

Energy, Climate & Infrastructure Security

Training

Sandia National Laboratories experts customize training and instruction in a variety of tools and capabilities to uniquely fit customers' specific set of needs and available resources

Custom Training

Sandia provides training to enhance the use and application of many of its tools and capabilities within the area of nuclear energy. Sandia recognizes that while some groups require intensive instruction detailing every step of a process, others have more expertise or experience in the area. Given the varied nature of groups and organizations, Sandia

experts customize training and instruction to uniquely fit each group's specific set

of needs and available resources. They bring decades of experience designing, developing, and delivering a variety of training courses to effectively introduce concepts and prepare trainees for real world situations.

Severe Accident Modeling Instruction

Sandia offers a comprehensive training suite of material for courses on nuclear reactor safety and Sandia-developed computational codes, used to model and simulate severe accidents, MELCOR and MACCS. Training generally includes modules regarding:

- Development of safety concepts
- Severe accident perspectives
- Accident progression in the reactor vessel
- Containment characteristics and design basis
- Source terms and off site consequences

The training can be tailored to meet specific needs and requirements.

Training in Transportation Risk Assessments

Leveraging 35 years of experience in this area, Sandia's training courses address key elements of transportation risk assessments. Past trainees include individuals and groups from the Nuclear Regulatory Commission, Department of Energy, American Nuclear Society, other national laboratories, and other countries. Whether a group needs training to better-understand transportation regulations and who they affect, or hands-on instruction for using Sandia's RADTRAN code to best generate, interpret, and use simulated transportation data, trainers can customize a course to help.

Courses in Probabilistic Risk Assessment

The courses Sandia offers for probabilistic risk assessments (PRAs) help trainees understand the purpose of PRAs and how they can be managed to increase levels of safety and security. Like other trainings, Sandia experts design courses to be as broad or in-depth as needed, with content ranging from Level 1 - 3 PRA and Fire PRA, to human reliability analysis, human factors, and reactor system overviews.

Training in Action: Gulf Nuclear Energy Infrastructure Institute

In 2011, Sandia teamed with the Nuclear Security Science and Policy Institute and regional Middle East partners to jointly develop and operate the Gulf Nuclear Energy Infrastructure Institute (GNEII). Located in Abu Dhabi, UAE, GNEII is a regional education program which offers both classroom instruction and hands-on experience in topics related to nuclear energy safety, security, safeguards, and nonproliferation.



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