



STELLENBOSCH UNIVERSITY



**THE INSTITUTE FOR
TRANSPORT TECHNOLOGY**

Presents online course in

GEOMETRIC ROAD DESIGN

ONLINE:

**Fridays: 13 Aug 2021
20 Aug 2021
27 Aug 2021
03 Sep 2021
10 Sep 2021**

FEE: R5000 – Industry Candidates

R400 – SU Registered Students

PRESENTED BY:

Dr Louis DV Roodt

Department of Civil Engineering
University of Stellenbosch

**An intensive online course at
Stellenbosch University**

GOALS OF THIS COURSE

To provide a thorough understanding of the concepts and methodologies involved in the geometric design of roads.

LANGUAGE

This course will be conducted in English. However, questions, assignments and examinations can be presented in either English or Afrikaans.

ACADEMIC CREDIT

This course forms part of the Stellenbosch University postgraduate programme. It carries fifteen (15) SAQA credits for academic purposes. The academic module also involves assignments and written examination.

Continuing Professional Development Certificates will be awarded to all delegates participating satisfactorily in the course. **CPD credits = 2.5.**

COURSE ARRANGEMENTS

The course will be presented online over five consecutive Friday afternoons from 13:00 to 17:00.

Participants are responsible for their own internet arrangements and access to Microsoft Teams.

ENQUIRIES

Enrolment will be limited. Registration, with payment, will be accepted on a first-received basis. There is an online registration process. Link will be forwarded / posted asap.

Contact: civilcourses@sun.ac.za

Tsholofelo

Tel: 021-8082080

Should you have academic / course content queries, please contact: Dr Louis Roodt: ldvroodt@sun.ac.za

REGISTRATION LINK

<https://shortcourses.sun.ac.za/application-form.html?offeringid=0d08aa71-54f4-eb11-abe5-005056801c40>

COURSE OUTLINE

DAY 1

INTRODUCTION

- The Safe System in road design
- Traffic volumes / Design speed
- Capacity and level of service

BASIC CRITERIA

- The driver and human factors
- The design vehicle
- Skid resistance
- Sight distance

DAY 2

ALIGNMENT

- Horizontal curves
- Superelevation
- Vertical Gradients and Curves
- Climbing lanes and speed profiles
- Passing lanes

DAY 3

CROSS-SECTION

- Lanes
- Shoulders and Medians
- Verges and Slopes
- Road Restraint Systems

DAY 4

INTERSECTIONS

and

INTERCHANGES

DAY 5

CURRENT ISSUES

- International policies
- Three-dimensional design
- Non Motorised Transport
- Bus Rapid Transit
- Automated vehicles