



Course

Deformation Monitoring Surveys

CVEN4310

6 Units of Credit

Overview

This course introduces the concepts, principles and techniques used for deformation monitoring to civil engineering students with an interest in structures or geotechnical. Topics include: Principles and concepts of deformation monitoring by surveying techniques. Project surveying methodology. Control survey network adjustments and simulations. Atmospheric effects on optical and radar measurements. Terrestrial Laser scanning. Underground mine and tunnel surveys. Open cut mines, wall monitoring. Subsidence monitoring above underground mines. Monitoring high rise buildings. Tiltmeters and GPS for high frequency bridge monitoring. Motorised total station instruments and automatic target recognition for dam and wall monitoring. High precision (sub-mm) survey techniques. 3D theodolite intersection measuring systems. Laser trackers. Dam deformation surveys. Close Range Photogrammetry, for monitoring scale models, building facades and heritage structures.

Faculty

Faculty of Engineering

School

School of Civil and Environmental Engineering

Study Level

Postgraduate

Indicative contact hours

4

Timetable

[Visit timetable website for details](#)

Exclusion Courses

GMAT3100 | 6 UOC

Surveying Applications and Design

Course Outline

To access course outline, please visit:

[CVEN4310 Course Outline](#)

Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

[Pre-2019 Handbook Editions](#)

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Authorised by Deputy Vice-Chancellor (Academic)

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