

# S770 MASTER OF DATA SCIENCE (PROFESSIONAL)

FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT PART C:  
PROFESSIONAL STUDIES - RESEARCH TRAINING, PROJECT AND ELECTIVES PATHWAY



FOR STUDENTS COMMENCING TRIMESTER 3 2023

Last updated 06/11/2023

When you first enrol via StudentConnect and go through the enrolment steps, you may be able to simply confirm any units that are pre-populated for you. You can also add any that you need to do, as part of your first year's enrolment – by using the information on this map and in the Handbook.

You must also complete the following compulsory zero (0) credit point units: STP050 Academic Integrity (0 credit points)

<b>YEAR 1</b> Year: 2023	Trimester 3				
<b>YEAR 2</b> Year: 2024	Trimester 1				
	Trimester 2				
	Trimester 3				
<b>YEAR 3</b> Year: 2025	Trimester 1				
	Trimester 2				
	Trimester 3				

NOTE: Students commencing in Trimester 3 who wish to undertake the 'AI and Computer Vision' or 'Networking and Cloud Technologies' specialisation will be required to complete units in subsequent Trimester 3 teaching periods in order to complete the PART C: Professional Studies – Research Training, Project and Electives pathway. Students should seek course advice prior to choosing a specialisation.

## S770 COURSE RULES

- Must pass 16 credit points for course
- Must pass all units in {SIT718, SIT720, SIT731, SIT741, SIT742, SIT743, SIT744, SIT787, STP050}
- Must pass 1 unit set(s) in {Part C: Professional Studies - Professional Practice (PT-S770003), Part C: Professional Studies - Research Project a and Electives (PTS770004), Part C: Professional Studies - Research Project (PT-S770006), Part C: Professional Studies - Team Project (PT-S770007)}
- Must pass 1 unit set(s) in {Business Analytics (SP-MDBS004), Information Systems (SP-MDBS012), Networking and Cloud Technologies (SP-S000021), Cyber Security (SP-S000028), Blockchain and Software Development (SP-S000092), Ai and Computer Vision (SP-S000093), Analytics in Internet of Things (SP-S000094)}

FOR USE ONLY WHEN UNDERTAKING A CONSULTATION WITH A STUDENT ADVISER:

Student ID: _____		Name: _____			
Deakin email: _____			Preferred contact no: _____		
Year commenced:	Period commenced:	eCOE (if applicable):	Campus: _____	Mode: _____	
Student adviser: _____				Date: _____	

## GENERAL INFORMATION

This course map is a guide only. You must also ensure you meet the course rules and structure as set out in the official [University Handbook](#) of the year you commenced your course. This course map has been created to be used electronically.

Not all units are available in all study periods or mode of delivery.

- Full time study is typically three to four units (or credit points) each study period.
- Part time study is typically one to two units (or credit points) each study period – part time study will extend the duration of your studies.
- Trimester 3 is typically an optional study period - unless it's your first study period and/or a compulsory study period for your course.

Unit options can be found in the '[Advanced Unit Search](#)' in the most current year's University Handbook.

If you have applied for or received credit for units as recognition of prior learning (RPL), it may alter the units you need to study.

Please seek advice from a Student Adviser in StudentCentral if you have any queries or need help understanding your course structure and unit options.

## S770 MASTER OF DATA SCIENCE (PROFESSIONAL) PART UNIT SETS

PART A: CORE DATA SCIENCE STUDIES (PT-S770001)
<a href="#">SIT718 Real World Analytics</a>
<a href="#">SIT720 Machine Learning</a>
<a href="#">SIT731 Data Wrangling</a>
<a href="#">SIT741 Statistical Data Analysis</a>
<a href="#">SIT742 Modern Data Science</a>
<a href="#">SIT743 Bayesian Learning and Graphical Models</a>
<a href="#">SIT744 Deep Learning</a>
<a href="#">SIT787 Mathematics for Artificial Intelligence</a>

### Completion Rule

- Must pass all unit(s) in {SIT718, SIT720, SIT731, SIT741, SIT742, SIT743, SIT744, SIT787}

PART C: PROFESSIONAL STUDIES - PROFESSIONAL PRACTICE (PT-S770003)
<a href="#">SIT753 Professional Practice in Information Technology</a>
<a href="#">SIT791 Professional Practice</a>
<a href="#">STP710 Career Tools for Employability</a>

Completion Rule

- Must pass all unit(s) in {SIT753, SIT791, STP710}
- Must pass 1 credit points in {SIT7%}

**PART C: PROFESSIONAL STUDIES - RESEARCH PROJECT (PT-S770006)**

[SIT723 Research Techniques and Applications](#)

[SIT746 Research Project \(Advanced\)](#)

