

Education - Augmenting the atom in nuclear energy

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Currently, there are 99 nuclear power reactors in operation in the U.S. These reactors not only provide approximately 20 percent of America's electricity, they also create thousands of stable, rewarding jobs. The nuclear industry needs engineers, technicians, craft workers and other professionals in positions ranging from entry-level to mid-career and senior management. The industry hires new employees from four areas: universities, community colleges, labor apprenticeships and the military.

Nearly all careers in the nuclear industry require a high school diploma or GED.

Many positions provide extensive company-sponsored on-the-job training, as well as formal classroom and laboratory training. However, associate degrees, bachelor degrees or advanced degrees are needed for some jobs, especially in engineering, chemistry and operations. In addition, many jobs in the nuclear industry require background checks and drug/alcohol screening as part of the industry's fitness-for-duty program. The purpose is to ensure that employees can enjoy a safe and secure workplace, free from the adverse effects of drugs and alcohol. It also helps ensure that there are no distractions from the primary goals of personnel and plant safety.

In the U.S., educational institutions that provide education and training related to nuclear science and technology include:

Universities and Colleges: All types of engineers are hired by the nuclear energy industry. The industry prefers engineering graduates from programs accredited by the Accreditation Board for Engineering and Technology (ABET). Most universities and colleges offer engineering courses, and may provide specific education and training specific to nuclear science and technology.

Labor Apprenticeships: Six labor apprenticeship programs are aligned to the nuclear energy industry's required initial training program. These six programs are under the Nuclear Mechanic Apprenticeship Program.

Military: All veterans are desired by the

industry, but the Navy's Nuclear Propulsion program graduates have additional knowledge and skills that are highly desirable to the nuclear energy industry.

A special education program, the Nuclear Uniform Curriculum Program (NUCP), is also important. The NUCP implements an industry strategy to ensure that properly trained personnel are in the right places at the right times. The NUCP consists of a three-step approach to 1) quantify the need, 2) define the curriculum, and 3) implement the right number of programs in each region. The intent is that graduates could be waived or exempted from portions of required initial training. By organizing industry partnerships with two-year education programs, it leverages resources to provide the next generation of highly skilled workers. Below is a list of schools in the NUCP:



Whatever the route taken to a career in the nuclear industry, one of the many rewards is the satisfaction of helping to provide the power and technology that supports the health and productivity of our nation.

Alabama

Wallace Community College
www.wallace.edu

Arizona

Estrella Mountain Community College
www.estrellamountain.edu

Connecticut

Three Rivers Community College
www.trcc.commnet.edu

Florida

Indian River State College
www.ircc.edu

Miami Dade College
www.mdc.edu

Georgia

Augusta Technical College
www.augustatech.edu

Idaho

ESTEC/Idaho State University
www.isu.edu

Kentucky

West Kentucky Community & Technical College
www.westkentucky.kctcs.edu

Maryland

College of Southern Maryland
www.csmd.edu

Michigan

Lake Michigan Community College
www.lakemichigancollege.edu

Monroe County Community College
www.monroeccc.edu

Minnesota

Dakota County Technical College
www.dctc.edu

St. Cloud Technical College
www.sctc.edu

Missouri

State Technical College of Missouri (formerly Linn State)
www.statetechmo.edu

Onondaga Community College
www.sunyocc.edu

Nebraska

Metropolitan Community College
www.mccneb.edu

Southeast Community College
www.southeast.edu

New Jersey

Salem Community College
www.salemcc.edu

New Mexico

New Mexico Jr. College
www.nmjc.edu

New York

Excelsior College
www.excelsior.edu

Midlands Technical College
www.midlandstech.edu

Spartanburg Technical College
www.sccsc.edu

North Dakota

Bismarck State College
www.bismarckstate.edu

Ohio

Lakeland Community College
www.Lakelandcc.edu

Pennsylvania

Luzerne County Community College
www.luzerne.edu

South Carolina

Aiken Technical College
www.atc.edu

Washington

Columbia Basin College
www.columbiabasin.edu

Wisconsin

Lakeshore Technical College
www.gotoltc.edu

Texas

Brazosport College
www.brazosport.edu

Texas State Technical College
www.tstc.edu

Wharton County Junior College
www.wcjc.edu

Tennessee

Chattanooga State Community College
www.chattanoogastate.edu