COURSE DESCRIPTION

• This training course covers a wide range of neutron based measurement techniques for material control and accounting (MC&A) purposes.
• The course is composed of lectures that describe underlying theories followed by hands-on laboratory exercises covering measurement techniques.

NDA Concepts Covered:
✓ Fundamental principles of neutron detection
✓ Passive neutron coincidence counting of bulk plutonium
✓ Multiplicity counting of bulk plutonium
✓ Active Neutron Coincidence Counting of bulk uranium and fresh fuel assemblies.
✓ Waste characterization using neutron counting.

NDA Equipment Covered: NMC, AWCC, UNCL, Add-a-source

Course Objective
To provide the participant with in-depth knowledge of the major neutron NDA techniques used in domestically for MC&A measurements of bulk special nuclear material (SNM) and in international safeguards.

Additional Information
Course Length: 4.5 days
Target Audience: Individuals that perform, manage, or supervise neutron based nondestructive assay (NDA) techniques. Auditors, regulators, and policy makers may also benefit from attending this course.