

CPD: 2 credits

Getting acquainted with Sewer Design

A two-day course to help candidates understand the fundamentals of sewerage systems, with emphasis on designing sewer collection systems in townships



Attend this course and learn about:

- The composition of complete sewerage systems, including the conveyance network, treatment works and associated infrastructure
- The selection of appropriate sanitation systems and the challenges associated with operations and maintenance
- The design of sewerage networks, including the selection of pipes and fittings and the parameters to be considered when laying pipes
- Policies, guidelines, health, hygiene and community requirements which must be considered when designing sewerage systems and associated community education

Benefits include:

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

Presenter:

Peter Coetzee Pr Tech Eng MSAICE FWISA

COURSE DATES & VENUES

Scheduled courses are offered around the country based on demand. Please contact Lizéle for more information on upcoming courses.

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

REGISTRATION

To register, visit www.candidateacademy.co.za
For more details contact Lizéle at lizelle@ally.co.za

WHO SHOULD ATTEND

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

- Staff involved in the design of conveyance networks
- Staff employed in local government and involved in the planning, design, operations and maintenance of conveyance networks or about to become involved in the field
- Candidate engineers, technologists and technicians
- Experienced personnel looking for a refresher in sewer design

COURSE CONTENT

INTRODUCTION AND SEWERAGE OPTIONS

- Policies and guidelines
- Assessment of sanitation options
- Types of sanitation systems
- Appropriate sanitation

WATER BORNE SEWERAGE

- Wastewater treatment
- Tariffs
- Operations and maintenance
- Spill management

SEWER CONSIDERATIONS

- Laying of sewers
- Loads on buried pipes
- Minimum cover
- Sewer manholes
- Surveys and testing

SEWER DESIGN

- Design requirements
- Hydraulic design
- Partial flow
- Velocity, grade and quantity

SEWER LAYOUT

- Depth of connection
- Layout options
- Mid-block and sidewalk sewers

SEWERAGE SYSTEM

- Minimum night flows
- Stormwater ingress
- Pipe material and fittings
- Inverted syphons
- Outfall/collector sewers
- Small pump stations

ABOUT YOUR FACILITATOR

Peter Coetzee obtained his National Diploma in Civil Engineering in 1970. He pursued a keen interest in water engineering and in 1980 wrote the CIWEM Diploma in the United Kingdom. He has had a long and successful career in the City of Johannesburg where he held the following roles since 1989 : Operations Manager : Road Planning and Development, Chief Engineer : Water and Gas Management, Executive Director : Metro Gas, Strategic Executive : Municipal Infrastructure, Managing Director : Pikitup and Executive Director of Infrastructure. The bulk of his early career was spent in water and wastewater, and his later career in privatisation and the re-engineering of infrastructure departments. He is a Registered Professional; Technologist, Member of SAICE, Fellow of WISA and a retired Fellow of CIWEM.

WHAT TO BRING TO THE COURSE

- Scale rule
- Pencil and eraser
- Engineering calculator



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