

## **Gas and Steam Turbines**

### MODULE

### About the Skill Module

This skill module describes the basic types of gas and steam turbine engines used as prime movers / drivers in oil and gas applications and explains their key components, sizing, standards and specifications, and control systems.

See example Mechanical eLearning module

# **Target Audience**

Facilities Engineers, Process Engineers, Senior Operations Personnel, Field Supervisors, Engineers who select, design, install, evaluate or operate gas processing plants and related facilities

## You Will Learn

Participants will learn how to:

- Describe how a gas turbine works
- Identify the types of gas turbines, major components, and common applications
- Describe the main factors that affect gas turbine performance
- List the options for heat recovery from gas turbines
- Explain the differences in the design and application of heat recovery from gas turbines
- · Describe inlet air filtration systems and air-cooling options
- · List common fuel gas specifications for natural gas
- List common pollutants in exhaust emissions and describe their mitigation methods
- Describe gas turbine control systems
- · List common steam turbine applications as prime movers in oil and gas facilities
- Describe the types of steam turbines used, key mechanical components, and auxiliary systems
- · List applicable company standards and industry codes for steam turbine driven equipment
- Describe types of rotors used and differences in their performance
- Describe the relationship between power output, steam inlet, and exhaust conditions and how this impacts facility design and operation
- Describe common steam turbine control strategies
- · List typical steam turbine damage mechanisms and maintenance and repair techniques
- · Outline the key steps in supplier selection and materials sourcing
- · Describe procedures for over-speed testing

# **Product Details**

Categories: Midstream

Disciplines: Mechanical Engineering

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 5 hours (approx.)

\$395.00