

PETROLEUM PRODUCTION ADVANCED OPERATOR

Overview

Degrees Offered: Program Certificate

Limited Enrollment: Yes (On Campus)

Program Begins: Fall

Delivery Method: Online, On Campus

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Description

This certificate program builds upon the knowledge and skills obtained in the Operator I and Petroleum Production Operator II programs. Building on previous training, this program provides specialized instruction on the complex systems and technologies that drive modern petroleum production operations. Students gain in-depth knowledge of production equipment, well services, and industrial SCADA systems, as well as emerging trends in gas processing and carbon capture. Additionally, the program explores the principles and applications of artificial lift systems, culminating in a practical applications course that synthesizes learning into real-world solutions.

Preparation

Students must successfully complete Operator I and Petroleum Production Operator II before enrolling in Petroleum Production Advanced Operator.

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 Petroleum Production Advanced Operator. Additional coursework may lead to an Associate in Applied Science degree.

Program Pathways

Credits from the Petroleum Production Advanced Operator Certificate may stack into the following Associate in Applied Science degree:

- Petroleum Production Technology

The Associate in Applied Science degree may stack into the following Bachelor of Applied Science degrees:

- Energy Management
- Operations Management

Career Opportunities

A career in the petroleum industry offers high-paying opportunities and global employment prospects. As oil and gas production increases in North Dakota's Bakken region and beyond, the demand for skilled operators and technicians continues to grow. Employers seek detail-oriented professionals with strong computer skills and problem-solving abilities. These careers provide excellent salaries, long-term job security, and nationwide employability, making them both versatile and rewarding.

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

- Petroleum Production Advanced Operator Program Certificate

Program Learning Outcomes

Upon graduation, Petroleum Production Advanced Operator students will be able to:

- Analyze and operate production equipment, artificial lift systems, and gas processing technologies, including carbon capture, to optimize petroleum production while adhering to environmental and safety standards.
- Apply principles of industrial SCADA systems and well servicing techniques to monitor, troubleshoot, and enhance the efficiency and safety of petroleum production processes.
- Evaluate and solve operational challenges using practical applications, industry standards, and effective communication to support safe and ethical practices in the petroleum production industry.