

# Getting acquainted with Road Construction and Maintenance

A two-day course aims to help attendees who are either **entering or currently working in the public or private sector in the area of road construction and maintenance.**



## Attend this course and learn about:

- Various aspects of road construction and maintenance from commencement to completion of building a road and the importance of maintenance thereafter
- Understanding the technical elements, quality assurance, systems, processes, new technology and sustainability
- Understanding the different types of surfaces used in road construction, defects, rehabilitation and materials for construction and maintenance

## Benefits include:

- Participation in an interactive workshop
- Various practical activities to equip attendees to handle projects when back in the workplace
- A comprehensive document that will serve as a reference manual
- CPD credits (ECSA)

## Presenter:

Theuns Eloff BEng(Civil)

## COURSE DATES & VENUES

Scheduled courses are offered online and face-to-face around the country based on demand.

Please contact Lizelle du Preez for more information on upcoming courses: [Lizelle@saicepdp.org](mailto:Lizelle@saicepdp.org) / 011 476 4100

TIMES: 08:00 for 08:30 to 16:30

## REGISTRATION

To register, visit [www.candidateacademy.co.za](http://www.candidateacademy.co.za)  
OR email [Academy@saicepdp.org](mailto:Academy@saicepdp.org)

## WHO SHOULD ATTEND

The course helps attendees to apply their theoretical training in practice. It is therefore recommended for:

- Staff working in the industry with very little experience or who are about to become involved in road construction and maintenance projects
- Candidate engineers, technologists and technicians

## COURSE CONTENT

### INTRODUCTION TO ROADS

- Preconditions for road building and maintenance
- List of TRH, TMH and UTG documents

### ROAD FUNDAMENTALS

- Role players in civil projects in South Africa
- Design process and considerations

### ROAD MANAGEMENT

- Asset management and PMS
- The laffer curve and maintenance types

### PAVEMENT ASSESSMENTS AND INVESTIGATIONS

- Analysis and field investigation
- Compilation of data

### TYPES OF PLANT AND EQUIPMENT

- Small plant and tools
- Earthmoving equipment

### TECHNICAL ASPECTS OF MATERIAL AND ROADS

- Terminology and standard units
- Types of materials for construction and maintenance
- Basic material mechanics, quality assurance and testing

### THE CONSTRUCTION PROCESS - EXECUTION

- Visual assessment and reading plans and drawings
- Clearing, grubbing and services
- Earthworks and layer works
- Confined and restricted areas
- Water handling and subsoil drains

### SURFACING OF ROADS

- Reseal and surface seals

### DISTRESS IDENTIFICATION AND REPAIRS

- Distress types, cracks and crack sealing
- Potholes, patches and rigid defects

### ROAD FURNISHING AND ANCILLARY WORKS

### ROAD SAFETY AND OHS ACT

## ABOUT YOUR FACILITATOR

**Theuns Eloff** completed his BEng(Civil) degree at UJ (RAU) and started his engineering career as a civil contractor. He was involved in the construction, rehabilitation and resurfacing of roads, and has extensive experience in major earthworks, construction of dams, open pit mines and contract management.

In-house courses can be arranged.

Contact Lizéle at [lizelle@saicepdp.org](mailto:lizelle@saicepdp.org) for more information.

### WHAT TO BRING TO THE COURSE

Calculator

Laptop with Excel recommended for online courses



The Candidate Academy's philosophy is to support candidates on their road to registration with ECSA, by helping them through the transition from theoretical training to the 'how' of engineering projects and processes. The Academy offers practical, hands-on training relevant to experiences in the workplace.

**candidate  
academy**  
the road to registration – tower above the rest