MECHANIC I

Overview

Degrees Offered: Program Certificate
Limited Enrollment: Yes
Program Begins: Spring
Delivery Method: On Campus
Phone: 701-224-5651 • 800-852-5685
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Description

Building on foundational knowledge acquired in the Operator I program, this program provides hands-on training in the fundamental skills and principles required to become a proficient mechanical maintenance technician. Students gain practical experience with hand and portable tools, measurements and lubrication systems, as well as in-depth knowledge of bearings, seals, pumps, valves, piping systems, small engines, compressors, mechanical drive systems, and hydraulic fundamentals. Upon completion, graduates are equipped with the essential skills and knowledge to perform routine maintenance tasks, troubleshoot mechanical issues, and support the reliability and efficiency of industrial equipment and systems.

Preparation

Those considering a career in mechanical maintenance should have a background in shop environments, basic tool knowledge, and welding, which are all beneficial. Mechanical aptitude and manual dexterity are essential traits for workers in this field, as they involve working with various mechanical systems and tools. Good reading comprehension is also necessary to effectively understand and follow technical manuals and instructions.

Prospective students should be prepared for the physical demands of entry-level technician positions after completing the program. Typical industry requirements often include passing a physical exam, the ability to lift over 50 pounds, and the ability to climb ladders and work in confined spaces or at heights. Job applicants may also be required to pass a drug screening and an eye exam, including the ability to distinguish between colors accurately, which is a key aspect in some maintenance tasks.

Requirements

Students who complete the curriculum requirements receive a Program Certificate in Mechanic I.

Program Pathways

Credits from this program may stack into the following Associate in Applied Science degree:

- Mechanical Maintenance Technology

The AAS program may stack into the following Bachelor of Applied Science degrees:

- Mechatronics Engineering Technology
- Operations Management

Career Opportunities

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

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)

Degree Plans

- Mechanic I Program Certificate

Program Learning Outcomes

Upon graduation, Mechanic I students will be able to:

- Demonstrate proficiency in the safe selection, operation, and maintenance of hand and portable tools to perform basic repairs and maintenance tasks in industrial settings.
- Apply knowledge of measurements, lubrication systems, bearings, and seals to diagnose mechanical issues, enhance equipment performance, and implement preventative maintenance strategies.
- Analyze and troubleshoot mechanical systems, including hydraulic systems, mechanical drive systems, small engines, and compressors, to ensure the efficient operation of plant equipment.