S770 MASTER OF DATA SCIENCE (PROFESSIONAL) (DRAFT)

FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT



FOR STUDENTS COMMENCING TRIMESTER 2 2022

Last updated 10/05/2022

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 (O) credit point units: STPO50 Academic Integrity (O credit points)

YEAR 1	Trimester 2	
Year: 2022	Trimester 3	
YEAR	Trimester 1	
2 Year: 2023	Trimester 2	
	Trimester 3	
YEAR	Trimester 1	
3 Year: 2024	Trimester 2	
	Trimester 3	

S770 COURSE RULES

- Must pass 16 credit points for course
- Must pass 1 units in {STP050}
- Must pass ALL units in {SIT718, SIT720, SIT731, SIT741, SIT742, SIT743, SIT744, SIT787}
- 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 a and Research Project B (Thesis) (PT-S770006), Part C: Professional Studies Team Project a and Team Project B (PT-S770007)}
- Must pass 1 unit set(s) in {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), Business Analytics for Data Science (SP-S000095), Information Systems for Data Science (SP-S000096)}

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 <u>University Handbook</u> 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)	
SIT791 Professional Practice	
STP710 Career Tools for Employability	

• Must pass all unit(s) in {SIT791, STP710}

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

SIT723 Research Project A

Completion Rule

- Must pass 1 unit(s) in {SIT723}
- Must pass 2 credit points in {SIT7%}

PART C: PROFESSIONAL STUDIES - RESEARCH PROJECT A AND RESEARCH PROJECT B (THESIS) (PT-S770006)

SIT723 Research Project A

SIT724 Research Project B (Thesis)

Completion Rule

• Must pass all unit(s) in {SIT723, SIT724}

PART C: PROFESSIONAL STUDIES - TEAM PROJECT A AND TEAM PROJECT B (PT-S770007)

SIT764 Team Project (A) - Project Management and Practices

SIT782 Team Project (B) - Execution and Delivery

Completion Rule

- Must pass all unit(s) in {SIT764, SIT782}
- Must pass 2 credit points in {SIT7%}

S770 MASTER OF DATA SCIENCE (PROFESSIONAL) SPECIALISATION UNIT SETS

AI AND COMPUTER VISION (SP-S000093)

SIT788 Engineering Ai Solutions

SIT789 Applications of 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)

 $\underline{\mathsf{SIT722}\,\mathsf{Software}\,\mathsf{Deployment}\,\mathsf{and}\,\mathsf{Operation}}$

SIT725 Applied Software Engineering

SIT729 Software Architecture and Scalability for Internet of Things

SIT730 Embedded Systems Development

$\underline{\textbf{SIT732 Developing Secure Internet of Things Applications}}$

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 Systems Development
SIT725 Applied Software Engineering
SIT728 Blockchain Technologies and Real-World Applications
SIT737 Cloud Applications Design and Development

Completion Rule

- Must pass all unit(s) in {SIT708, SIT725, SIT780}
- Must pass 1 unit(s) in {SIT728, SIT737}

SIT780 Enterprise Applications Development

BUSINESS ANALYTICS FOR DATA SCIENCE (SP-S000095)	
MIS770 Foundation Skills in Data Analysis	
MIS771 Descriptive Analytics and Visualisation	
MIS775 Decision Modelling for Business Analytics	
MIS782 Value of Information	

Completion Rule

• Must pass all unit(s) in {MIS770, MIS771, MIS775, MIS782}

CYBER SECURITY (SP-S000028)
SIT703 Advanced Digital Forensics
SIT704 Ethical Hacking
SIT716 Computer Networks and Security
SIT735 Application and Communication Protocol Security
SIT763 Cyber Security Management

Completion Rule

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

INFORMATION SYSTEMS FOR DATA SCIENCE (SP-S000096) MIS701 Business Requirements 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 Development and Operation	
SIT727 Cloud Automation Technologies	
SIT729 Software Architecture and Scalability for Internet of Things	

Completion Rule

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