

## INSTRUCTOR LED TRAINING

Course Title: Excel VBA Programming for Chemical Engineers

Course ID:	Course Type:	Course Length:
CH766	Instructor-led (classroom) Course	1 Day

## **Course Schedule**

**7:30 – 8:00** Registration

8:00 – 9:45 Session 1 – Getting Started with VBA

- Configuring Excel for VBA programming
- The Visual Basic Editor environment
- Recording and editing macros
- Debugging tools

**9:45 – 10:15** Morning Break

**10:15 – Noon** Session 2 – User-defined Functions

- Programming user-defined functions (UDFs) for engineering formulas
- Including programming structure in UDFs
- Developing array functions and borrowing Excel functions
- Packaging collections of functions in an Excel Add-in

Noon – 1:00 Lunch Break

**1:00 – 2:45** Session 3 – Delving into VBA Programming

- Communicating with Excel object-oriented concepts
- Data types and scope
- VBA programming structures
- Modular programming organization

**2:45 – 3:15** Afternoon Break

**3:15 – 5:00** Session 4 – User Interfaces and VBA Applications

- Message boxes, input boxes and user forms
- Programming event handlers
- Integrating course concepts into an Excel/VBA application
- Interfacing with outside programs process simulator example