



## DIGITAL SOLUTIONS

# SYNERGI GAS COMPLETE COMPRESSOR MODELLING

Course code: SY-29  
Duration: 3 days

### Prerequisite:

Significant experience as a Synergi Gas modeller with a good working knowledge of compression. Completion of SY-25 Synergi Gas standard course. This course assumes you are proficient in the use of the latest version of the product.

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## DESCRIPTION

This is an intermediate/advanced level course that solely focuses on compressor modelling in Synergi Gas. We start with a review of "Basic compressors", including theoreticals and general station terminology & controls. Much of this material is included in the "Standard plus compressors" training. Next we discuss how the program calculates the compressibility factor and gas properties, and then introduce the Station Analysis tool.

The second day covers drivers, centrifugal compressors, and reciprocating compressors. The last day covers recycle, losses, temperature effects, and more controls. Additional tools and modules we may cover include services, compressor station site polygons, temperature polygons, the station spacing tool, compressor behavior in USM/TVM, and Steady State State Optimization.

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## LEARNING OBJECTIVES

You will learn how to model reciprocating compressors using data from the manufacturer or eRCM. You will learn how to model centrifugal compressors using a head-flow map and curves for power & fuel. You will learn about the different ways to model fuel, de-rate power, and select units within a station. You will learn how constraint interchange is applied to compressor stations on multiple levels, and how that positively affects your results.

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## TARGET GROUP

Users who have attended a Synergi Gas standard course and/or have experience using Synergi Gas, and need to learn about compressor modelling beyond theoretical driver/compressors.