The Degree of Master of Geospatial Data Science (MGDS – 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 2018 as the Professional Master of Geospatial Science and Technology.

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.

3. The structure of the qualification

To qualify for the degree a student must:

(a) pass courses having a total minimum value of 180 points; and
(b) satisfactorily complete:
    i. All courses from Schedule C;
    ii. A maximum of 45 points from GISC coded courses in Schedule E: Group 1; and
    iii. A maximum of 30 points from non-GISC coded courses from Schedule E: Group 2.

4. Admission to the Qualification

A student for the Degree of Master of Geospatial Data Science, before applying to enrol in the degree, must have:

(a) qualified for a university degree with at least a B Grade Point Average in 300-level GIS courses; and has completed 30 points of undergraduate GIS course(s), or GISC422 (Foundations of Geographic Information Systems), or an approved equivalent course prior to enrolment;
(b) 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 with a time limit of 36 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) GEOG693 may not be 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) There are no advancing qualifications for this degree.
(b) Exit qualifications may include:
    i. Postgraduate Diploma in Geospatial Data Science (PGDipGDS); or
    ii. Postgraduate Certificate in Geospatial Data Science (PGCertGDS).

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

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

Course Code	Course Title	Pts	2026	Location	P/C/R/RP/EQ
GEOG693	Geospatial Data Science Project	60	A	Campus	P: GISC402
			X	Campus	
GISC401	Foundations of Geospatial Data Science	15	S1	Campus	R: GISC101
GISC402	Geospatial Data Science Research	15	S2	Campus	P: Entry subject to approval by the Programme Director. RP: 30 points of GISC at 400-level.
GISC403	Geovisual Analytics	15	T1	Campus	P: GEOG205 or DIGI205 or GISC422 or equivalent.
GISC404	Spatial Analysis	15	S1	Campus	P: Subject to the approval of the Programme Director. RP: GEOG-DIGI 205 or GISC 422 or equivalent, GEOG323

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

Group 1

Course Code	Course Title	Pts	2026	Location	P/C/R/RP/EQ
GISC405	Environmental and Climate Data Analytics	15	S2	Campus	P: GISC101 or GISC401 or equivalent.
GISC406	Remote Sensing for Earth Observation	15	S1	Campus	P: GEOG205, GEOG208 R: GEOG407
GISC411	Spatial Analytics for Health, Society and Environment	15	NO		P: Entry is subject to the approval of the Programme Director: GIS. RP: HLTH462 recommended but not required.
GISC412	Advanced Methods in Geospatial Data Science	15	S2	Campus	P: GISC 401 or COSC121 or COSC480 or equivalent R: GEOG324
GISC415	Geospatial Data Science Internship	15	S2	Campus	P: Entry is limited to students enrolled in the programmes and subject to the approval of the Programme Director. R: Subject to the approval of the Programme Director against normal or previous employment.
GISC417	Special Topic	15	NO		P: Entry subject to the approval of the Programme Director, GISC101/GISC401, GEOG205/DIGI205/ GISC422, or equivalent.

Group 2

Course Code	Course Title	Pts	2026	Location	P/C/R/RP/EQ
COMS408	Communication Ethics	30	NO		P: Subject to approval of the Head of Department. R: COMS422, PHIL469
DATA422	Data Wrangling for Data Science	15	S2	Campus	P: Subject to approval of the Head of Department of Mathematics and Statistics.
			S2	Distance Learning	
FORE642	Geospatial Science in Forest Monitoring and Management	15	S1	Campus	P: Subject to approval of Head of School. R: FORE342; FORE242
HITD603	Human Interface Technology - Prototyping and Projects	15	S1	Campus	P: Subject to Approval of the College of Engineering Dean (Academic) R: HITD601
MBIS601	Management of Information Systems	15	S1	Campus	R: INFO243, INFO343
MBIS602	Systems Analysis and Process Modelling	15	S1	Campus	R: INFO223
MBIS603	Digital Business and Technology	15	S2	Campus	R: INFO253
MBIS623	Data Management	15	S1	Campus	R: INFO260
			S1	Distance Learning	
			S2	Campus	
			X3	UC Online	
STAT448	Big Data	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	
STAT462	Data Mining	15	X1	UC Online	P: Subject to approval of the Head of School.
			S1	Campus	
			S1	Distance Learning	
			S2	Campus	
			S2	Distance Learning	
			X4	UC Online	