NUCLEAR POWER TECHNOLOGY

Program Description

Nuclear Power Technology at BSC is an instructor-led program designed in collaboration with the Energy Providers Coalition for Education (EPCE) and developed for current and future nuclear power employees. To earn a Nuclear Power Technology degree, a student will decide on one of two tracks; non-licensed operator or instrumentation and control technician. All students will need to complete the Nuclear Uniform Curriculum Program (NUCP) courses; then, depending on their specialization, four specific courses are required. The non-licensed operator track will include; NUPT 101, NUPT 107, NUPT 220 and NUPT 227. The instrumentation and control technician track (available on demand) will include: ICTL 215, ICTL 225, ICTL 235 and NUPT 229. Students employed in the nuclear industry will be accepted into this track.

Offered entirely online, students in both tracks are trained in industry-required fundamentals needed for their respective field. Students will learn about all phases of nuclear power generation, including equipment, systems and safety culture. Both careers provide students the opportunity to find entry-level positions at nuclear or other modern power plants.

Preparation

A background in math, physics, and chemistry is highly recommended. Knowledge of electronics, mechanics, or instrumentation is helpful.

Prospective students should be prepared for the physical demands of entry-level technician positions. Typical industry requirements include passing a physical exam, which may entail lifting 50+ pounds, climbing ladders, and working in confined spaces or heights. Job applicants also may be required to pass a drug screen and eye exam, including the ability to distinguish between colors accurately.

Program Requirements

Students who complete the curriculum requirements receive a Program Certificate or Associate in Applied Science degree.

An agreement between BSC and Exelon allows Nuclear Power Technology students the opportunity to substitute their education for training. Those who complete the AAS program and specific requirements of the agreement receive a National Academy for Nuclear Training Certificate. The certificate states the student has completed nuclear fundamental training objectives based on the Nuclear Energy Institute's Uniform Curriculum Standard and can bypass fundamental training once employed in a nuclear facility.

Career Opportunities

Industry forecasts a strong job market for job applicants in nuclear energy due to an aging workforce, plant license renewal, and growing interest in nuclear power. Graduates find employment as entry-level instrumentation and control or non-licensed operators. Graduates can also find entry-level employment as radiographers, operators, radiation monitors, and decontamination workers. They may also work in health care. Technicians with the necessary skills can become instructors who train new workers or technical writers who prepare operating or repair manuals.

Additional Information

NEI Approved

Developed in collaboration with EPCE nuclear industry partners, the Nuclear Power Technology program is approved by the Nuclear Energy Institute (NEI). The purpose of NEI is to foster and encourage the continued safe utilization and development of nuclear energy to meet the nation's energy, environmental, and economic goals and to support the nuclear energy industry by providing encouragement to educational institutions to promote education in nuclear energy disciplines.

Credits from this program may be applied to BSC's Bachelor of Applied Science degree (BAS) in Energy Management, offered entirely online. The BAS is designed for individuals interested in supervisory and management positions in the energy industry. The BAS builds on the foundation laid in an AAS degree and includes general education classes, core management courses, and energy specific management courses.

BSC's National Energy Center of Excellence was designated as the National Power Plant Operations Technology and Education Center by U.S. Energy Secretary Samuel W. Bodman in 2007. This official designation recognizes BSC as the premier national center of education and training for operators and technicians in the energy industry.

Contact

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Degree Plans

- Nuclear Power Technology (Operations) Associate in Applied Science
- Nuclear Power Technology (Operations) Program Certificate

- Nuclear Power Technology (Instrumentation & Control) Associate in Applied Science
- Nuclear Power Technology (Instrumentation & Control) Program Certificate