



Dept. of Civil Engineering | CPD Courses

## Transport Studies

Master's Modules 2021



## Introduction



The Centre for Transport Studies offers courses aimed at equipping transport planning practitioners to confront the challenge of creating, efficient, equitable, sustainable, affordable and safe urban transport systems in South Africa.

Eight individual block release modules are offered in 2020. Continuing Professional Development students may take each module as a separate certificate course. CPD students are required to attend the lectures but are not required to submit assignments or write the exam.

## Who Should Attend

The programme has been designed to be accessible to people in full-time employment as well as full-time students. Applicants may register for the individual Master level courses offered by the programme as Continuing Professional Development students. These students will be awarded a Certificate of Attendance. University credits will not be awarded to these students. Courses are typically attended by consultants or government officials working within the transportation field.

## 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. If COVID-19 protocols persist or change, it may be necessary to change the format of this course to an online format, and to half days over two weeks.





## **CPD** Courses

### Transport Modelling

CIV5133Z: 25 - 29 January 2021

This course aims to develop an advanced understanding of principles and skills in working with these models. Topics include transport modelling types and scales, theory of travel demand modelling, including the four-step transport model (i.e. trip generation, trip distribution, mode choice and traffic assignment), output analysis, land use – transport interaction models, as well as theory of traffic flow dynamics, including capacity assessment, LOS assessment, shockwave analysis, dynamic traffic management and elementary traffic control design. The course ends with a discussion about the link between models and the analytical questions raised by different policy environments.

Convenor: Prof Mark Zuidgeest

5 CPD points, ECSA registration number: UCTTSPTPM21

## Transport Demand Analysis and Project Assessment

CIV5132Z: 8 - 12 March 2021

This course aims to develop an understanding of transport demand analysis and project assessment. Topics include: travel data collection and survey design, data processing and analysis, the link between methodological approaches to transport analysis and the analytical questions raised by different policy environments, theoretical and philosophical backgrounds of assessment and evaluation methods, and techniques for the assessment and evaluation of urban transport proposals.

Convenor: Prof Marianne Vanderschuren

5 CPD points, ECSA registration number: UCTTSPTDAP21

# Discrete Choice Modelling and Stated Choice Survey Design

CIV5127W: 23 - 26 March 2021

This course will present a brief, but systematic overview of choice modelling and survey design theory and practice. Taught by Professor Stephane Hess from the Choice Modelling Centre (CMC) at the University of Leeds and experts from the University of Cape Town (UCT), the course will consist of a mixture of lectures, computer practicals, and detailed case studies from within Africa and beyond. Bringing together expertise from fields as diverse as transport, health, marketing and environmental economics, the course will cover all the steps required for successful choice modelling analyses, from inception via survey design and data collection to modelling and implementation.

Please note: the fees for this course are different to the other Transport Studies courses for international participants

Convenor: Prof Mark Zuidgeest

4 CPD points, ECSA registration number: UCTTSPDCM21





## Integrated Land Use-Transport Planning

CIV5138Z: 3 - 7 May 2021

This course aims to develop an advanced understanding of the integration of land use planning and transport planning process. Topics include: theoretical perspectives on the relationship between transport systems and urban activity systems, co-evolution of transport systems and urban form, sustainable transport and the problem of 'automobile dependent' cities, planning paradigms and rationales for public intervention into land use and transport systems, legislative, institutional and financial frameworks for land use and transport planning in South Africa, conceptual framing and practical application of approaches to integrated land use-transport planning in the South African context and local and international case studies and experiences.

Convenor: Prof Roger Behrens

5 CPD points, ECSA registration number: UCTTSPILTP21

## Local Area Transport Planning, Management and Design

CIV5036Z: Cancelled

This course aims to provide students with an overview of the planning and implementation of transport improvements at a local area (as opposed to city-wide) scale and to explore local area network design practices appropriate to the South African context, as well as the management of networks through coordinated and proactive traffic calming and pedestrian, bicycle and special needs infrastructure provision. Students will also be introduced to current developments in the field both locally and internationally.

Convenor: Prof Roger Behrens

5 CPD points, ECSA registration number: UCTTSPLATP21

## Management of Transport Supply and Demand

CIV5035Z: 6 - 10 September 2021

This course aims to develop an advanced understanding of transport systems management. Topics include: the rationale for the management of transport systems through alternatives to large scale infrastructure provision, transport impact assessment and access management as a means of managing the impacts of new land use development on transport systems, road space management as a means of prioritising public transport vehicles, 'transport system management' as a means of managing transport supply; 'travel demand management' as a means of managing travel behaviour; and the use of 'intelligent transport systems' in supply and demand management.

Convenor: Prof Roger Behrens

5 CPD points, ECSA registration number: UCTTSPMTSD21





## Public Transport System Design and Operations Management

#### CIV5071Z: 18 - 22 October 2021

This course aims to develop an advanced understanding of public passenger transport system design and operations management. Topics include public transport system concepts, public transport system design, public transport system operations management, integrated fare structures and system maintenance.

Convenor: Prof Mark Zuidgeest

5 CPD points, ECSA registration number: UCTTSPPTSD21

## Public Transport Policy and Regulation

#### CIV5070Z: 22 - 26 November 2020

This course aims to develop an advanced understanding of public passenger transport system policy analysis and regulation. Topics include legislative and planning frameworks, public transport policy, paratransit reform, public transport system regulation and competition and quality of service.

Convenor: Prof Roger Behrens

5 CPD points, ECSA registration number: UCTTSPPTPR21

## Overview

Programme	Transport Studies CPD courses
Modules and duration	Transport Modelling: 25 – 29 Jan 2021 Transport Demand Analysis and Project Assessment: 8 – 12 Mar 2021 Discreet Choice Modelling and Stated Choice Survey Design: 23 – 26 Mar 2021 Integrated Land Use-Transport Planning: 3 - 10 May 2021 Local Area Transport Planning Management and Design: 26 – 30 July 2021 Management of Transport Supply and Demand: 6 – 10 Sep 2021 Public Transport Systems Design and Operations Management: 18 - 22 Oct 2021 Public Transport Policy and Regulation: 22 – 26 Nov 2021
Venue	PG Seminar Room, NEB, Upper Campus, University of Cape Town or online
CPD	CPD points and ECSA codes as indicated per module
Fees	Standard fee: R14 200 (5-day course)* <u>Discreet Choice Modelling</u> course:  R14 200 for SADC participants attending onsite  R11 500 for SADC participants attending online  R15 400 for international participants

<sup>\*</sup> If the course needs to be presented online due to Covid-19 restrictions, a 25% discount will apply to the standard fee only.





## Registration

#### **Registration and Cancellation**

- Register for this course
- Registration covers attendance of all sessions of the course, lunch vouchers, 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

#### **Certificates and CPD Points**

A certificate of attendance will be awarded to CPD participants. Participants need to attend 80% of the lectures to qualify for an attendance certificate.

CPD participants can also request a formal university transcript, which will show this course as part of a Professional Development Career.

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.

For further information on the master's programme please see the website:

http://www.civil.uct.ac.za/transport-studies

#### Contact details

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

Web: www.cpd.uct.ac.za Email: ebe-cpd@uct.ac.za

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#### **Programme administrators**

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