

Course Title: Distillation in Practice

Course ID:	Course Type:
ELA112	eLearning Course
http://www.aiche.org/ela112	

## **Course Outline**

- Module 1: Vapor, Liquid, and Equilibrium
- Module 2: Batch systems, Continuous systems, Typical Multi-stage Columns, McCabe-Thiele Method, Reflux Ratio and Equilibrium Stages, Side-Streams in Ternary Separations, and MESH Equations
- Module 3: Distillation System, Types of Columns, and Importance of Column Intervals
- Module 4: Cross Flow Tray Types, Column Cross-Sectional Area, Weeping, Fractional Entrainment, Total Vapor Pressure Drop, and Liquid Regime
- Module 5: Types of Packing, Flooding Correlation, Pressure Drop Correlations, Intro to Liquid Distribution, and Vapor Distribution
- Module 6: Other types of Columns and Design Characteristics
- Module 7: Definition of Design Engineers, Goals Versus Reality, and Efficiency Effects
- Module 8: The Oldershaw Column and HETP
- Module 9: Introduction to Column Start-up and Causes of Column Failures
- Module 10: Triangular Diagrams and Typical Distillation Train