

Engineering Analytical Lab

The Engineering Analytical Lab is a shared-use analytical lab supporting the research needs of interdisciplinary engineering fields. Housed within the 84,315 sq. ft. Woltosz Engineering Research Laboratory, the Engineering Analytical Lab provides faculty and research teams with access to advanced characterization tools, including a **Zeiss EVO-10 Scanning Electron Microscope (SEM)** equipped with an **EDS detector**, and a **Quorum Q150R ES Plus Sputter Coater** for SEM sample preparation.

The SEM complete with EDS enables high-resolution imaging and elemental analysis of material surfaces, supporting investigations that span materials characterization, nanostructure analysis, microfabrication, and failure analysis. Together, these instruments support a wide range of experimental procedures, including microstructural analysis, compositional mapping, surface defect identification, and fabrication quality assessment. Their capabilities are applicable to faculty across numerous engineering research disciplines—including but not limited to mechanical, chemical, materials, biomedical, and aerospace engineering, as well as interdisciplinary research bridging design, manufacturing, and applied sciences.