## 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					
General Education Courses 18 Total Credit Hours					
English Composition Courses					
	ENGL	1113	English Composition	n I 3 hou	rs
	ENGL	1213	English Composition		
or	ENGL	1223	Technical Writing		
or	COMM	1713	Intro to Oral Commu	unication	
History & Government Courses					
	HIST	1483	American History to	1877 3 hour	rs
or	HIST	1493	American History Si	nce 1877	
	POLI	1113	American Governme	ent 3 hou	rs
Mathematics Courses					
	MATH	1493	Math Applications	3 hou	rs
or	Other college-level math				
Computer Science Courses					
		1113	Digital/Financial Lite	eracy 3 hou	rs
or Other approved computer course					
Technical Occupational Specialty - 42 Total Hours					rs

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

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 either foundational or college-level courses, whichever will lead to the greatest possibility of student success. Academic placement is determined either by A.C.T. test scores or by Accuplacer test scores. These tests are administered in the Testing Center at NOC. Based upon the scores, students may be required to take one or more courses for remediation in English, Math, or Reading, either prior to or concurrent with credit courses. 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.