



Dept. of Civil Engineering | CPD Courses

Transport Studies

Master's Modules 2022



UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

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.

Seven individual block release modules are offered in 2022. 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: As a result of Covid-19, courses are offered remotely until further notice. Scheduling and duration of course offerings could change due to unforeseen circumstances.

Transport Modelling

CIV5133Z: 24 – 28 January 2022

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: UCTTSPTPM22

Non-Motorised Transportation

CIV5039Z: 21 – 25 February 2022

This course aims to develop an advanced understanding of planning and design of non-motorised transportation infrastructure. Topics include: current SA realities and the importance of NMT travel modes; planning frameworks for NMT infrastructure improvements and network management; methods of site and network analysis, and approaches to modelling and simulation; footway and pathway design; the design of pedestrian precincts, low cost bicycle supply and promotion; cycleway and bicycle parking design and pedestrian and bicycle crossing facilities.

Convenor: Prof Marianne Vanderschuren

5 CPD points, ECSA registration number: UCTTSPNMT22

Transport Demand Analysis and Project Assessment

CIV5132Z: 28 March – 1 April 2022

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: UCTTSPTDAP22

Integrated Land Use-Transport Planning

CIV5038Z: 9 – 13 May 2022

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: UCTTSPILTP22

Management of Transport Supply and Demand

CIV5035Z: 5 – 9 September 2022

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: UCTTSPMTSD22

Public Transport System Design and Management

CIV5071Z: 24 – 28 October 2022

This course aims to develop an advanced understanding of public passenger transport system design and operations management. Topics include: Public transport system concepts: basic bus and rail system concepts; alternative technologies and operating characteristics. Public transport system design: route network planning; service planning; road and rail right-of-way design and vehicle prioritisation; signalling systems; station and interchange design; demand estimation; passenger capacity analysis. Public transport system operations management: service quality assessment, scheduling and rostering; train movement control systems; reliability, disruption and incident management; performance assessment; ridership measurement. Integrated fare structures: integrated ticketing systems; fare structures; fare setting. System maintenance: asset management; vehicle fleet and rolling stock maintenance and refurbishment.

Convenor: Prof Mark Zuidgeest

5 CPD points, ECSA registration number: UCTTSPPTSD22

Public Transport Policy and Regulation

CIV5070Z: 21 – 25 November 2022

This course aims to develop an understanding of public passenger transport system policy analysis and regulation. Topics include: Legislative and planning frameworks: institutional, legislative, financing and planning frameworks for integrated public transport infrastructure provision and service operation. Public transport policy: policy debates on subsidisation and competition regulation; mode alternatives analysis; international case studies of public transport system reform. Paratransit reform: operator consolidation and transition; fleet renewal; service upgrade; integration with scheduled services. Public transport system regulation and competition: industry structures; approaches to regulation and competition; licensing and contracting. Quality of service: quality-of-service measurement; passenger satisfaction measurement; passenger information systems and wayfinding.

Convenor: Prof Roger Behrens

5 CPD points, ECSA registration number: UCTTSPPTPR22

Overview

Programme	Transport Studies CPD courses
Modules and duration	Transport Modelling: 24 – 28 January 2022 Non-Motorised Transportation: 21 – 25 February 2022 Transport Demand Analysis and Project Assessment: 28 March – 1 April 2022 Integrated Land Use-Transport Planning: 9 – 13 May 2022 Management of Transport Supply and Demand: 5 – 9 September 2022 Public Transport Systems Design and Management: 24 – 28 October 2022 Public Transport Policy and Regulation: 21 – 25 Nov 2022
Venue	Online OR PG Seminar Room, NEB, Upper Campus, University of Cape Town
CPD	CPD points and ECSA codes as indicated per module
Fees	Standard fee: R14 950 (5-day course)

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.

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