Course Title:	**Geospatial Data Visualisation and Analysis**
Course Code:	**GESC800**
Descriptor Start Date:	**01/01/2026**
POINTS:	**30.00**
LEVEL:	**8**
PREREQUISITE/S:	
COREQUISITE/S:	
RESTRICTION/S:	

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 300

PRESCRIPTOR

Advances knowledge and methodologies required to process geospatial analysis and conceptualise geo-visualisation of results. Explores geoprocessing, data automation, cartography, and geo-communication strategies. Using hands-on practice, gain skills to analyse geospatial data to solve real-world problems and communicate solutions to diverse audiences and end-users.

LEARNING OUTCOMES

1. Integrate fundamental geospatial concepts for real-world problem solving
2. Critically assess methods and tools for analysing and visualising geospatial data.
3. Critically discuss geoprocessing and visualization solutions for solving a variety of real-world problems.

CONTENT

- Geospatial analysis, methods, and problem solving
- Cartographic concepts and applications
- Geospatial automation (Python, model builder FME)
- Web or enterprise GIS solutions
- Desktop and web-based geospatial analysis and communication

LEARNING & TEACHING STRATEGIES

The course delivery will include lectures, classes, group work, student-led seminars, discussions, and online tools, supplemented by self-directed study. Refer to your timetable and Canvas for detailed information.

ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Written Assessment (3500 words)	30.00	LO1, LO2, LO3
Portfolio 1	10.00	LO1
Portfolio 2	40.00	LO1, LO2, LO3
Verbal presentation (20 mins)	20.00	LO1, LO2, LO3

Grade Map **MAP1**

A+ A A- Pass with Distinction
B+ B B- Pass with Merit
C+ C C- Pass
D Fail

Overall requirement/s to pass the course:

Students must achieve an overall average grade of at least C- across all summative assessments to pass this course.

LEARNING RESOURCES

Additional readings and resources are provided in class and on Canvas.

For further information, contact: Te Ara Hauora A Putaiao - Faculty of Health & Environmental Science

Principal Programme: **AK2037, Master of Science**

Related Programme/s: **AK1037**
AK1038
AK1039

Disclaimer: Course descriptors may be amended between teaching periods/semesters