



## DIGITAL SOLUTIONS

# SAFETI CONGESTED EXPLOSION MODELLING EXTENSION

Course code: SA-12  
Duration: 1 day

**Prerequisite:**

The course is suitable for users familiar with Safeti software and who have previously attended SA-02 Safeti, SA-03/06 Safeti advanced modelling and SA-13 Safeti advanced explosion modelling would also be of benefit, but are not mandatory.

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### DESCRIPTION

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Safeti contains a new extension for modelling the risks from explosions. This new approach to explosion modelling takes account of the effects of congestion and confinement when calculating overpressure and impulse results. The new modelling allows the user to select either the Multi Energy or Baker Strehlow Tang explosion methodologies. The course describes how to use the extensive new functionality, including defining obstructed regions, buildings and associated vulnerability characteristics for a range of effect types and creating additional vulnerability sets for use when assessing exceedance criteria. It goes on to describe the extensive results assessment capabilities of the much extended risk-reporting functionality available in Safeti.

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### LEARNING OBJECTIVES

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Upon completion of this course, you will understand and be able to use the congested explosion modelling available in Safeti. The course focuses on the features available in the software and explains how to use these to build a model of your plant which includes congestion and confinement information, and building specific vulnerability characteristics.

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### TARGET GROUP

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Experienced risk analysts with previous experience using Safeti who need to carry out detailed risk modelling calculations involving explosions. The course does not cover Phast and Safeti usage and assumes that participants are familiar with the software.