

POWER PLANT TECHNOLOGY

ASSOCIATE IN APPLIED SCIENCE (77 CREDIT HOURS)

Electricity plays a vital role in modern American life, and the demand for this valuable resource continues to grow throughout Oklahoma and the US. In recent years, power generation organizations have become dependent on increasingly complex information technologies, confronted new governmental regulations, and, like many workforce sectors, faced retirements among large numbers of their current workers. Not surprisingly, these changes have significantly impacted the availability of a sufficient number of well-prepared power production technical professionals.

Job prospects are expected to be favorable as many workers retire while the industry continues to build new plants. The gap between the skilled technicians that the industry workforce currently has and those needed by 2025 is substantial, and the power plant industry faces significant challenges in meeting the need for experienced technicians and continuing their training in advancing technologies (Oklahoma Office of Workforce Development, 2019).

Graduates of OSUIT's Power Plant Technology program are the workforce of the future, operating, maintaining, and expanding the power generation capacity of this state and country. Students utilize the same cutting-edge technology and equipment for hands-on training that they will later encounter in their careers as skilled plant operators. Sponsored on-site internships, a requirement for those in the program, ensure students learn and gain real-world experience before they graduate.

Students explore all aspects of plant operations, from water chemistry to electrical distribution, in the two-year program. Students develop a broad understanding of plant instrumentation and mechanical and electrical systems. With ten power plants within a one-hour drive of the OSUIT campus, site visits are part of the curriculum. Students have a chance to tour multiple plants and speak with operators. Many guest speakers from surrounding power companies provide students with current operations knowledge.

This program of study requires special program fees beyond OSUIT's current tuition and mandatory fees.

For more detailed information regarding OSUIT's Power Plant Technology program, please contact a program advisor at 918-293-4742 or visit osuit.edu/powerplant.

PROGRAM REQUIREMENTS: 57 CREDIT HOURS

POWER PLANT TECHNOLOGY (57 CREDIT HOURS)

SEPP 1113 Introduction to Electrical/Electronics
 SEPP 1123 Introduction to Power Plants
 SEPP 1133 Piping & Instrument Diagrams
 SEPP 1223 Electrical Motors & Controls
 SEPP 1233 Power Plant Computer Applications
 SEPP 1312 Internship ^[P] (12 Credit Hours)
 SEPP 2403 Plant Operations
 SEPP 2413 Compliance Regulations ^[P]
 SEPP 2423 Mechanical Systems ^[P]
 SEPP 2443 Boilers & Prime Movers
 SEPP 2503 Balance of Plant
 SEPP 2523 Water Systems & Processes
 SEPP 2543 Plant Chemicals & Water Quality
 SEPP 2553 Safety Competency & Qualifications
 SEPP 2623 Advanced Plant Operations
 SEPP 2633 Power Plant Capstone

GENERAL EDUCATION REQUIREMENTS: 19 CREDIT HOURS

AMERICAN HISTORY & GOVERNMENT (6 CREDIT HOURS)

HIST 1483 US History to 1865 *or*
 HIST 1493 US History since 1865
 POLS 1113 US Government

COMMUNICATIONS (6 CREDIT HOURS)

Select from courses listed below or others as approved by program advisor.

ENGL 1113 Freshman Composition I *or*
 ENGL 1033 Technical Writing I
 SPCH 1113 Introduction to Speech Communications *or*
 SPCH 2313 Small Group Communications

MATHEMATICS (3 CREDIT HOURS)

MATH 1513 Pre-Calculus (A)

SCIENCE (4 CREDIT HOURS)

Select from laboratory science courses designated with an "N" as approved by program advisor.

INTERDEPARTMENTAL REQUIREMENTS: 1 CREDIT HOUR

ORIENTATION (1 CREDIT HOUR)

ORIE 1011 College Strategies