

# Postgraduate Diploma in Geospatial Data Science (PGDipGDS – 120 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 Diploma was first offered in 2018 as the Postgraduate Diploma in 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 Postgraduate Diploma in Geospatial Data Science a student must:

- (a) have been credited with 120 points of courses selected from the Schedule to the Regulations for the Postgraduate Diploma in Geospatial Data Science including:
  - i. All Schedule C Courses;
  - ii. A maximum of 60 points from GISC coded courses in Schedule E Group 1;
  - iii. A maximum of 30 points from non-GISC coded courses from Schedule E Group 2 for the programme.

## 4. Admission to the qualification

A student for the Postgraduate Diploma in Geospatial Data Science, before enrolling for the Diploma, must have:

- (a) qualified for a university degree with at least a B Grade Point Average in 300-level GIS courses; including 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 24 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 qualification, with no additional stipulations.

## 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) A student who has completed the requirements for the PGDipGDS but has not yet graduated, may apply to the Amo Matua, Pūtaiao | Executive Dean of Science or delegate to be admitted to the Master of Geospatial Data Science (MGDS) and have credits transferred.
- (b) A student who has graduated with the PGDipGDS from Te Whare Wānanga o Waitaha | University of Canterbury, may apply to the Amo Matua, Pūtaiao | Executive Dean of Science or delegate to be admitted to the Master of Geospatial Data Science (MGDS) and have their Diploma subsumed in accordance with the General Regulations to the University.

- (c) A student who does not complete the points required to qualify for a PGDipGDS may apply to the Amo Matua, Pūtaiao | Executive Dean of Science or delegate to have their credits transferred towards the award of a Postgraduate Certificate in Geospatial Data Science (PGCertGDS).

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

For full course information, go to [courseinfo.canterbury.ac.nz](http://courseinfo.canterbury.ac.nz)

| Course Code | Course Title                           | Pts | 2025 | Location | P/C/R/RP/EQ   |
|-------------|--|-----|------|----------|---|
| GISC401     | Foundations of Geospatial Data Science | 15  | S1   | Campus   | P: Entry subject to the approval of the Programme Director.<br>R: GISC101                                   |
| 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.<br>RP: GEOG-DIGI205 or GISC422 or equivalent, GEOG323 |

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

Group 1

| Course Code | Course Title  | Pts | 2025 | Location | P/C/R/RP/EQ  |
|-------------|---|-----|------|----------|--|
| GISC402     | Geospatial Data Science Research                      | 15  | S2   | Campus   | P: Entry subject to approval by the Programme Director.<br>RP: 30 points of GISC at 400-level.                       |
| 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<br>R: GEOG407  |
| GISC411     | Spatial Analytics for Health, Society and Environment | 15  | NO   |          | P: Entry is subject to the approval of the Programme Director: GIS.<br>RP: HLTH462 recommended but not required.     |
| GISC412     | Advanced Methods in Geospatial Data Science           | 15  | S2   | Campus   | P: GISC401 or COSC121 or COSC480 or equivalent<br>R: GEOG324   |
| GISC417     | Geospatial Data Science 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 | 2025 | Location          | P/C/R/RP/EQ  |
|-------------|---|-----|------|-------------------|--|
| COMS408     | Communication Ethics  | 30  | S1   | Campus            | P: Subject to approval of the Head of Department.<br>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     | Advanced Geospatial Science in Forest Monitoring and Management | 15  | S1   | Campus            | P: Subject to approval of Head of School.<br>R: FORE342                            |
| HITD603     | Human Interface Technology - Prototyping and Projects           | 15  | S1   | Campus            | P: Subject to Approval of the College of Engineering Dean (Academic)<br>R: HITD601 |
| MBIS601     | Management of Information Systems                               | 15  | S1   | Campus            | R: INFO243, INFO343  |
| MBIS602     | Systems Analysis and Process Modelling                          | 15  | S2   | Campus            | R: INFO223   |
| MBIS603     | Digital Business and Technology                                 | 15  | S1   | Campus            | R: INFO253   |
| MBIS623     | Data Management   | 15  | S1   | Campus            | R: INFO260   |
|             |   |     | S1   | Distance Learning |  |
|             |   |     | X2   | UC Online         |  |
|             |   |     | S2   | Campus            |  |
|             |   |     | X4   | 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 |  |