SHERIDAN
INSTITUTE OF HIGHER EDUCATION

Diploma of Science (DipSc)

Registration Code: PRV14012
CRICOS Code: 03391M

Introduction

Sheridan'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, information science or 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.

Course Outline

A total of 8 units must be taken to complete the Sheridan Diploma of Science program. Each unit is worth 3 credit points for a total of 24 credit points.

Core Diploma of Science Subjects (3 units)

- CH101 Foundations of Chemistry
- MA101 Linear Algebra and Calculus
- SC101 Essential Academic Skills for the Sciences

Common Core Subject (2 units)

- CS100 Introduction to Christianity
- RS191 Academic and Professional Communication Skills

Elective Science Subjects (choose 3 units)

- BL101 Biology: The Unity and Diversity of Life
- BL202 Plant Form and Function
- BL203 Animal Form and Function
- CH201 Chemistry of Fuels and Renewable Energies
- CP101 Fundamentals of Computing
- CP120 Data Communication and Networking
- GG100 Fundamentals of Physical Geography
- IS101 Principles of Information Systems
- PH101 Foundations of Physics

Unit Information

Unit code	Unit name	Core/ Elective	Pre-requisites
RS191	Academic and Professional Communication Skills	Core	None
SC101	Essential Academic Skills for the Sciences	Core	None
MA101	Linear Algebra and Calculus	Core	None
CH101	Foundations of Chemistry	Core	None
CS100	Introduction to Christianity	Core	None
GG100	Fundamentals of Physical Geography	Elective	None
BL101	Biology: The Unity and Diversity of Life	Elective	None
CP101	Fundamentals of Computing	Elective	None
CP120	Data Communication and Networking	Elective	None
IS101	Principles of Information Systems	Elective	None
CH201	Chemistry of Fuels and Renewable Energies	Elective	CH101
PH101	Foundations of Physics	Elective	None
BL202	Plant Form and Function	Elective	BL101
BL201	Animal Form and Function	Elective	BL101

SHERIDAN
INSTITUTE OF HIGHER EDUCATION

Rules of Progression

Students must take "Essential Academic Skills for the Sciences" as a co-requisite in their first semester. This unit will be offered in both Semester 1 and Semester 2 of each academic calendar year, to allow for prospective students to begin their studies in either semester.

"Foundations of Chemistry" is a compulsory pre-requisite for students who choose "Chemistry of Fuels and Renewable Energies" as an elective unit.

"Biology: The Unity and Diversity of Life" is a compulsory pre-requisite for the elective units "Plant Form and Function" and "Animal Form and Function".

All other Diploma of Science units have been designed as discrete subjects, and do not require additional prerequisites.

Academic Calendar

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

Semester 1 (Jan–Jun)

Full-time students will take 4 coursework units in Semester 1, requiring 12 contact hours per week.

Semester 2 (Jul–Dec)

Full-time students will take 4 coursework units in Semester 2, requiring 12 contact hours per week.

Entry Points

Students may enter the Diploma of Science for the first time in any semester. Fulltime students will be able to complete the program in 2 semesters:

Sample MEd Program (Fulltime students)

YEAR	SEMESTER 1	SEMESTER 2
1	▪ RS191 Academic and Professional Communication Skills ▪ CS100 Introduction to Christianity ▪ SC101 Essential Academic Skills for the Sciences ▪ MA101 Linear Algebra and Calculus	▪ CH101 Foundations of Chemistry ▪ PH101 Foundations of Physics ▪ BL101 Biology: The Unity and Diversity of Life ▪ GG100 Fundamentals of Physical Geography

Course Workload

The Diploma of Science may be completed in one year if taken full time, or longer if taken part-time. Students are regarded as taking an annual full-time workload when they are enrolled in a minimum of twenty four (24) or more credit points across two semesters in a given year. Students are regarded as part-time when they take less than twenty four (24) credit points per year.

A single Diploma of Science unit represents 168 hours of study over a semester, 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).

Mode of Study and Assessment

The Diploma of Science is delivered face-to-face through lectures, tutorials and seminars, and supported by the Sheridan online Learning Management System, Canvas. Sheridan does not offer an external study option for remote students.

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, students will be able to:

- Demonstrate theoretical and technical knowledge of the scientific consensus in specialised learning areas within mathematics, physical sciences and life sciences.
- Exercise 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 understanding of knowledge and skills relating to specialised learning areas within mathematics, physical sciences and life sciences to others in various 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 scenarios.

- Demonstrate the 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 various settings.

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

Career Opportunities

Diploma of Science graduates acquire knowledge and a skill set that can lead to a diverse range of careers, including:

- Lab technician
- Lab assistant
- Field assistant
- Environmental monitoring officer
- Research assistant

Location

Classes take place at the Perth CBD campus (Suite 18, 7 Aberdeen St Perth).

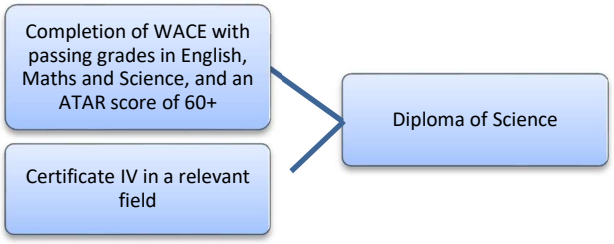
Some laboratory demonstrations may be scheduled at Quinns Baptist College campus (8 Salermo Drive, Mindarie). There is public transport (train and bus) connecting the two campuses.

Admission Requirements

Domestic Students

- A minimum ATAR score or its equivalent as determined by the Academic Council (currently the minimum score is set at 60), and
- Completion of WACE or equivalent with scaled marks of at least 50 in ATAR English or Literature, one ATAR Mathematics and one ATAR Science subject, or
- Completion of relevant VET Certificate IV.

Domestic admission pathways into DipSc



International Students

- Successful completion of an assessable qualification from Australia or comparable qualification from selected countries, and
- Scaled marks of at least 50 in comparable High School Maths and one High School Science course, and
- 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.

Recognition of Prior Learning

There are no advanced standing agreements INTO the diploma. For recognition of prior learning please consult the *Sheridan Credit Transfer and Prior Learning Policy*, available in the Policy Library on the Sheridan website: http://sheridan.edu.au/index.php/home/policy-library.

Credit Transfer to University

The Sheridan 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. Sheridan has signed formal credit pathways for multiple majors into the undergraduate science programs at Curtin University and Murdoch University.

Tuition

Domestic students will pay $825 per unit, for a total cost of $6,600 for the Diploma of Science.

International students will pay $1,600 per unit, for a total cost of $12,800 for the Diploma of Science.

There are no additional expenses for textbooks and field trips. These items are fully covered by the tuition fees outlined above.

Tuition-Free Placements

Graduates and current staff of Baptist schools in Western Australia are invited to register for a selected number of tuition-free placements offered each year. Tuition-free placement students will only be required to meet the expenses of textbooks and field trips.

Further Information

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

Contact Details

Sheridan Institute of Higher Education
Tel: (08) 9221 8170
Email: enquiries@sheridan.edu.au
Website: sheridan.edu.au
Address: 18/7 Aberdeen St Perth WA 6000
Postal Address: GPO Box D178 Perth WA 6849