

Enrolment Course Structure

Course Code – SC5.ADV

Course Name – Bachelor of Science (Advanced)

First Year	Unit Code	Unit Name	Unit Rules
Semester 1			
	STATS1000	Statistical Methods	
		Science Elective	
		Specialisation Major 1	
		Specialisation Major 2	
Semester 2			
	SCCOR2200	Advanced Scientific Communication	PR: 60 points level 1 units EX: SCCOR1200
	COOPC1026	Professional Identity (Science)	
		Specialisation Major 1	
		Specialisation Major 2	
Second Year	Unit Code	Unit Name	Unit Rules
Semester 1			
		Specialisation Major 1	
		Specialisation Major 1	
		Specialisation Major 2	
		Elective	
Semester 2			
		Specialisation Major 1	
		Specialisation Major 2	
		Specialisation Major 2	
		Elective	

Third Year	Unit Code	Unit Name	Unit Rules
Semester 1			
	COOPC2006	Co-Operative Placement (Science)\	PR: Minimum 105 credit points EX: BUGEN3751 & BUGEN3752 & SCCOR3003 & SCCOR3014
	OR		
	COOPC2001	Community Impact Project 1	PR: 120cp
		Specialisation Major 1	
		Specialisation Major 1	
		Specialisation Major 2	
Semester 2			
		Specialisation Major 1	
		Specialisation Major 2	
		Specialisation Major 2	
		Elective	

Bachelor of Science Major and Minor Sequences

BEHAVIOURAL SCIENCE

Major

PSYCB1101 Introductory Psychology A: Biological and Cognitive

PSYCB1102 Introductory Psychology B: Personality and Individual Differences

Three of:

- BEHAV2003 Behaviour in The Workplace
- BEHAV2004 Forensic Behavioural Science
- PSYCB2102 Lifespan Developmental Psychology
- PSYCB2103 Personality
- PSYCB2104 Social Psychology
- PSYCB2106 Psychology, Culture, and Indigenous Australians
- PSYCB2107 Cognitive and Biological Psychology

BEHAV3003 Health and Behaviour Change

BEHAV3004 Counselling Theory and Practice

PSYCB3102 Abnormal Psychology

Minor

PSYCB1101 Introductory Psychology A: Biological and Cognitive

PSYCB1102 Introductory Psychology B: Personality and Individual Differences

Two of:

- BEHAV2003 Behaviour in The Workplace
- BEHAV2004 Forensic Behavioural Science
- PSYCB2102 Lifespan Developmental Psychology
- PSYCB2103 Personality

- PSYCB2104 Social Psychology
- PSYCB2106 Psychology, Culture, and Indigenous Australians
- PSYCB2107 Cognitive and Biological Psychology

BIOCHEMISTRY

Major

SCBIO1001 Principles of biology
 SCCHM1002 Chemistry 2
 SCBCH2001 Biochemistry
 SCBCH2002 Nutrition and Metabolism
 SCMOL2001 Biotechnology laboratory techniques or SCCHM2001 Analytical Techniques

Three of:

- SCMOL3001 Molecular Cell Biology
- SCMOL3010 Advanced Methods in Biotechnology
- SCCHM3001 Medicinal Chemistry
- SCCHM3004 Organic Synthesis for Drug Design

Minor

SCBIO1001 Principles of biology
 SCCHM1002 Chemistry 2

Two of:

- SCBCH2001 Biochemistry
- SCBCH2002 Nutrition and Metabolism
- SCMOL2001 Biotechnology Laboratory Techniques or SCCHM2001 Analytical Techniques

BIOLOGICAL SCIENCE

Major

SCBIO1001 Principles of biology
 SCBIO1020 Systems biology

Three (pairs) of:

- SCMED2010 Pathophysiology 1 and SCMED3034 Histopathology and Haematology
- SCMOL2010 Mammalian genetics and SCMOL3001 Molecular Cell Biology
- SCMIC2001 General Microbiology and SCMIC3003 Clinical microbiology
- SCBCH2002 Nutrition and Metabolism and SCMED3010 Pharmacology & toxicology
- SCVET2001 Animal Management and Disease and SCVET3001 Case studies in animal mgt
- SCENV2100 Australian Fauna and SCENV2101 Australian flora

Minor

SCBIO1001 Principles of biology
 SCBIO1020 Systems biology

One (pair) of:

- SCMED2010 Pathophysiology 1 and SCMED3034 Histopathology and Haematology
- SCMOL2010 Mammalian genetics and SCMOL3001 Molecular Cell Biology
- SCMIC2001 General Microbiology and SCMIC 3003 Clinical microbiology
- SCBCH2002 Nutrition and Metabolism and SCMED3010 Pharmacology & toxicology
- SCVET2001 Animal Management and Disease and SCVET3001 Case studies in animal mgt
- SCENV2100 Australian Fauna and SCENV2101 Australian Flora

