S770 MASTER OF DATA SCIENCE (PROFESSIONAL)

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

YEAR 1 Year: 2023	Trimester 3	SIT718 Real World Analytics	SIT731 Data Wrangling	Specialisation or Course Grouped Electives (Level 7 SIT or MIS unit)	
YEAR 2 Year: 2024	Trimester 1	SIT787 Mathematics for Artificial Intelligence	SIT720 Machine Learning	SIT743 Bayesian Learning and Graphical Models	Specialisation or Course Grouped Electives (Level 7 SIT or MIS unit)
	Trimester 2	SIT741 Statistical Data Analysis	SIT742 Modern Data Science	SIT744 Deep Learning	Specialisation or Course Grouped Electives (Level 7 SIT or MIS unit)
	Trimester 3	SIT723 Research Techniques and Applications			
YEAR 3 Year: 2025	Trimester 1	SIT746 Research Project (Advanced)		Specialisation or Course Grouped Electives (Level 7 SIT or MIS unit)	
	Trimester 2				
	Trimester 3				

NOTE: Students commencing in Trimester 3 will be required to complete units in subsequent Trimester 3 teaching periods in order to complete the PART C: Professional Studies – Research Project pathway.

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 (PT-S770004), 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:**

Notes

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)
SIT718 Real World Analytics
SIT720 Machine Learning
SIT731 Data Wrangling
SIT741 Statistical Data Analysis
SIT742 Modern Data Science
SIT743 Bayesian Learning and Graphical Models
SIT744 Deep Learning
SIT787 Mathematics for Artificial Intelligence

Completion Rule

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

PART C: PROFESSIONAL STUDIES - PROFESSIONAL PRACTICE (PT-S770003)
SIT753 Professional Practice in Information Technology
SIT791 Professional Practice
STP710 Career Tools for Employability

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}