



## Electric Motors and Motor Control in Oil and Gas

### MODULE

#### About the Skill Module

This skill module explains electric motor drivers including electric power generation fundamentals, basic AC motor types used in oil and gas, selection criteria, efficiency and performance standards, mechanical and electrical design aspects, typical accessories, motor starting techniques, and typical maintenance, inspection, and commissioning activities.



[See demo online learning module](#)

## Target Audience

Facilities personnel who interface with facility electrical power systems, including project engineers, operation leads, instrumentation, controls personnel, and electrical engineers who are new to electrical power systems within oil and gas facilities.

## You Will Learn

You will learn how to:

- Describe a motor driver and its key operational aspects
- Describe differences in operation between induction and synchronous motors and how to select between them
- Identify key design and operating parameters of electric motors
- Identify electric motor de-rating factors
- Describe the relationship between motor torque and speed
- List available motor accessories and their functions
- Describe the typical data shown on the motor nameplate
- Describe the methods of motor starting and their pros/cons
- Describe the operation of variable speed drives and their effects on electrical equipment
- Describe items generally covered in optional Factory Acceptance Testing
- Describe common steps in commissioning motors
- List typical motor maintenance activities and typical failure modes

## Product Details

Categories: Upstream

Disciplines: Instrumentation, Controls & Electrical

Levels: Basic

Product Type: Individual Skill Module

Format: On-Demand

Duration: 2 hours (approx.)

**\$250.00**