

Materials Characterization with Scanning Electron Microscopy

10 hour course | 2 live sessions

Dates: 8/27/26 and 8/28/26 | Location: Polytechnic Campus

Time: 1-6pm

This microcredential introduces learners to the fundamental principles and practical techniques of scanning electron microscopy (SEM) for materials characterization.

Participants will explore the underlying physics of SEM, learn essential sample-preparation methods, and gain hands-on experience operating a benchtop SEM.

Through guided laboratory activities, learners will acquire and interpret SEM images to evaluate material structure and properties.

Key Skills Covered

- Understand underlying physics of SEM
- Understand SEM sample preparation for metals, polymers, and ceramics
- Successfully prepare samples for SEM analysis
- Operating a benchtop SEM safely and effectively
- Acquire high-quality images for material property analysis

Meet The Instructor:



Dr. Fabiano Carvalho

Research Laboratory
Manager in the School of
Manufacturing Systems
and Networks

Eligibility:

- Must be current ASU student

For further questions please email exec-fseonline@asu.edu

[Register here](#)

