2 CPD Credits: ECSA
SAICEwat25/03915/28 / SAICEEL25/03929/28

CPD Validated

Getting Acquainted with Wastewater Treatment Plants - Operations and Maintenance

A two-day course that will equip attendees with the necessary skills to operate and maintain a Wastewater Treatment Plant.





Attend this course and:

- Learn about the methods of wastewater treatment and how to select the most appropriate method for your municipality
- Understand properties of wastewater and their potential harm if not treated
- Get a practical perspective on effective operation and maintenance of wastewater treatment plants
- Get an overview of the green drop compliance process
- Understand the wastewater risk abatement planning

Benefits include:

- Practical activities to solve wastewater management problems
- Comprehensive training manual that will serve as reference material
- Networking with your peers
- CPD Credits (ECSA)

Presenters:

Sibusiso Mnguni Pr Eng
Siphathisiwe Masimirembwa Pr Tech Eng

COURSE DATES & VENUES

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

Please contact Lizélle du Preez for more information on upcoming courses: Lizelle@saicepdp.org / 011 476 4100

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

REGISTRATION

To register, visit www.candidateacademy.co.za
OR email Academy@saicepdp.org

WHO SHOULD ATTEND

The course helps graduates apply their theoretical training in practice.

It is therefore recommended for:

- Staff employed involved in wastewater treatment plants, or about to become involved in the field
- Water Service Managers and Supervisors looking for a refresher in the operation and maintenance of wastewater treatment plants
- Engineers, Technologists and Technicians
- Managers / Supervisors of municipal wastewater treatment works

SCE School of Consulting Engineering

saice GROWING FORWARD TOGETHER

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

COURSE CONTENT

DAY 1
HOLISTIC OVERVIEW OF WASTEWATER TREATMENT PLANTS

- Introduction to wastewater treatment
- Objectives of wastewater treatment
- Environmental effects of spillage of untreated wastewater
- Wastewater governance and regulatory environment
- Introduction to characteristics of wastewater
- Wastewater Systems
  - Overview of the status of wastewater treatment plants in South Africa
  - Overview of methods of wastewater treatment including selection of suitable methods
  - Elements of a conventional wastewater treatment plant
  - Improvements / latest technologies in wastewater treatment

DAY 2
OPERATIONS AND MAINTENANCE – PRACTICAL PERSPECTIVE

- Recap of Day 1
- Effective operation and maintenance of plants and safety aspects
  - Shortcomings in maintenance and management in most municipalities
  - Wastewater plant failures and response
  - Components of a strong management team
  - Plant optimisation and trouble shooting
  - Environmental, health and safety
  - Check list / maintenance schedules
- Green drop compliance approach - hints and tips
- Overview of Wastewater Risk Abatement Plan



ABOUT YOUR FACILITATORS

Sibusiso Mnguni is a civil engineer with a BSc in Civil Engineering and an M.Com in Project Leadership and Management. He has over 30 years' experience in the civil engineering sector, spanning construction supervision, consulting, municipal services, and state-owned entities. His expertise lies in water and wastewater infrastructure, including pump stations, pipelines, and related systems. For a decade, he coordinated Strategic Integrated Project (SIP) 19, providing technical oversight to major municipalities and supporting wastewater treatment operations and maintenance. He is committed to strengthening municipal technical capacity and ensuring compliance with regulatory standards and sound engineering practices.
Sibusiso is an active SAICE corporate member.

Siphathisiwe Masimirembwa has a BEng Hons in Civil and Water Engineering and an MBA. She started her career in Zimbabwe where she worked for consulting engineers and a water authority before moving to South Africa, where she has gained experience in both consulting and the public sector. Her range of experience has equipped her with knowledge in planning, design and construction of roads and water services as well as private housing developments. Phathi's passion for uplifting candidates has led her to mentoring engineering candidates in municipalities, developing and delivering courses which contributes to capacity building.
Phathi is an active member of SAICE.

Contact Lizélle at Lizelle@saicepdp.org for your in-house training requirements.



candidate academy
the road to registration – tower above the rest

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.