

Course Title: Spreadsheet Problem-Solving for Chemical Engineers

Course ID:	Course Type:
CH765	Instructor-led (classroom) Course
http://www.aiche.org/ch765	

Course Schedule

Day One

7:30 – 8:00	Registration
8:00 – 9:45	Basic Spreadsheet Skills <ul style="list-style-type: none"> • Configuring Excel for engineering calculations • Efficient spreadsheet manipulations • Formulas, cell addressing and range names • Creating engineering graphs
9:45 – 10:15	Morning Break
10:15 – Noon	Process Calculations <ul style="list-style-type: none"> • Dealing with engineering formulas and units • Flow sheet calculations: recycle calculations • Targeting calculations • Case studies with data tables
Noon – 1:00	Lunch Break
1:00 – 2:45	Dealing with Data <ul style="list-style-type: none"> • Table look-up and interpolation • Excel's Data Analysis toolbox • Histograms and distributions • Model building through curve-fitting
2:45 – 3:15	Afternoon Break
3:15 – 5:00	Numerical Problem-Solving <ul style="list-style-type: none"> • Solving algebraic equations: single, linear sets and nonlinear sets • Solving differential equations: ordinary sets and partial differential equations • Optimization calculations • Economic evaluation: cash flow and profitability measures