

ONE-DAY SHORT COURSE ENGINEERING GEOLOGICAL MODELS

The International Association for Engineering Geology and the Environment (IAEG) and NZ Geotechnical Society are offering a one-day workshop developed to provide practical experience in the development of engineering geological models using the internationally recognized IAEG Guidelines on the development and application of engineering geological models on projects.

SUMMARY

An Engineering Geological Model (EGM) is a comprehensive knowledge framework that supports the interpretation and assessment of the engineering geological conditions so that projects can be successfully engineered.

THE WORKSHOP

This workshop will provide an overview of the IAEG Guidelines followed by a practical opportunity to implement the knowledge gained. During the workshop participants will work in small, supervised groups to develop EGM's on real life exercises involving typical infrastructure developments in challenging geological environments.

WHO SHOULD ATTEND

The workshop is intended for a broad range of ground engineering professionals ranging from junior and intermediate level geotechnical engineers and engineering geologists who prepare engineering geological models for projects, to senior staff who ensure the quality of the engineering geological models that are delivered.

OUTCOMES

Attendees will have gained an appreciation and practical working knowledge of:

- The internationally adopted Guidelines for the development of engineering geological models
- An understanding of the knowledge framework and different types of models that go to make up an EGM and skills in developing those models for a range of infrastructure projects.
- An appreciation of how models can be communicated using a range of media from maps and sections to computer generated 3D models.

WHERE AND WHEN

AUCKLAND

18th November
Room 423.340,
University of Auckland,
22 Symonds St

CHRISTCHURCH

21st November
University of Canterbury,
John Britten Building,
Conference Foyer 102,
69 Creyke Road



REGISTRATION

REGISTRATION FEES

\$500 + GST for NZGS, NZSEE, SESOC and NZSOLD members (priority registration over non-members)

\$800 + GST for non-NZGS, NZSEE, SESOC and NZSOLD members.

Registration fees include attendance of the course and course material (digital course notes) and full catering for the day (morning and afternoon teas, lunch tea and coffee). Fees will not be refunded if a participant is unable to attend, although a nominated substitute person may attend. If the course is cancelled fees will be refunded in full.

COURSE NUMBERS

Numbers will be limited to 30 at each short course.

Registrations will be accepted on a first come, first served basis.

REGISTER ONLINE

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

SHORT COURSE: ENGINEERING GEOLOGICAL MODELS

COURSE PROGRAMME

TIME	DESCRIPTION
Info Pack	One week prior to one day workshop AGS/NZGS will email participants with a Mam Tor Information Pack 1 and the updated version of the C25 Guidelines. Participants encouraged to scan content, look at maps, visit site on Google Earth and identify the geological and geomorphological context of the project, carry out any searches on the area and think about how to develop and EGM compliant with the Guidelines in preparation for the workshop
8.30 - 9.00 am	Registration & Introductions
9.00 - 10.00 am	Lecture - introduction to the C25 Guidelines methodology
10.00 - 10.30 am	<i>Morning Tea</i>
10.30 - 12.30pm	Structured development of an EGM for a project - based on Mam Tor exercise - interactive workshop session - pencil and paper based
12.30 - 1.30 pm	<i>Lunch and socialisation</i>
1.30 - 2.00 pm	Lecture - Application of the C25 Guidelines to different types of projects, definition of the fundamental steps and the use of digital platforms to increase productivity
2.00 - 4.00 pm	Structured development of an EGM through a case study
4.00 - 4.30 pm	General discussion and debriefing

PRESENTERS

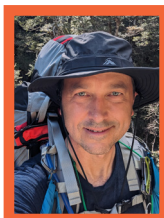


DR FRED BAYNES

Past President of the IAEG and Chair of the IAEG Commission 25 on Engineering Geological Models

Fred Baynes was educated in the UK where he obtained a BSc in geology from Bristol University, an MSc in engineering geology from Imperial College and a PhD from Newcastle University relating to research on weathered rocks. After working for a site investigation contractor in the UK for a couple

of years, he immigrated to Australia in 1980, where he has worked as an engineering geologist for contractors, consultants and utilities. For the last 20 years, Fred has been an independent consultant-engineering geologist with a continuing love of fieldwork and is now based in Central Victoria, Australia. He provides advice to major projects in the civil, mining and oil and gas sectors throughout the world. The advice provided invariably centres around "getting the geology right" and developing effective engineering geological models of all sorts to facilitate project delivery. As one of the lead authors of the IAEG guideline, Fred will provide unique insights into the thinking behind the development of the guide.



ROSS ROBERTS

IAEG New Zealand Representative

Ross is an engineering geologist in Auckland, involved in projects ranging from geohazard studies to geotechnical design, construction and management.

He has twenty years' experience in the management, planning and supervision of geotechnical and civil engineering projects, including

leading teams of engineers and managing multi-year consulting projects. He has worked for consultants and contractors in the UK, Indonesia, Australia and NZ on projects including major highway construction, railway asset management, water pipeline scheme assessments, landslide assessment and remediation, microtunneling and bridge foundation design and now works for Auckland Council as their in-house geotechnical specialist and Head of Engineering Resilience. Ross will provide perspectives on the client's needs and how this might be considered in the engineering geological model development.

COURSE HELPERS



CHRISTOPH KRAUS

NZGS Young Geo-Professionals (YGP) Representative

Christoph is the current NZGS YGP representative. He is a chartered Engineering

Geologist at Beca in Wellington, and his key interests include developing geological models, analysing complex geology, as well as the assessment and mitigation of natural hazards. Christoph has conducted fieldwork in a range of different geological settings in New Zealand, Patagonia, Samoa, and Antarctica. Christoph contributed to the IAEG C25 guideline and will assist with facilitating the course.



LAUREN FOOTE

IAEG Young Engineering Geologists NZ Representative

Lauren is a Chartered Engineering Geologist working with WSP in Nelson. She has over 10 years' experience

working within New Zealand and has been involved with natural hazard response following the 2010-2011 Canterbury Earthquake Sequence, the 2016 Kaikoura Earthquake, and more recently with ongoing Marlborough Storm recovery works. Lauren is passionate about geological models and will be providing support to Fred and Ross during the course.