

## **Nanotechnology(AAS) PROGRAM STUDENT LEARNING OUTCOMES**

Upon completion of the AAS Degree Program in Nanotechnology, students will demonstrate the following learning outcomes:

1. Explain basic scientific principles related to the behavior of matter at the atomic and macroscopic levels in chemical, biological and mechanical systems.
2. Operate nanofabrication processing equipment with a focus on safety, environmental and health issues.
3. Perform basic nanofabrication processes.
4. Perform patterning for nanofabrication process.
5. Describe various vacuum pump systems and verify when a system is functioning properly.
6. Operate characterization equipment including optical microscopes, scanning probe microscopes, and electron microscopes as well as chemical, electrical and physical characterization equipment.
7. Communicate advanced technical concepts in an oral, written and graphical form.
8. Function effectively as a member of a technical team.
9. Use a variety of sources to acquire and critically evaluate needed technical information and use it in an ethical, professional and legal manner.