

## Civil Infrastructure Management and Maintenance

The Programme in Civil Infrastructure Management and Maintenance equips engineers and infrastructure managers with appropriate technical skills for management and maintenance of civil infrastructure. The program draws from a number of fields including civil and structural engineering, construction planning and project management. The programme can be taken as MSc or MEng in Civil Infrastructure Management and Maintenance. The MSc(Eng) route is a 180 credit qualification and can be done by research only or part research (120 credits) and course work (minimum 80 credits). The MEng route consists of 120 credits of course work and 60 credits of dissertation and is primarily taken by part-time students. Both the MSc Eng route and MEng route can be completed in two years full-time or over a maximum period of five years on a part-time basis.

Programme convenor Prof Pilate Moyo [pilate.moyo@uct.ac.za](mailto:pilate.moyo@uct.ac.za)

### Prescribed Courses for the MEng program

To complete the MEng programme students must do at least 120 credits of prescribed coursework and submit a 60 credit dissertation. The following are the prescribed courses for the MEng program.

#### Compulsory Core Courses

CIV5067Z	Advanced Infrastructure Management	20 credits
CIV5119Z	Structural performance assessment and monitoring	20 credits
CIV5116Z	Durability and condition assessment of concrete structures	20 credits
CIV5120Z	Repair and Rehabilitation of Concrete Structures	20 credits

#### Elective Core Courses

CIV5118Z	Safety of Special Structures	20 credits
CIV5115Z	Bridge management	20 credits
CON5016Z	Project Planning and Implementation OR Project	20 credits
CON5014Z	Management & Systems Theory	

#### Enrichment courses

CIV5002Z: Structural Concrete Properties and Practice	16 credits
CIV5113S: Structural Dynamics with Applications	16 credits
MEC5064Z: Finite Element Analysis	16 credits

## Prescribed courses for MSc Eng program

### Compulsory Core Course

CIV5067Z	Advanced Infrastructure Management	20 credits
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### Elective Core Courses

CIV5119Z	Structural performance assessment and monitoring	20 credits
CIV5116Z	Durability and condition assessment of concrete structures	20 credits
CIV5120Z	Repair and Rehabilitation of Concrete Structures	20 credits
CIV5118Z	Safety of Special Structures	20 credits
CIV5115Z	Bridge Management and Maintenance	20 credits
CON5016Z	Project Planning and Implementation	20 credits
CON5014Z	Project Management & Systems Theory	20 credits

### Specialist Elective Courses: Enrichment only

CIV5002Z: Structural Concrete Properties and Practice	16 credits
CIV5113S: Structural Dynamics with Applications	16 credits
MEC5064Z: Finite Element Analysis	16 credits

### Enrichment course: Students strongly advised to take this course

CHEM5055Z: Research Communication and methodology	16 credits
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### DELIVERY MODE

All courses will be run on block release mode, which usually entails a week of lectures, tutorials and assignments followed by an examination.

### HOW TO APPLY

Apply online at least three weeks before the first course begins

<http://www.uct.ac.za/apply/applications/postgraduates/> Alternatively application forms are available online at [www.uct.ac.za/downloads/uct.ac.za/apply/forms/form1.pdf](http://www.uct.ac.za/downloads/uct.ac.za/apply/forms/form1.pdf) International students should ensure that the application and issue of a valid study permit is well in advance of course commencement-refer [www.uct.ac.za/about/iapo/overview/welcome/](http://www.uct.ac.za/about/iapo/overview/welcome/) . or the Admissions Office, Wilfred and Jules Kramer Building, Middle Campus.

Tel: (021) 650 2128, Fax: (021) 650 5189 or

email: [admissions@uct.ac.za](mailto:admissions@uct.ac.za)

### COSTS

Each 20 credit course costs R6800 (2012)

MEng dissertation R8,060 (2012)

MSc Eng dissertation R17,060 (2012)

### COURSE SCHEDULE FOR 2013

*February:* Durability and condition assessment of concrete structures

*April:* Advanced infrastructure management

*June:* Bridge management and maintenance

*September:* Repair and rehabilitation of concrete structures

*Tbc:* Project planning and implementation