

## Engineering and Industrial Technology - Power Generation Option Associate in Applied Science

**Division of Engineering, Physical Science and PTEC** 

Life changing.

Program Requirements 60 Total Credit Hours						
	•	•			edit Hours	
English Composition Courses						
	ENGL	1113	English Composition	on I	3 hours	
	ENGL	1213	English Composition	on II	3 hours	
or	ENGL	1223	Technical Writing			
or	COMM	1713	Intro to Oral Communication			
History & Government Courses						
	HIST	1483	American History t	o 1877	3 hours	
or	HIST	1493	American History S	Since 187	7	
	POLI	1113	American Governr	nent	3 hours	
Mathematics Courses						
	MATH	1493	Math Applications		3 hours	
or	Other college-level math					
Computer Science Courses						
	BADM	1113	Digital/Financial Li	teracy	3 hours	
or	or Other approved computer course					
Technical Occupational Specialty - 42 Total Hours						

The associate in Applied Science degree program is designed to provide the employees of the OGE Energy Corporation of Oklahoma an opportunity to complete an associate degree specifically designed to prepare them with the knowledge, technical skills, and job-related experiences necessary to make a significant contribution to their corporation. The specific areas of operations, instrumentation and control, electrical, and mechanics form the basis of the degree program. Additional focus of this program is the perpetuation of a quality workforce, a higher quality of life for our citizenry and state-wide economic development.

Career Opportunities: Instrument and Control, Operator, Plant Mechanic

Page 156 2025-2026

## Engineering and Industrial Technology - Power Generation Option HERN Associate in Applied Science College Division of Engineering Physical Science and BTEC Life changing.

Division of Engineering, Physical Science and PTEC

This suggested curriculum includes degree requirements and courses that are usually completed in the first two years of a four-year curriculum. Consult with the university or college of your choice and its catalog curriculum as you make plans on where to transfer. Be careful to select the courses that will meet all requirements for both the Associate and Baccalaureate degree programs.

Students will be awarded 42 credit hours of extra-institutional credit for certified coursework and job performance demonstration at the OGE Energy Corporation in the areas of Plant Operations, Instrumentation, and Control, Plant Electricians, and Plant Mechanics at the following levels:

Apprenticeship Level C-1, C-2, and C-3:

Safety-PPE and First-aid; Fall Suppression, Worker Right to Know/HAZCOM, Envirochemical, Confined space, Basic Shop Equipment, Prints & Drawings, Clearance Procedures, fuel Systems, SAP Notifications & Confirmation Notes, ash Removal systems, Circulating Water Systems, Steam Cycle, Compressed Air Systems, Turbine Auxiliaries, Generator, Plant Electrical Systems, Water Treatment, Plant Instrumentation, Fire Protection Systems, Hand Signals, Electrical Circuit Basics.

Apprenticeship Level B-1 and B-2:

Coal System, Pulverizes and Feeders, Ash Systems, Closed Cooling Water System, Stator Cooling Water system, MCC Breaker System, Motor Megger, Pump/Motor Rigging & Removal, Small Motor (25 HP or less) Overhaul, Tubing and Fittings, Metal Work and Welding, Main Turbine, Generator and Turbine Lube Oil Systems, Hydrogen Seal Oil system, Pump seal Inspection, Heat Exchanger Inspection and Repair, Calibrate Gauge, Test & Repair Pressure Switches.

Apprenticeship Level A-1 and A-2:

Control Loops, Piping, Condensate system, Feedwater System, Steam System, Closed Cooling Water System, Fuel System-Gas/Oil, Fuel system-Coal, Plant/Service Air System, Instrument/Control Air Systems, Emergency Generator, Waste Water Treatment System, Circulating Water System, Calibrate a Transmitter, Freeze Protection System, Centrifugal Pump, Test & Calibrate Positioners & Actuators, Lube Oil Systems, Generator/Electrical System, Test & Repair Pneumatic & Electronic Solenoid, Small Valve Refurbishment, Troubleshoot and Repair a Piston Actuator, Pump Bearing Inspection.

Students are required to pass the OGE certification examination for each of the above levels and complete 12 credit hours at Northern before credit can be transcripted.

NOC evaluates students for placement into supplemental/college-level courses or college-level courses, whichever will lead to the greatest possibility of student success. Academic placement is determined by A.C.T. test scores, corresponding A.C.T. challenge tests, holistic placement, or other college approved placement tests. These tests are administered in the Testing Center at NOC. Based upon the scores, students may be required to take one or more supplemental courses for English, Math, Social Science or Nursing. See the NOC testing web page by clicking on the following link: <a href="http://www.noc.edu/act">http://www.noc.edu/act</a> for placement guidelines.

Page 157 2025-2026