Completion Rule

- Must pass all unit(s) in {SIT723, SIT746}

**PART C: PROFESSIONAL STUDIES - RESEARCH TRAINING PROJECT AND ELECTIVES (PT-S770004)**

[SIT723 Research Techniques and Applications](#)

[SIT753 Professional Practice in Information Technology](#)

Completion Rule

- Must pass all unit(s) in {SIT723, SIT753}
- Must pass 1 credit points in {SIT7%}

**PART C: PROFESSIONAL STUDIES - TEAM PROJECT (PT-S770007)**

[SIT753 Professional Practice in Information Technology](#)

[SIT764 Team Project \(A\) - Project Management and Practices](#)

[SIT782 Team Project \(B\) - Execution and Delivery](#)

Completion Rule

- Must pass all unit(s) in {SIT753, SIT764, SIT782}
- Must pass 1 credit points in {SIT7%}

**S770 MASTER OF DATA SCIENCE (PROFESSIONAL) SPECIALISATION UNIT SETS**

**AI AND COMPUTER VISION (SP-S000093)**

[SIT788 Engineering Ai Solutions](#)

[SIT789 Robotics, Computer Vision and Speech Processing](#)

[SIT796 Reinforcement Learning](#)

[SIT799 Human Aligned Artificial Intelligence](#)

Completion Rule

- Must pass all unit(s) in {SIT788, SIT789, SIT796, SIT799}

**ANALYTICS IN INTERNET OF THINGS (SP-S000094)**

SIT722 Software Deployment and Operation

SIT725 Applied Software Engineering

SIT729 Software Architecture and Scalability for Internet of Things

SIT730 Embedded Systems Development

SIT732 Developing Secure Internet of Things Applications

Completion Rule

- Must pass all unit(s) in {SIT725, SIT729, SIT730}
- Must pass all unit(s) in {SIT725, SIT729, SIT730}
- Must pass 1 unit(s) in {SIT722, SIT732}
- Must pass 1 unit(s) in {SIT722, SIT732}

**BLOCKCHAIN AND SOFTWARE DEVELOPMENT (SP-S000092)**

SIT708 Mobile Application Development

SIT725 Applied Software Engineering

SIT728 Blockchain Technologies and Real-World Applications

SIT737 Cloud Native Application Development

Completion Rule

- Must pass all unit(s) in {SIT708, SIT725, SIT728, SIT737}

**BUSINESS ANALYTICS (SP-MDBS004)**

MIS714 People Analytics

MIS770 Foundation Skills in Data Analysis

MIS771 Descriptive Analytics and Visualisation

MIS772 Predictive Analytics

MIS781 Business Intelligence and Database

Completion Rule

- Must pass 2 unit(s) in {MIS714, MIS772, MIS781}
- Must pass 2 unit(s) in {MIS770, MIS771}

**CYBER SECURITY (SP-S000028)**

SIT703 Computer Forensics and Investigations

SIT704 Ethical Hacking

SIT716 Computer Networks and Security

SIT735 Application and Communication Protocol Security

SIT736 Identity, Access Management and Physical Security

[SIT738 Secure Coding](#)

[SIT763 Cyber Security Management](#)

Completion Rule

- Must pass all unit(s) in {SIT704, SIT716}
- Must pass 2 unit(s) in {SIT703, SIT735, SIT736, SIT738, SIT763}

### INFORMATION SYSTEMS (SP-MDBS012)

[MIS701 Digital Business Analysis](#)

[MIS761 Cyber Security Strategies](#)

[MIS770 Foundation Skills in Data Analysis](#)

[MIS770A Foundation Skills in Data Analysis](#)

[MIS782 Value of Information](#)

Completion Rule

- Must pass 3 credit points in {MIS701, MIS761, MIS782}
- Must pass 1 credit points in {MIS770, MIS770A}

### INFORMATION SYSTEMS FOR DATA SCIENCE (SP-S000096)

[MIS701 Digital Business Analysis](#)

[MIS712 Managing Digital Transformation](#)

[MIS776 Design Thinking for Innovation](#)

[MIS782 Value of Information](#)

Completion Rule

- Must pass all unit(s) in {MIS701, MIS712, MIS776, MIS782}

### NETWORKING AND CLOUD TECHNOLOGIES (SP-S000021)

[SIT706 Cloud Computing](#)

[SIT716 Computer Networks and Security](#)

[SIT722 Software Deployment and Operation](#)

[SIT727 Cloud Automation Technologies](#)

[SIT729 Software Architecture and Scalability for Internet of Things](#)

[SIT737 Cloud Native Application Development](#)

Completion Rule

- Must pass all unit(s) in {SIT706, SIT716, SIT727}
- Must pass 1 unit(s) in {SIT722, SIT729, SIT737}