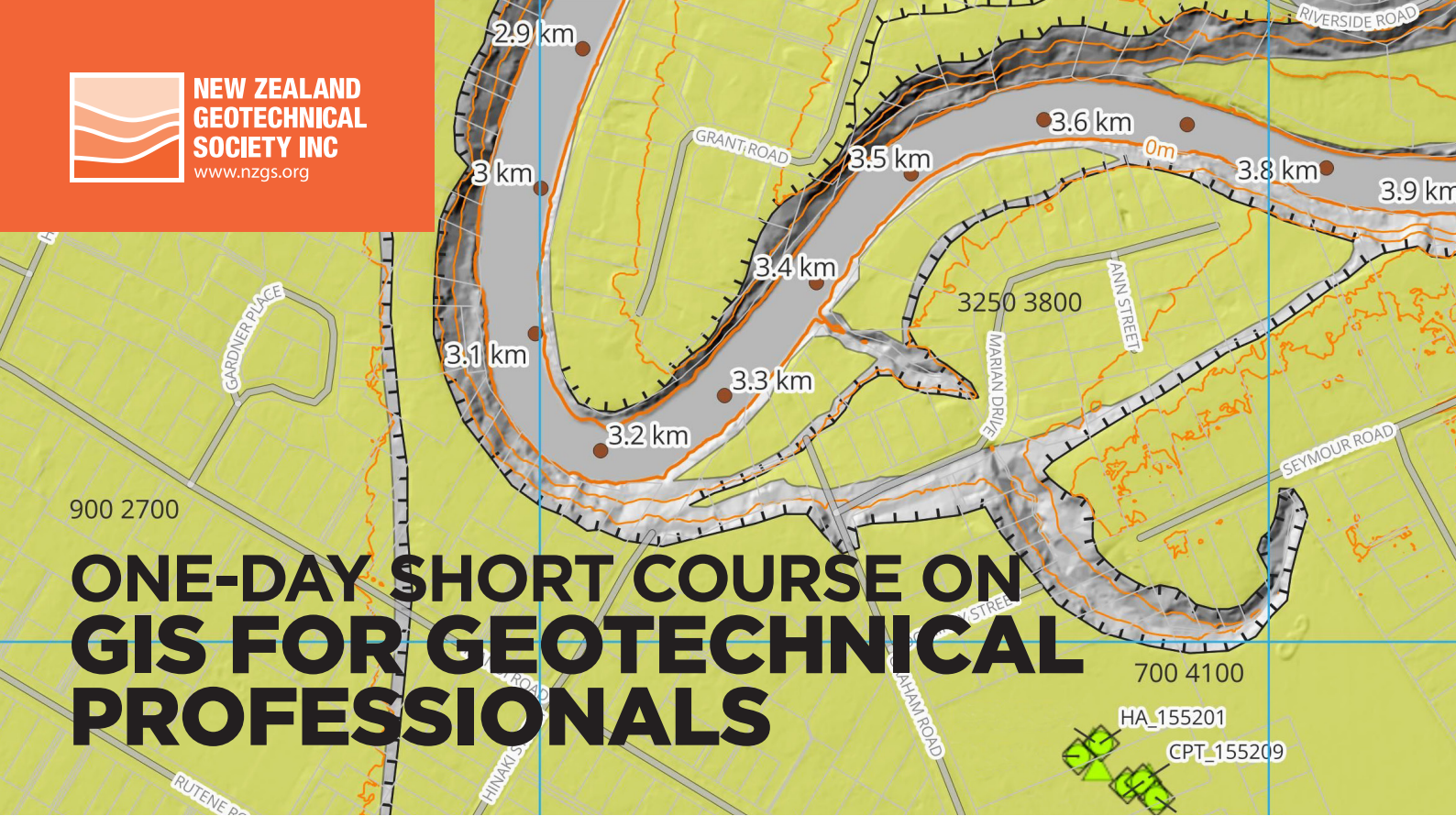




NEW ZEALAND  
GEOTECHNICAL  
SOCIETY INC  
www.nzgs.org



# ONE-DAY SHORT COURSE ON GIS FOR GEOTECHNICAL PROFESSIONALS

**The NZ Geotechnical Society is offering a one-day short course providing an introduction to Geographic Information Systems (GIS) with a focus on geotechnical applications.**

This online course is intended to provide geotechnical engineers and engineering geologists with an introduction to using geographical information systems (GIS) using the QGIS software platform.

## This course will cover

- An introduction to GIS concepts;
- importing common GIS data formats including web services;
- adding, editing, symbolising and labelling data;
- spatial analysis using filters and queries;
- making maps to use in reports;
- topographic cross-sections;
- visualising landscapes with digital elevation models;
- importing field photographs into GIS;
- methods for working with important digital imagery such as historic aerial photos (stereo pairs), satellite imagery and scanned plans will also be outlined;
- QGIS plugins relevant to geotechnical investigations;

A large part of the day is devoted to working through an exercise using the QGIS software to answer geotechnical questions and create a map and form an opinion for a hypothetical client.

Course materials will be available for download prior to the event: GIS datasets, AS1726 compatible symbol sets, NZ web connections, exercise notes and video and presentation. Recordings of the meeting will be available following the event.

The course will be conducted via Microsoft Teams and will utilise the free open-source software programme QGIS. Participants will be required to install QGIS on their own computer before the meeting and will need to have access to MS Teams. Full instructions for hardware requirements and setting up software will be provided beforehand. Participants will need a modern mid-range computer or better with a current operating system installed, preferably two monitors, a webcam and headset. A reliable internet connection with sufficient bandwidth for video conferencing is essential.

## Who should attend

Geotechnical practitioners (particularly engineers and geologists) at all levels of prior experience and training in GIS will benefit from the course, even those without any GIS experience or training in the past. For others managing GIS staff, there is much to be gained by learning more about what your GIS team can do for your business. Attendees should have prior computer experience.

The course will also benefit those who are GIS analysts/specialists. Your communication with your geotechnical colleagues will be improved and some of the additional capabilities of GIS will be showcased, so that you can do more advanced and challenging tasks in the geotechnical space in the future. For those GIS specialists who do not have a strong geotechnical background, this is your opportunity to learn what your geotechnical colleagues really want to know.

## WHERE AND WHEN

Online

Thursday 7 May 2026 or

Thursday 21 May 2026

8.30am till 5pm



## Presenter

Colin Mazengarb, based in Tasmania, has practised in the fields of regional-geological mapping and engineering-geology in New Zealand, Australia and the USA throughout his long career. He is an advanced user of various geographical information systems (GIS) software and has taught this course since 2016.



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# REGISTRATION

## REGISTRATION FEES

\$500 + GST for NZGS members

(priority registration over non-members)

\$700 + GST for non-members

Registration fees include attendance of the course and course material (digital course notes).

Fees will not be refunded if a participant is unable to attend, although a nominated substitute person may attend. If the course is canceled fees will be refunded in full.

## COURSE NUMBERS

Number of attendees is limited. Registrations will be accepted on a first come - first served basis.

## REGISTER ONLINE

Click on the link to register <https://www.nzgs.org/events/>