

The Degree of Master of Applied Data Science (MADS – 180 points)

These regulations must be read in conjunction with the General Regulations for the University.

1. Version

- (a) These Regulations came into force on 1 January 2025.
- (b) This degree was first offered in 2017.

2. Variations

In exceptional circumstances the Amo Matua, Pūtaiao | Executive Dean of Science or delegate may approve a personal programme of study which does not conform to these Regulations, unless a substitute course is otherwise approved.

3. The structure of the qualification

To qualify for the Degree of Master of Applied Data Science a student must complete a total of 180 points including:

- (a) 45 points from the Foundation Courses listed in Schedule C: Group 1 to these Regulations, unless a substitute course is otherwise approved.
 - i. A student who has completed an undergraduate course equivalent to any of the Foundation Courses, or who has equivalent industry experience to the relevant learning outcomes, may substitute these with other approved courses from Schedule E with approval from the Amo Matua, Pūtaiao | Executive Dean of Science or delegate.
- (b) 60 points of courses listed in Schedule C: Group 2 to these Regulations.
 - i. With approval of the Amo Matua, Pūtaiao | Executive Dean of Science or delegate a student may substitute one or more of these courses with a more advanced course on the topic.
- (c) At least 30 points from Schedule E to these Regulations.
- (d) 45 points from Schedule C Group 3 to these Regulations.

4. Admission to the qualification

A student for the Degree of Master of Applied Data Science (MADS), before applying to enrol in the degree, must have:

- (a) qualified for a university degree in an area which is relevant to data science eg, biological sciences, computer science, digital humanities, economics, environmental science, finance, geography, geology, mathematics, physics, psychology, statistics, or any other relevant degree subject to approval of the Amo Matua, Pūtaiao | Executive Dean of Science or delegate; and
- (b) passed 90 points in relevant 300-level courses with at least a B Grade Point Average; and
- (c) met the prerequisites as specified in the BSc(Hons) or BA(Hons) Regulations in at least one relevant subject to allow enrolment in 400-level courses, or higher, to fulfil the Group B requirements; and
- (d) been approved as a student for the degree by the Amo Matua, Pūtaiao | Executive Dean of Science or delegate.

5. Subjects

There are no majors, minors or endorsements for this qualification.

6. Time limits

This qualification adheres to the General Regulations for the University, unless an exemption is granted by the Amo Matua, Pūtaiao | Executive Dean of Science or delegate, with a time limit of 60 months.

7. Transfers of credit, substitutions and cross-credits

This qualification adheres to the Credit Recognition and Transfer Regulations with no additional stipulations.

8. Progression

This qualification adheres to the General Regulations for the University, which permits 30 points of course failures to qualify for the degree, with the following stipulation:

- (a) Courses in Schedule C Group 3 cannot be repeated if failed.

9. Honours, Distinction and Merit

This qualification adheres to the General Regulations for the University and may be awarded with Distinction and Merit.

10. Exit and Upgrade Pathways to other Qualifications

A student who has not met the requirements for the MADS or who wishes to transfer to the Postgraduate Diploma in Applied Data Science may apply to the Amo Matua, Pūtaiao | Executive Dean of Science or delegate for admission. Admission will be based on having met the requirements for entry.

Schedule C: Compulsory Courses for the Degree of Master of Applied Data Science

For full course information, go to courseinfo.canterbury.ac.nz

Group 1: Foundation Courses: Foundational Data Science Competencies

A student will be required by the Kaihautū Hōtaka | Programme Director to enrol in all the foundation courses unless there is evidence of prior learning in the fundamentals of data science:

Course Code	Course Title	Pts	2025	Location	P/C/R/RP/EQ
COSC480	Computer Programming	15	X1	UC Online	P: Subject to approval of the Head of Department.
			S1	Campus	
			S1	Distance Learning	
			S2	Campus	
			S2	Distance Learning	
			X4	UC Online	
DATA401	Introduction to Data Science	15	X1	UC Online	P: Subject to approval of the Head of School.
			S1	Campus	
			S1	Distance Learning	
			S2	Campus	
			S2	Distance Learning	
			X3	UC Online	
MBIS623	Data Management	15	S1	Campus	R: INFO260
			S1	Distance Learning	
			X2	UC Online	
			S2	Campus	
			X4	UC Online	

Group 2: Advanced Data Science Competencies

Course Code	Course Title	Pts	2025	Location	P/C/R/RP/EQ
DATA420	Scalable Data Science	15	X1	UC Online	P: Subject to approval of the Head of Department of Mathematics and Statistics.
			S1	Campus	
			S1	Distance Learning	
			S2	Campus	
			S2	Distance Learning	
			X3	UC Online	
DIGI405	Texts, Discourses and Data: the Humanities and Data Science	15	S1	Campus	P: Subject to approval of the Programme Coordinator.
			S1	Distance Learning	
			S2	Campus	
			S2	Distance Learning	
			X3	UC Online	
STAT448	Big Data	15	S1	Campus	P: Subject to approval of the Head of School
			S1	Distance Learning	
			S2	Campus	
			S2	Distance Learning	
			X4	UC Online	
STAT462	Data Mining	15	S1	Campus	P: Subject to approval of the Head of School.
			S1	Distance Learning	
			X2	UC Online	
			S2	Campus	
			S2	Distance Learning	

A student will be required to take the following courses. With approval of the Kaihautū Hōtaka | Programme Director, other relevant courses can be substituted:

Group 3: Data Science Project

Course Code	Course Title	Pts	2025	Location	P/C/R/PP/EQ
DATA601	Applied Data Science Project	45	A	Campus	P: Subject to the approval of the Head of School
			X	Campus	
DATA603	Applied Data Science Industry Project	45	A		P: Students must have completed at least 90 points of coursework towards MADS. Students must have a B+ average = a GPA of at least 6.0 from 45 points of those 90 points of coursework towards MADS. Subject to approval of the Head of School. R: DATA601, DATA605
DATA605	Applied Data Science Industry Research Project	45	A		P: Students must have completed at least 90 points of coursework towards MADS. Students must have a B+ average = a GPA of at least 6.0 from 45 points of those 90 points of coursework towards MADS. Subject to approval of the Head of School. R: DATA601, DATA603

Schedule E: Elective Courses for the Degree of Master of Applied Data Science

Domain Specific Competencies

400 or 600-level courses in Biological Sciences, Computer Science, Digital Humanities, Economics, Environmental Science, Finance, Geography, Geology, Mathematics, Physics, Psychology, Statistics, or in any other relevant degree subject as approved by the Kaihautū Hōtaka | Programme Director and the Head of the relevant school or department. This group would normally include a course with a specified work integrated learning component.