><strong>Approved Level I Elective</strong></td>
</tr>
<tr>
<td>S2</td>
<td>PHYSICS 1200</td>
<td>Physics IB</td>
<td>MATHS 1012</td>
<td>Mathematics IB</td>
<td><strong>Approved Level I Elective</strong></td>
</tr>
</tbody>
</table>

## Year 2 / Level II

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>PHYSICS 2510</td>
<td>Physics IIA</td>
<td>MATHS 2101</td>
<td>Multivariable &amp; Complex Calculus</td>
<td>Approved Level II Elective</td>
</tr>
<tr>
<td>S2</td>
<td>PHYSICS 2520</td>
<td>Physics IIB</td>
<td>PHYSICS 2532</td>
<td>Classical Physics II</td>
<td>PHYSICS 2530</td>
</tr>
</tbody>
</table>

*Global Experience: The Faculty of Sciences recommends students who want to undertake an exchange in an overseas university plan to go in Semester 2 of Level 2 and/or Semester 1 of Level 3.

## Year 3 / Level III (at least 24 units)

<table>
<thead>
<tr>
<th>Term</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>PHYSICS 3542</td>
<td>Physics III (6 units)</td>
<td>PHYSICS 3534</td>
<td>Computational Physics III or Approved Level III Elective</td>
<td>PHYSICS 3532</td>
</tr>
<tr>
<td>S2</td>
<td>PHYSICS 3002</td>
<td>Experimental Physics III</td>
<td>PHYSICS 3544</td>
<td>Quantum Mechanics III</td>
<td>PHYSICS 3006</td>
</tr>
</tbody>
</table>

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**Key**

- Core Course
- Elective Course
- Course for Major

# Check Course Planner or with the Faculty of Sciences Office to ensure you meet the pre-requisites prior to enrolling into this course.

** Students who successfully complete CHEM 1101 Foundations of Chemistry IA and CHEM 1201 Foundations of Chemistry IB and who wish to continue their study of Chemistry at Level II will be required to undertake an additional course, CHEM 1312 Foundations of Chemistry IS during Summer School before commencing Level II Chemistry studies.

† PHYSICS 2520 is a pre-requisite for PHYSICS 3540 Optics & Photonics III.

‡ PHYSICS 2532 Classical Physics II is a prerequisite for PHYSICS 3006 Advanced Dynamics and Relativity III, and PHYSICS 3534 Computational Physics, and Assumed Knowledge for PHYSICS 3542 Physics III, and PHYSICS 3544 Quantum Mechanics III.

§ You must present at least one of these courses in addition to PHYSICS 3002, 3006, 3542 and 3544 to complete the Major.

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**Enrolment Advice**

- It is your responsibility to ensure you are correctly enrolled. Enrolment into courses outside of the Study Plan and Enrolment Advice listed could affect your eligibility to graduate.
- A total of 72 units are required to complete Bachelor of Science program.
- 24 units will usually be completed for each of Levels I, II and III.
- At least 24 units must be completed at Level III.
- 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.
- There is a limitation on the amount of ‘Non-Science’ courses that can be presented. Do not assume that because a course is offered through Sciences, that it automatically counts as ‘Science’ (e.g. Animal Science courses). Please refer to your Program Rules, if in doubt consult the Faculty Office for advice.
- No level III course may be used to meet the requirements of more than one major. (For example, if Soil Ecology and Nutrient Cycling is used to qualify for a Soil Science major, it cannot also be used to qualify for an Ecology Major).
- For approved elective courses, please refer to your Program Rules (http://www.adelaide.edu.au/calendar/).
- Please contact the Faculty of Sciences Office for advice.
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Complimentary Majors
This is an extended major and it is normally not possible to fit in sufficient units at Level III to also qualify for a second major.

Electives and Broadening
You must complete 9 units of Broadening courses at Level I or Level II. Of these courses:
- A maximum of 6 units of courses can be chosen at Year 1 from other Faculties of the University
You must also complete Elective courses to fulfil the requirements of your Program:
- No courses at Year 3 can be chosen from other Faculties of the University
- Please refer to your Program Rules for electives and all other requirements http://calendar.adelaide.edu.au/
- For Faculty of Sciences electives, see our website: http://sciences.adelaide.edu.au/degrees/courses/
- For information about electives from other faculties, restrictions and pre-requisites, search the course planner: https://access.adelaide.edu.au/courses/search.asp

Variations for students who commenced in or prior to 2012
- Level III: Must present PHYSICS 3002 Experimental Physics III and PHYSICS 3542 Physics III, and either PHYSICS 3006 Dynamics and Relativity III or PHYSICS 3544 Quantum Mechanics III, together with 6 units from PHYSICS 3532 Atmospheric & Astrophysics III, PHYSICS 3534 Computational Physics III, or PHYSICS 3540 Optics & Photonics III.

Global Experience
The University of Adelaide is committed to offering its students the opportunity to study overseas through a Global Learning Experience. This experience is available in a wide range of degrees and can include student exchange (for either one or two full semesters), study tours, internships and placements. There are many exciting opportunities in Europe, Asia, the Americas, Africa, and Oceania ranging from a few weeks to a full academic year.
* The Faculty of Sciences recommends students who want to undertake an exchange in an overseas university plan to go in Semester 2 of Level 2 and/or Semester 1 of Level 3. To find Global Learning opportunities available in your study area click Global Experiences.

Further Information and Enrolment Advice
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