



University of Bahrain MICRO-CREDENTIAL



Chemistry Lab Skills

GENERAL INFORMATION

Duration: 4 Weeks

Total Hours: 75 hours (30 hours theory, 45 hours practical)

Venue: University of Bahrain

Fees: 600 BD

Level: Undergraduate/Graduate

Language: English

Pre-requisite:

- High school diploma (with chemistry)
- Basic chemistry and computer skills
- Active participation

INSTRUCTOR BIOGRAPHY



Prof. Ayman H. Kamel

Ph.D. from Ain Shams University, specializes in electrochemical sensors and mimic polymers for environmental and biomedical analysis. He has published 153+ articles with an h-index of 31, supervised 17 Ph.D. and 43 M.Sc. students, and led multiple research projects. He also serves as a guest editor and reviewer.



Micro-credential is a short, focused course designed to equip learners with specific skills and knowledge within a specialized area. It serves as a pathway to earning an equivalent certification for a core course, offering a flexible and targeted learning experience.

COURSE OVERVIEW

The 4-week Chemistry Lab Skills Bootcamp teaches essential lab techniques, safety practices, and quality control. Topics include titration, chromatography, spectroscopy, and GLP. Participants gain hands-on experience and complete a mini-research project. Upon completion, they receive a micro-credential certifying their lab proficiency.

DELIVERY MODE

- **In-Person Contact:** 40 hours of hands-on labs and workshops.
- **Synchronous Online:** 15 hours of live lectures and discussions.
- **Asynchronous Online:** 20 hours of pre-recorded lectures and materials.
- **Peer Engagement:** 5 hours of group projects and discussions.

ASSESSMENTS

- Quizzes and Knowledge Checks: 20%
- Lab Reports: 30%
- Group Discussions and Presentations: 20%
- Capstone Project: 30%

TARGET AUDIENCE

- Recent graduates in chemistry or related fields
- Current lab technicians seeking to upskill
- Career changers from other disciplines
- Industry professionals in pharmaceuticals, petrochemicals, and environmental testing
- Technical trainers and educators in laboratory settings
- Undergraduate or postgraduate students wanting hands-on experience

KEY TOPICS COVERED

- Lab Safety and Basic Techniques
- Chromatography and Instrument Calibration
- Advanced Spectroscopy and Quality Control
- Data Analysis, Lab Documentation, and Capstone Project



Scan the code
for Registration

For further Information, please contact:

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<https://microcredentials.uob.edu.bh/>