

MECHANICAL MAINTENANCE TECHNOLOGY

Overview

Degrees Offered: AAS, Program Certificate

Limited Enrollment: Yes

Program Begins: Fall

Delivery Method: On Campus

Phone: 701-224-5651

Email: bsc.aeat@bismarckstate.edu

Description

Mechanical maintenance technicians install, maintain, and repair turbines, compressors, pumps, valves, and other industrial production and processing equipment. BSC's one year Mechanical Maintenance Technology program provides students a solid foundation in safety, fabrication, mechanics, fluid power, hydraulics, and use of tools amongst other skills. Students apply technical knowledge and skills to install, maintain, and repair motors, pumps, pneumatic tools, conveyor and pipeline systems, production machinery and automated equipment.

Preparation

Background in these areas is helpful: shop math, basic tool knowledge, and welding. Mechanical aptitude and manual dexterity are important characteristics for workers in this trade. Good reading comprehension is also necessary to understand technical manuals.

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.

Requirements

Students who complete the base curriculum requirements receive a Program Certificate. Students may return for an additional year of welding and general education courses to earn an Associate in Applied Science degree.



This program receives funding from the U.S. Department of Labor; therefore, veterans and eligible spouses receive priority of service over non-covered persons. (20 CFR 1010)

Career Opportunities

BSC's Mechanical Maintenance Technology program is the first of its kind regionally and within the North Dakota University System. Graduates are prepared for entry-level jobs in the power and process plant industries, factories, institutions such as hospitals and schools, and other commercial or private enterprises that require complex, industrial machinery and equipment. Top paying industries for these jobs are power generation, pipeline distribution, petroleum and biofuel refineries, food manufacturers, and other manufacturing companies.

Additional Information

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.

Degree Plans

- Mechanical Maintenance Technology Associate in Applied Science
- Mechanical Maintenance Technology Program Certificate

Program Learning Outcomes

Upon graduation, Mechanical Maintenance Technology students will be able to:

- Demonstrate methods in the technical and safety aspects of mechanical maintenance.
- Describe the responsibilities of the maintenance mechanic and the tools needed for the repair and maintenance of plant equipment.
- Demonstrate through inspection and testing, basic competency of welding processes vital to mechanical maintenance.
- Inspect and analyze a wide variety of mechanical equipment in order to assist in its repair and preventative maintenance.