



**MiChem Dynamics**  
LEADING CHANGE

## BASIC LABORATORY TECHNIQUES IN A CHEMISTRY LABORATORY TRAINING

The Basic Laboratory Techniques in Chemistry training course is designed to provide participants with a foundational understanding of essential practices and skills required for working in a chemistry laboratory. Tailored for individuals with diverse backgrounds, the course covers key principles, safety protocols, and hands-on techniques necessary for conducting experiments and analyses in a chemical laboratory.

Through a combination of theoretical discussions, hands-on experiments, and interactive sessions, participants will gain practical skills and knowledge applicable to various chemistry laboratory settings. By the end of the course, attendees will be equipped with a solid foundation in basic laboratory techniques, enabling them to conduct experiments safely and efficiently.



**THE COURSE WILL RUN OVER A PERIOD OF 3 DAYS**

### LEARNING OUTCOMES:

- Understand the basic analytical technique of methods operated in your unique laboratory (from sample receipt to reporting of final results).
- Understand the handling, function, use and disposal of standards, certified reference materials (CRM) / reference materials, equipment, glassware, chemicals and reagents specific to methods operated in own laboratory.
- Understand the basic requirements of ISO/IEC 17025 (introduction only).

### WHO SHOULD ATTEND THIS COURSE:

- Laboratory managers / supervisors
- Analysts / technicians
- Students

### MINIMUM ENTRY REQUIREMENTS:

- Fluency in English writing and reading skills

### TUITION:

- Training material included (English)
- Certificate of attendance or competence (based on outcome of assessment) will be issued on successful completion of training.

### COURSE OVERVIEW:

#### DAY 1

- An introduction to the laboratory quality management system according to ISO/IEC 17025
- An introduction to good laboratory practices in chemistry testing

santie@michemdynamics.co.za | angeline@michemdynamics.co.za | 082 770 7127 or 078 335 0528

[www.michemdynamics.co.za](http://www.michemdynamics.co.za)

## COURSE OVERVIEW:

---

### DAY 2

- Basic analytical technique of methods including:
  - Sample receipt and storage
  - Weighing practices
  - Correct use of all equipment and glassware presented in each method
  - Preparation and storage of media, chemicals, etc
  - Receipt, preparation, control, storage and disposal of standards and certified reference materials (CRMs) / reference materials
  - Environmental conditions
  - Quality control technique
  - Dilutions
  - Interpretation of results
  - Reporting of results

### DAY 3

- Basic analytical technique of methods continues
- Introduction to laboratory health and safety
- Housekeeping in a laboratory
- Test (assessment)