CHEMISTRY

Major

SCCHM1001 Chemistry 1
 SCCHM1002 Chemistry 2

SCBCH2001 Biochemistry

SCCHM2001 Analytical techniques

SCCHM2002 Environmental chemistry

Three of:

- SCCHM3001 Medicinal Chemistry
- SCCHM3003 Food Chemistry
- SCCHM3004 Organic Synthesis for Drug Design
- SCCOR3001 Research Project

Minor

SCCHM1001 Chemistry 1

SCCHM1002 Chemistry 2

Two of:

- SCBCH2001 Biochemistry
- SCCHM2001 Analytical Techniques
- SCCHM2002 Environmental Chemistry

ECOLOGY

Major

SCENV1001 Environmental studies

SCENV1002 Biodiversity Conservation

SCENV2200 Population and Community Ecology

Two of:

- SCENV2100 Australian Fauna
- SCENV2101 Australian Flora
- SCENV2202 Wildlife Ecology and Conservation
- SCENV3800 Ecosystems Conservation and Management

SCENV3110 Fire Ecology: Burning Issues for Science and Management

OR

SCENV3204 Arid Zone: Ecology, Management And Challenges

SCENV3912 Environmental assessment

Minor

SCENV1001 Environmental studies

SCENV1002 Biodiversity conservation

SCENV2200 Population and Community Ecology

One of:

- SCENV2100 Australian Fauna
- SCENV2101 Australian Flora
- SCENV2202 Wildlife Ecology and Conservation

ENVIRONMENTAL RESTORATION

Major

SCCHM2002 Environmental Chemistry

SCENV1001 Environmental Studies

SCENV2804 Invasive Species

SCENV3120 Landscape Restoration and Mine Site Rehabilitation

SCENV3400 Wetlands and Water Resources

SCENV3500 Climate and Environmental Issues in a Changing World

SCENV3912 Environmental Assessment

SCSUS1500 Sustainable Earth

Minor

SCCHM2002 Environmental chemistry

SCENV1001 Environmental studies

SCENV2804 Invasive Species

SCSUS1500 Sustainable earth

FOOD SCIENCE

Double major

SCBCH1001 Introduction to Nutrition

SCBCH2001 Biochemistry

SCBCH2002 Nutrition and Metabolism

SCBCH3001 Lifespan Nutrition

SCBIO1020 Systems Biology

SCCHM1002 Chemistry 2

SCCHM2001 Analytical Techniques

SCCHM3003 Food Chemistry

SCCOR3000 Laboratory Management and Quality Assurance

SCCOR3013 Workplace Experience

SCFST2023 Food Processing Systems 1

SCFST3026 Product and Process Development

SCMIC2001 General Microbiology

SCMIC3002 Food Microbiology

SCMOL2001 Biotechnology Laboratory Techniques

Major

SCBCH1001 Introduction to Nutrition

SCBCH2002 Nutrition and Metabolism

SCCHM1002 Chemistry 2

SCCHM3003 Food Chemistry

SCCOR3000 Laboratory Management and Quality Assurance

SCFST2023 Food Processing Systems 1

SCFST3026 Product and Process Development

SCMIC3002 Food Microbiology

Minor

SCBCH1001 Introduction to Nutrition

SCCHM1002 Chemistry 2

SCFST2023 Food Processing Systems 1

SCFST3026 Product and Process Development

GEOSCIENCE

Double major in Geoscience

SCCHM1001 Chemistry I

SCGEO1104 Landscape Evolution

SCGEO1103 Planet Earth
 SCSUS1500 Sustainable earth
 SCCHM2002 Environmental Chemistry
 SCGEO2103 Structural Geology
 SCGEO2106 Hydrology
 SCGEO2107 Fieldwork Principles and Practice
 SCGEO2112 Sedimentology and Stratigraphy
 SCENV2600 GIS
 SCGEO3102 Petrology
 SCGEO3104 Fieldwork
 SCGEO3115 Geochemical and Geophysical Techniques
 SCGEO3116 Economic Geology
 SCENV3120 Landscape Restoration
 SCENV3500 Climate and Environmental Issues in a Changing World

Major

SCGEO1103 Planet Earth
 SCGEO1104 Landscape Evolution
 SCGEO2103 Structural Geology
 SCGEO2107 Fieldwork Principles and Practice
 SCGEO2112 Sedimentology and Stratigraphy
 SCGEO3102 Petrology
 SCGEO3115 Geochemical and Geophysical Techniques
 SCGEO3116 Economic Geology

Minor

SCGEO1103 Planet Earth
 SCGEO1104 Landscape Evolution
 SCGEO2103 Structural Geology
 SCGEO2112 Sedimentology and Stratigraphy

