

# Spreadsheet Problem-Solving for Chemical Engineers (CH764VTL)

*Virtual Course*

Day 1

10:00 . 11:30<sup>1</sup> Session 1

Basic Spreadsheet Skills

Configuring Excel for engineering calculations

Efficient spreadsheet manipulations

12:00 . 1:30 Session 2

Basic Spreadsheet Skills

Formulas, cell addressing, and range names

Creating engineering graphs

2:30 . 4:00 Session 3

Process Calculations

names

2:30 . 4:00 Session 3

Numerical Problem-Solving

Solving algebraic equations and systems

- Single nonlinear equations
- Sets of linear equations
- Sets of nonlinear equations

Numerical solution of differential equations

4:30 . 6:00 Session 4

Numerical Problem-Solving

Optimization calculations

Capstone design calculations

Process economic evaluation

- Cash flow and profitability