



Dept. of Civil Engineering | Master's Module | CPD Course

Advanced Infrastructure Management

11 - 15 August 2025



Introduction



The Master's Programme:

Civil Infrastructure Management and Maintenance is designed to offer training in structural and materials engineering, underpinned by principles of infrastructure management. The broad areas of interest cover deterioration science, assessment technologies, and renewal engineering.

The key objectives of the programme are to develop a clear understanding of the following aspects: the concept of civil infrastructure management • practical application of infrastructure management principles in selected infrastructure systems • causes and implications of material and structural deterioration • infrastructure

assessment technologies such as non-destructive testing • infrastructure maintenance and rehabilitation strategies • principles of life cycle assessment as applied to various types of infrastructure • project management principles for infrastructure maintenance and renewal.

The programme is designed to attract students who are aiming to graduate with an MEng or MScEng degree. Both full-time students, aiming to complete all the requirements within one or two years, and part-time students can be accommodated.

Continuing Professional Development:

Modules of this Master's Programme are offered to Continuing Professional Development students as separate certificated courses from which a participant can obtain CPD points as these courses are registered with the Engineering Council of South Africa (ECSA). These CPD courses are attendance based, and a certificate of attendance is issued.

Who should attend?

The courses are best suited for Civil Engineers, Consultants, Architects, Structural Engineers, Contractors, Project managers, City and Public Works Officials, City Planners, students and other engineering professionals.

Format

Each module is structured in the following way: a week of intensive contact time at UCT, comprising formal lectures, class assignments and seminars/tutorials.

Please note: these courses are currently planned to be presented face-to-face over 5 days, but it may be necessary to change the format of a course to an online or hybrid format.





Course Content

The aim of this module is to expose students to the concepts of municipal infrastructure management. These concepts include the context for Infrastructure Management Planning, the process of Infrastructure Management Planning and the techniques required to prepare an Infrastructure Management Plan.

Delivery mode

The course is designed as a 5-day contact-mode equivalent online course. It will be presented through formal pre-recorded lectures, videos, pre-recorded practical demonstrations, and a series of live seminar-type discussions on Zoom, as well as short assignments and online guizzes.

Course Presenters



Prof. Pilate Moyo (PrEng) is Professor of Structural Engineering and Director of the Concrete Materials and Structural Integrity Research Unit (CoMSIRU) in the Department of Civil Engineering at the University of Cape Town. His research and consultancy is on structural health monitoring, condition assessment, structural dynamics, vibration testing, and structural strengthening strategies for civil structures. His research is focused on developing structural assessment technologies integrating finite element modelling, full scale field testing, and advanced data analysis algorithms. He has published widely in these areas.

Course Overview

Name	Advanced Infrastructure Management, CIV5067Z
Duration	11 - 15 August 2025
Venue	Postgraduate Seminar Room, New Engineering Building, UCT or online .
CPD	5 CPD points, ECSA Validation No: <i>UCTCIMMAIM25</i>
Participants	Suitable for engineers, technicians, students, and academics involved in the design, construction, and management of steel structures
Fees	Standard delegate: R17 300 Full-time student: R8 650

^{*} a 10% discount will be applied to the standard fee if the course takes place online only.





Registration

Registration and Cancellation

- Register online
- Registration covers attendance of all sessions of the course and course material.
- Registrations close one week before the start of the course. Confirmation of acceptance will be sent on receipt of a registration form.
- Cancellations must be received one week before the start of a course, or the full course fee will be charged.
- For more information on application and registration procedures, please visit our website: www.cpd.uct.ac.za/cpd/applications

Certificates and CPD Points

A digital certificate of attendance will be awarded to CPD participants for each course. Participants need to attend 80% of the lectures to qualify for an attendance certificate. For further information on digital certificates please visit <u>Digital Certificates at UCT</u>

According to guidelines set out by the Engineering Council of South Africa, attendance of this course will earn participants 5 points towards Category 1 (Developmental Activities). The ECSA validation number for this course is UCTCIMMAIM25

Please note: If you are interested in attending this course for credit purposes, you will need to register for the Master's Programme or as an occasional student. If you attend the course as a CPD participant, credit cannot be claimed in retrospect.

Contact details

For more information or details on CPD courses, visit our website or contact us.

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