HEALTH AND NUTRITION

Major

SCBIO1020 Systems biology
 SCBCH1001 Introduction to nutrition
 SCMIC2001 General Microbiology
 SCBCH2002 Nutrition and Metabolism
 SCMED2011 Pathophysiology 2
 SCBCH3001 Lifespan Nutrition
 SCMIC3002 Food microbiology
 HEALT3006 Health Promotion

Minor

SCBIO1020 Systems biology
 SCBCH1001 Introduction to Nutrition
 SCBCH2002 Nutrition and Metabolism
 SCMED2011 Pathophysiology 2

INFORMATION TECHNOLOGY

Minor

ITECH1100 Understanding the Digital Revolution

ITECH1103 Big Data and Analytics

ITECH2003 Web Design

ITECH2004 Data modelling

MATHEMATICS

Major

MATHS1001 Modelling and Change (Introductory level)

MATHS1102 Linear Algebra with Applications

MATHS2016 Modelling Continuous Change

Two of:

- MATHS2003 Profit, Loss, and Gambling (Intermediate Level)
- MATHS2009 Space, Shape & Design (Intermediate Level)
- MATHS2012 Graphs, Digraphs & Networks

MATHS3001 Modelling and Change (Advanced)

MATHS3002 Analytics Project 1

OR

SCCOR3001 Research Project

MATHS3007 Puzzles, Patterns and Proofs (Advanced level)

Minor (Calculus stream)

MATHS1001 Modelling and Change (Introductory level)

MATHS1102 Linear Algebra with Applications

MATHS2016 Modelling Continuous Change

One of:

- MATHS2003 Profit, Loss, and Gambling (Intermediate Level)
- MATHS2009 Space, Shape & Design (Intermediate Level)
- MATHS2012 Graphs, Digraphs & Networks
- MATHS3001 Modelling and Change (Advanced Level)

Minor (Non-calculus stream)

MATHS1000 Upon the Shoulders of Giants

STATS1000 Statistical methods

Two of:

- MATHS2003 Profit, Loss, and Gambling (Intermediate Level)
- MATHS2009 Space, Shape & Design (Intermediate Level)
- MATHS2012 Graphs, Digraphs & Networks

MICROBIOLOGY

Major

SCBIO1001 Principles of biology

SCCHM1001 Chemistry 1

SCMIC2001 General Microbiology

SCMIC3002 Food Microbiology

SCMIC3003 Clinical microbiology

SCMOL2001 Biotechnology laboratory techniques

Two of:

- SCCOR3001 Research Project
- SCMOL3010 Advanced Methods in Biotechnology
- SCMOL3020 Immunology

Minor

SCBIO1001 Principles of biology
SCCHM1001 Chemistry 1
SCMIC2001 General Microbiology
SCMOL2001 Biotechnology laboratory techniques

MOLECULAR BIOLOGY

Major

SCBIO1001 Principles of biology
SCCHM1002 Chemistry 2
SCCOR3001 Research Project
SCMIC2001 General Microbiology
SCMOL2010 Mammalian Genetics
SCMOL3001 Molecular Cell Biology
SCMOL3010 Advanced Methods in Biotechnology

Minor

SCBIO1001 Principles of biology
SCCHM1002 Chemistry 2
SCMIC2001 General Microbiology
SCMOL2010 Mammalian Genetics

STATISTICS

Minor

SCCOR1300 Scientific Practice
STATS1000 Statistical Methods
STATS2101 Statistics for Prediction
STATS2100 Experimental Design and Analysis

Course Rules

- Students must complete either 2 major sequences or a double major sequence
- Students must complete either SCCOR3003 Industry based learning (30 cpt) or SCCOR3001 Research project and either SCCOR3014 Industry based learning (15 cpt) or SCCOR3013 Workplace experience (15 cpt)
- A maximum of ten 1000 level units, and a minimum of four 3000 level units are required.

Additional Information

This course structure applies to students commencing from 2024. Students who commenced prior to 2024 should refer to the continuing enrolments page.

TEQSA have advised that, in accordance with B1.1.3 of [Higher Education Standards Framework \(Threshold Standards\) 2021](#) all Higher Education Providers are required to show their TEQSA Provider number and Provider Category on all relevant public material. ITS have ensured that our website and email signature templates have been amended to ensure compliance and have provided a knowledge article to assist you to update your signatures. Marketing are working to update the brand library and all social media accounts.

Glossary

Semester: designated teaching period.

PR: Pre-requisite, a unit/s that must be completed prior to undertaking another unit.

CO: Co-requisite, a unit/s that must be completed simultaneously, or prior to, undertaking another unit.

EX: Exclusion, a unit/s that may not be taken.