Diploma of Science (DipSc)

Registration Code: PRV14012
CRICOS Code: 03391M

Introduction
Sheridan College’s Diploma of Science program provides a first-year undergraduate program for students interested in preparing for a career in the STEM disciplines (science, technology, engineering and mathematics), or as a pathway towards future study in the sciences.

Students will learn the foundation principles of core scientific disciplines – including biology, chemistry, physics, mathematics and geography. In studying these units, students will gain an understanding of the underlying scientific laws that govern the physical universe and enable the presence of life on Earth.

For their research project unit, students will have the opportunity to be directly engaged in one of Sheridan Research Institute’s research projects, designing an original experiment that will extend the body of knowledge in their chosen discipline.

Course Outline
A total of 8 units, and an academic writing module, must be taken to complete the Sheridan College Diploma of Science program. Each unit is worth 3 credit points for a total of 24 credit points.

Pre-Diploma Preparation (1 module)
- Academic Writing

Core Subjects (8 units)
- Essential Academic Skills for the Sciences (3cp)
- Biology: Diversity of Life (3cp)
- Foundations of Chemistry (3cp)
- Linear Algebra and Calculus (3cp)
- Foundations of Physics (3cp)
- Fundamentals of Physical Geography (3cp)
- Introduction to Christianity (3cp)
- Research Project 1: Problem Definition and Experimental Design (3cp)

There are no electives. Students must complete all listed units to meet the graduation requirements for the Diploma of Science.

Academic Calendar
The Diploma of Science is a 12-month program. Units are delivered in 15-week trimesters. Each trimester comprises 12 weeks of teaching, two non-teaching study weeks, and an examination week.

Trimester 1 (Jan–May) and Trimester 3 (Sep–Dec)
Trimesters 1 and 3 are dedicated coursework trimesters for all students. Full-time students will take 4 units in Trimester 1 (12 contact hours per week), and 3 units in Trimester 3 (9 contact hours per week).

Trimester 2 (May – Aug)
Trimester 2 is a dedicated research trimester for all undergraduate students. Whether you are enrolled full-time or part-time, your only formal study during Trimester 2 will be a single research-related unit (3 contact hours per week).

The trimester provides a focused opportunity to acquire valuable research skills, and to practise applying those skills under the direction of the College faculty. Each research-related unit can only be taken once a minimum of three (3) other science units have been completed in the relevant year of study.

The Trimester 2 schedule also offers you some freedom to pursue personal, professional and learning goals outside of your formal coursework. The College provides a range of extra-curricular programs during this trimester for you to gain life experience and enhance your employability. These programs are described on the College website at http://sheridan.edu.au/index.php/home/academic-calendar.

In the sample schedule below, the student will complete the minimum requirements for the Diploma of Science.

SAMPLE DipSc SCHEDULE
Pre-Trimester Module: Academic Writing

<table>
<thead>
<tr>
<th>TRIMESTER 1</th>
<th>TRIMESTER 2</th>
<th>TRIMESTER 3</th>
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<tr>
<td>Essential Academic Skills for the Sciences (3cp)</td>
<td>Research Project 1: Problem Definition and Experimental Design (3cp)</td>
<td>Linear Algebra and Calculus (3cp)</td>
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<tr>
<td>Biology: Diversity of Life (3cp)</td>
<td>Extra-curricular activities and programs</td>
<td>Foundations of Physics (3cp)</td>
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<tr>
<td>Foundations of Chemistry (3cp)</td>
<td></td>
<td>Fundamentals of Physical Geography (6cp)</td>
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<tr>
<td>Introduction to Christianity (3cp)</td>
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Course Structure
The Diploma of Science may be completed in one year if taken full time, or longer if taken part-time. Students are regarded as full-time when they are enrolled in seven (7) or more units per year. Students are regarded as part-time when they take less than seven (7) units per year.

A single Diploma of Science unit represents 168 hours of study over a trimester, including class contact hours and private study. The 168 hours typically consists of seminars and laboratories for 72 hours (6 hours per week over 12 teaching weeks) and private study for 96 hours (6 hours per week over 12 teaching weeks plus 12 hours per week over 2 non-teaching weeks).

New students are required to take the two-week intensive module “Academic Writing” before their first trimester begins. The “Academic Writing” module will run in Trimester 1 and Trimester 3, allowing for two possible entry points to the Diploma of Science in an academic calendar year.

Mode of Study and Assessment
The Diploma of Science utilises a blended learning model which combines face-to-face teaching sessions with the use of the Canvas online course management platform.

Assessments typically consist of a combination of online forum discussions, essays, lab reports, interactive case studies, tests, written reports, presentations and/or examinations.

Expected Learning Outcomes
Diplomas qualify individuals who apply integrated technical and theoretical concepts in a broad range of contexts to undertake advanced skilled or paraprofessional work, and provide a pathway for further learning.

Upon completion of the Diploma of Science, you will be able to:
- Demonstrate your theoretical and technical knowledge of the
scientific consensus in specialised learning areas within mathematics, physical sciences and life sciences.

- Exercise your cognitive skills successfully to search for, identify, and carefully analyse scientific and mathematical evidence.
- Plan, propose and evaluate potential solutions to problems relating to specialised learning areas within mathematics, physical sciences and life sciences.
- Communicate your understanding of knowledge and skills relating to specialised learning areas within mathematics, physical sciences and life sciences to others in study and workplace learning contexts.
- Apply technical and creative tools from one or more specialised learning areas within mathematics, physical sciences and life sciences to interpret and resolve unpredictable problems in a range of theoretical and workplace scenarios.
- Demonstrate your capacity to seek scientific and mathematical knowledge and truth with persistence, independence, rigour, and integrity.
- Evaluate the relevance of Christian faith and practice to the pursuit of scientific knowledge.
- Model self-discipline, servant leadership and respect for the dignity of individuals and groups in study and workplace learning settings.

Each unit you take in the Diploma of Science program will contribute towards the fulfilment of these broader learning outcomes.

Location

Teaching sessions take place at the Perth CBD campus (Suite 18, 7 Aberdeen St Perth) during office hours.

Laboratory demonstrations are scheduled at a Baptist secondary school campus from 3:30pm-6:30pm.

Admission Requirements

**Domestic Students**

- A minimum ATAR score or its equivalent as determined by the Academic Council (for 2015 the score is set at 60), and
- Completion of WACE/HSC with scaled marks of at least 50 in English 2A/2B or Literature 2A/2B, Maths 2C/2D, and one 3A/3B Science course, or
- Completion of relevant VET Certificate IV.

**International Students**

- Successful completion of an assessable qualification from Australia or comparable qualification from selected countries, or
- IELTS 6.0 overall with no band lower than 6.0 OR equivalent.

For decisions of equivalence, or alternative admissions arrangements for students over the age of 19, please contact the Registrar.

Credit Transfer to University

The Sheridan College Diploma of Science is a recognised higher education course, accredited by the Tertiary Education Quality and Standards Agency (TEQSA). Graduating students are able to present the Diploma of Science as evidence in applying for credit towards a Bachelor program at any Australian university. The amount of credit granted will be dependent upon the rules and regulations of the university.

Further Information

If you would like to know more about the course or about Sheridan College, please visit sheridan.edu.au or contact the Registrar.

Contact Details

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