

SOIL LABORATORY TRAINING

QCTO Aligned

ADVANCED SHORT COURSE



OVERVIEW

The main focus of the learning in this course is to build an understanding of the test methods applicable to the soil laboratory. This short course will prepare learners with practical knowledge required as a soil materials tester.

COURSE CONTENT

X5 Sampling Test Methods

Sampling of Road Pavement Layers
- TMH5 MA2 or MC1

Sampling from Stockpiles - TMH5 MB1

Sampling of Treated Pavement Layers
- TMH5 MB10

Division of a Sample Using the Riffler - TMH5 MD1

Division of a Sample by Quartering - TMH5 MD2

X1 AG Tests Methods

Apparent density of crushed stone base - SANS 3001-AG22

X2 NG Test Method

Determination of in situ density using a nuclear density gauge - SANS 3001-NG5

Viscosity
- ASTM D4402



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COURSE CONTENT

X13 GR Tests Methods

Wet preparation and air-drying of samples for plasticity index and hydrometer tests
- SANS 3001-GR5

Wet preparation and particle size analysis - SANS 3001-GR1

Determination of the one-point liquid limit, plastic limit, plasticity index and linear shrinkage

- SANS 3001-GR10

Determination of the liquid limit with the twopoint method - SANS 3001-GR11

Determination of the moisture content by ovendrying
- SANS 3001-GR20

Determination of the maximum dry density and optimum moisture content
- SANS 3001-GR30

Determination of the maximum dry density and optimum moisture content of laboratory mixed cementitiously stabilized materials

- SANS 3001-GR31

Determination of the California bearing ratio
- SANS 3001-GR40

Preparation, compaction and curing of specimens of laboratory mixed cementitiously stabilized materials
- SANS 3001-GR50

Sampling, preparation, compaction and curing of field mixed freshly cementitiously stabilized materials including the determination of the maximum dry density and optimum moisture content

- SANS 3001-GR51

Determination of the unconfined compressive strength of compacted and cured specimens of cementitiously stabilized materials
- SANS 3001-GR53

Determination of the indirect tensile strength of compacted and cured specimens of cementitiously stabilized materials
- SANS 3001-GR54

Determination of the initial stabilizer consumption of soils and gravels
- SANS 3001-GR57



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ADMISSION REQUIREMENTS

Prospective delegates should at least have a Matric certificate/NQF4



TARGET AUDIENCE

This short course is ideal for laboratory technicians, people working on road construction projects and for those dealing with civil materials at graduate level.



COURSE FEES

Contact us for detailed costing



COURSE DURATION

8-day course



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