



# Advanced Medical Laboratory Technician

**Duration:** 5 Days

**Language:** en

**Course Code:** IND5 - 165

## Objective

:Upon completion of this course, participants will be able to

- Understand the core principles of medical laboratory science and its applications in healthcare.
  - Perform a wide range of laboratory tests with accuracy and precision.
  - Apply quality control measures to ensure reliable and valid test results.
  - Operate and maintain laboratory equipment according to standard protocols.
- Interpret laboratory test results and understand their implications for patient care.
  - Adhere to safety standards and ethical practices in the laboratory environment.

## Audience

:This course is intended for

- Aspiring Medical Laboratory Technicians seeking to enter the healthcare field.
- Current laboratory professionals looking to upgrade their skills and qualifications.
  - Healthcare professionals interested in expanding their knowledge of laboratory practices.
- Recent graduates from healthcare-related fields who wish to specialise in laboratory technology.

## Training Methodology

The training methodology for this course combines theoretical instruction with practical application, using various teaching methods to ensure a well-rounded learning experience. The focus on interactive, hands-on learning, complemented by continuous assessment and feedback, ensures that participants are fully prepared for their roles as Medical Laboratory Technicians.

## Summary

This course provides comprehensive training for individuals seeking to enhance their skills and knowledge as Medical Laboratory Technicians. The curriculum is designed to equip learners with the practical and theoretical expertise required to perform essential laboratory tests, analyse results, and maintain laboratory equipment. With an emphasis on accuracy, safety, and efficiency, this course prepares participants for the demanding environment of modern healthcare laboratories.

## Course Content & Outline

### Section 1: Introduction to Medical Laboratory Science

- Overview of the healthcare system and the role of laboratory technicians.
- Introduction to laboratory safety protocols, including handling of hazardous materials.
  - Basic laboratory equipment: functions and maintenance.

### Section 2: Laboratory Techniques and Procedures

- Sample collection, handling, and processing.
- Blood analysis: Complete Blood Count (CBC), blood typing, and coagulation tests.
  - Urine and stool analysis: Techniques and interpretation.

- Microbiological testing: Culture, sensitivity, and identification of pathogens.

### **Section 3: Quality Control and Assurance**

- Principles of quality assurance in the laboratory.
- Implementing quality control procedures in daily practice.
  - Troubleshooting common laboratory errors.
- Calibration and maintenance of laboratory equipment.

### **Section 4: Data Interpretation and Reporting**

- Analysing test results and understanding their clinical significance.
  - Writing and presenting laboratory reports.
- Ethical considerations in data handling and reporting.
- Collaboration with healthcare teams for patient management.

### **Section 5: Advanced Laboratory Techniques**

- Molecular diagnostics: PCR, ELISA, and other advanced techniques.
  - Automation in the laboratory: Benefits and challenges.
  - Emerging technologies in laboratory science.
- Case studies: Application of advanced techniques in real-world scenarios.

### **Section 6: Professional Development and Ethics**

- Career pathways and opportunities in medical laboratory science.
- Continuing professional development: Certifications and further education.
  - Ethical issues and professional responsibilities.
- Effective communication skills for laboratory professionals.

## **Certificate Description**

Upon successful completion of this training course, delegates will be awarded a Holistique Training Certificate of Completion. For those who attend and complete the online training

course, a Holistique Training e-Certificate will be provided.

Holistique Training Certificates are accredited by the British Assessment Council (BAC) and The CPD Certification Service (CPD), and are certified under ISO 9001, ISO 21001, and ISO 29993 standards.

CPD credits for this course are granted by our Certificates and will be reflected on the Holistique Training Certificate of Completion. In accordance with the standards of The CPD Certification Service, one CPD credit is awarded per hour of course attendance. A maximum of 50 CPD credits can be claimed for any single course we currently offer.

## Categories

Healthcare & Pharmaceutical, Technology, Health, Safety & Environment HSE

## Tags

Medical Laboratory Technician, Medical training

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