

Gas Measurement Certificate



Right now, oil and gas are the world's most important energy sources. They produce power for our factories and our homes, run our cars, ships, aircraft and railways, and provide us with plastics and other synthetic materials that, in the modern world, we often take for granted.

With demand for oil and gas increasing, and greater care being taken of our natural resources, the energy industry faces a challenging and exciting future - one that is going to test our ingenuity and expertise to the full.

*This certificate program is **NOW AVAILABLE** in **Junction City!!***

Coursework in this 30 Credit Hour Certificate includes:

COURSE & COURSE NUMBER	COURSE DATES - FALL 2014	CREDIT HOURS
MEAS 1100 – Common Technical Skills	August 4 - 8	3
MEAS 1101 – Gas Industry Concepts	August 11 - 22	5
MEAS 1102 – Instrumentation and Controls	August 25 - September 12	9
MEAS 1103 – Gas Quality Analysis	September 15 - 26	4
MEAS 1104 – Flow Measurement	September 29 - October 10	6
MEAS 1105 – Pressure and Volume Control	October 13 - 17	3

Program Schedule: Classes run Monday - Friday from 8:00 am to 5:00 pm
Program Certificate Cost: \$2730 - Non-Barton County Resident



For more information, contact:

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This training was developed in partnership with industry members of the Southern Gas Association Joint Industry Project on Measurement .



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Gas Measurement Certificate Course Descriptions

COMMON TECHNICAL SKILLS

August 4 - 8

This web based course introduces the student to the basic skills necessary to pursue further training in Natural Gas Measurement. Skills will include applied mathematics, physics, and basic computer operation. Success in the courses that follow Common Technical Skills depend on the student having a fundamental grasp of mathematical, physics, and statistical concepts that will be used in Fluid Mechanics and Measurement principles. Since much of the training is computer based, the student will also need basic computing competence to navigate Microsoft Windows and web based modules.

GAS INDUSTRY CONCEPTS

August 11 - 22

This combination of instructor led and web based training introduces the student to the laws of fluid mechanics and gas measurement techniques commonly used in the industry. A basic understanding of fluid mechanics and concepts of natural gas flow measurement is fundamental to the custody transfer of natural gas between parties in addition to monitoring system gas usage and loss. The student must be able to understand these concepts in order to apply new skill sets at the required level.

INSTRUMENTATION and CONTROLS

August 25 - September 12

This instructor led and web based course enables the student to understand and operate instrumentation that monitors and directs processes including pressure, flow, temperature, level, and material composition. The student will learn to use a variety of different forms of instrumentation such as electrical, electronic, and computerized control devices such as programmable logic controllers. Gas Measurement technicians must have the skills necessary to install, maintain, and troubleshoot computerized instrumentation and controls. This course is a critical part of the training necessary to ensure the success of technicians competing for high tech positions in the natural gas measurement field.

GAS QUALITY ANALYSIS

September 15 - 26

No classes April 21-25 due to Easter Break

This instructor led and web based course prepares the student to work with standard gas quality analyzers used in all aspects of the measurement industry. The student will learn how to collect and analyze gas quality data in order to make determinations about its quality and safety. Knowledge of gas quality analysis is an important aspect of the measurement industry. The student must be able to monitor and make critical judgments about gas quality in order to be successful in his/her job. With safety as the first priority of any gas technician, the student must learn under which conditions the gas quality must pass or fail the analytical process.

FLOW MEASUREMENT

September 29 - October 10

This instructor led and web based course prepares the student to install, maintain, and troubleshoot all industry standard gas measurement devices. The student will also learn how to interpret data from popular brands of flow computers and modify software parameters for specified applications. In the natural gas industry, precision of measurement is second in importance only to safety. Because profit and potential losses can be directly related to measurement accuracy, gas companies insist that their technicians have a high level of training in installation, maintenance, and troubleshooting of gas measurement devices. This course contains the core intent of the gas measurement program.

PRESSURE and VOLUME CONTROL

October 13 - 17

This instructor led and web based course prepares the student install, maintain, and troubleshoot the devices that regulate gas flow. Common types of control valves, pressure regulators, and safety relief devices are discussed. Topics include theories of operation, applications, and safety concerns. The concept of gas measurement must include methods for regulating flow to ensure that required amounts of gas are delivered. This course addresses that aspect of the industry. Proper regulation of gas protects the end customer financially and personally. A properly trained technician reinforces the intent of gas regulation.