



Dept. of Civil Engineering | Masters module | CPD course

Public Transport System Design

6 – 10 October 2025



Introduction



The Master's Programme

The master's programme offers degrees specialising in transport studies, with a specific focus on the planning and management of urban passenger transport systems. The primary aim is to produce graduates from a range of undergraduate disciplines with the necessary knowledge and skills to engage effectively with the challenge of creating affordable, efficient, sustainable, safe, equitable and environmentally sound urban transport systems, and to contribute to the implementation of new and demanding policy directives. Curriculum content is crossdisciplinary in

orientation and exposes students to a broad range of the analytical, evaluative, planning and management issues they are likely to encounter in the field. For further information on the master's programme please see the website: [Transport Studies | University of Cape Town \(uct.ac.za\)](https://transportstudies.uct.ac.za)

Continuing Professional Development

Modules of this master's programme are offered to Continuing Professional Development delegates. Ten individual block release modules are offered in 2025. 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 fulltime 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 CPD 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, but it may be necessary to change the format of a course to an online or hybrid format.

Course Content

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.

Course Presenter



Prof Mark Zuidgeest is the SANRAL Chair of Transport Planning and Engineering in the Department of Civil Engineering at the University of Cape Town. He is an expert in transport studies in Africa, with a passion for behavioural modelling. He is also the co-editor in chief for the Journal of Transport Geography and the deputy-editor in Chief of African Transport Studies.

Overview

Course Dates	6 – 10 October 2025
Delivery format	PG Seminar Room, NEB, Upper Campus, University of Cape Town or online
CPD	5 CPD points, ECSA registration number: <i>UCTTSPPTSD25</i>
Fees	Standard fee: R17 300 UCT student fee: R8 650
Transport CPD courses 2025	<p>Transport Modelling CIV5133Z: 3 - 7 Feb</p> <p>Discrete Choice Modelling and Stated Choice Survey Design CIV5127Z: 3 - 7 Mar</p> <p>Transport Demand Analysis and Project Assessment CIV5132Z: 24 - 28 Mar</p> <p>Integrated Land Use-Transport Planning CIV5038Z: 19 - 23 May</p> <p>Local Area Transport Planning, Management & Design CIV5036Z: 28 Jul - 1 Aug</p> <p>Transport Systems Simulation; CIV5165Z: 25 - 29 Aug</p> <p>Management of Transport Supply & Demand CIV5035Z: 1 - 5 Sep</p> <p>Public Transport System Design CIV5071Z: 6 - 10 Oct</p> <p>Big Data Analytics and Transport CIV5164Z: 20 - 24 Oct</p> <p>Public Transport Policy and Regulation CIV5070Z: 17 - 21 Nov</p>

Registration

Registration and Cancellation

- [Register for this course](#)
- Registration covers attendance of all sessions of the course and course material.
- Registrations close one week before the start of the course. Confirmation of registration 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 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.

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 *UCTTSPPTSD25*.

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.

Web: <http://www.cpd.uct.ac.za>

E-mail: ebe-cpd@uct.ac.za

Physical address

CPD Programme
Room 6.10, 6th Floor
New Engineering Building
Upper Campus
University of Cape Town
South Africa

Postal address

CPD Programme
EBE Faculty
University of Cape Town
Private Bag X3
Rondebosch 7701
South Africa

Programme administrators

Sandra Jemaar: +27 (0)21 650 5793

Heidi Tait: +27 (0)21 650 4922
