## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Engineering</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Process Control</td>
<td>14</td>
</tr>
<tr>
<td>Manufacturing Execution Systems</td>
<td>17</td>
</tr>
<tr>
<td>Petroleum Supply Chain</td>
<td>20</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>22</td>
</tr>
<tr>
<td>Asset Performance Management</td>
<td>23</td>
</tr>
<tr>
<td>License Management</td>
<td>24</td>
</tr>
<tr>
<td>Aspen Dynamic Optimization</td>
<td>24</td>
</tr>
</tbody>
</table>
Questions about AspenTech Training:
Please contact your AspenTech Regional Service Center below. Press option 7 to speak with a Training Coordinator or a Customer Care Specialist.

<table>
<thead>
<tr>
<th>Region</th>
<th>Phone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>North &amp; Latin America (NLA)</td>
<td>+1 888 996 7100</td>
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<td>Europe, Middle East, and Africa (EMEA)</td>
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</tr>
</tbody>
</table>

To register for a course:
Go to the training center [website](#).
## PROCESS ENGINEERING

### EAP101: Aspen Plus Process Modeling
Learn steady-state process simulation, process analysis and optimization using Aspen Plus (3 Days, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Build flowsheet models and summarize basic unit operations.
- Define facilities, materials, utilities and chemical reactions.
- Summarize physical properties.

### EAP121: Building MS Excel User Interfaces
Learn how to embed and link MS Excel using Aspen Plus (1 Day, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Integrate Aspen Simulation Workbook with add in tools in MS Excel®.
- Use features of the Aspen Simulation Workbook and publish and deploy models.

### EAP150: Rigorous Design and Rating of Distillation Columns (New)
Learn how interactively design and rate distillation columns in Aspen Plus (1 Day, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Discuss column design and rating.
- Do column designing and perform rating studies of a column.
- Use detailed rate-based modeling to understand and improve column performance.

### EAP2311: Custom Modeler
Learn how to develop equation models with excel using Custom Modeler (3 Days, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Summarize Equation Oriented modeling, steady state / dynamic modes, and stream types.
- Build flowsheet and create sub models along with hierarchy blocks.
- Script, automate, and customize models.

### EAP2611: Heat Transfer Modeling Using Aspen Plus
**Prerequisites:** Attended EAP101
**Learning Outcomes:**
- Summarize Heat Exchanger Unit Operations.
- Distinguish between the different types of heat exchangers that can be used in Aspen Plus.
- Perform rigorous heat changer design calculations using Aspen EDR.

### EAP901: Aspen Plus – Dryer Optimization: Minimize Energy Demand of Belt Dryers
Learn how to reduce energy demand using Aspen Plus (0.5 days, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Model a multi-stage bed dryer.
- Optimize the dryer demand to reduce cost.
<table>
<thead>
<tr>
<th>Course ID</th>
<th>Course Title</th>
<th>Overview</th>
<th>Prerequisites</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAP902</td>
<td>Aspen Plus – Improving Product Recovery in Distillation Column</td>
<td>Learn how to perform maximum product recovery using Aspen Plus (0.5 days, Basic).</td>
<td>None</td>
<td>• Model distillation units and analyze potential process changes.</td>
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<td>• Optimize distillation units for maximum product recovery.</td>
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<td></td>
<td></td>
<td>• Apply Physical Properties, Henrys Law, and Electrolyte Property Methods.</td>
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<td></td>
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<td></td>
<td></td>
<td>• Use regression and analyze data.</td>
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<tr>
<td>EAP208</td>
<td>Aspen Plus: Migration to V8</td>
<td>Learn new engineering features in version 8 using Aspen Plus (1 Day, Intermediate).</td>
<td>None</td>
<td>• Create simulations in the new user interface.</td>
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<tr>
<td></td>
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<td></td>
<td>• Use activated economics analysis, activated energy analysis, and activated energy analysis.</td>
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<td></td>
<td>• Model solids.</td>
</tr>
<tr>
<td>EAP250</td>
<td>Distillation Modeling</td>
<td>Learn how to simulate and evaluate model quality using Aspen Plus (2 Days, Intermediate).</td>
<td>Attended EAP101</td>
<td>• Use RadFrac models for rating and design and for reporting features.</td>
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<tr>
<td></td>
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<td>• Use column analysis and NQ curves for optimization.</td>
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<td></td>
<td>• Use reactive distillation, three-phase distillation, and rate-based distillation.</td>
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<tr>
<td>EAP251</td>
<td>Aspen Rate Distillation</td>
<td>Learn how to create accurate simulations of column separations. (1 Day, Intermediate).</td>
<td>Attended EAP101</td>
<td>• Compare the operation of the equilibrium RadFrac model to Aspen Rate Based Distillation.</td>
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<td></td>
<td>• Use a Calculator Block to make corrections for tuning parameter adjustments.</td>
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<td>• Apply different convergence strategies.</td>
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<td>• Document the full overpressure analysis.</td>
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<td>• Design single or multiple relief valves.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisites</td>
<td>Learning Outcomes</td>
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<tr>
<td>EAP281</td>
<td>EAP281: Aspen Plus: Process Simulation with Aspen Polymers</td>
<td>Learn how to use Aspen Polymers to model polymerization process (3 Days, Intermediate).</td>
<td>Attended EAP101</td>
<td>• Define complete polymer process flowsheet models. &lt;br&gt;• Estimate polymer properties and perform regression from experimental data. &lt;br&gt;• Apply engineering studies and plant data fitting.</td>
</tr>
<tr>
<td></td>
<td>EAP288: Introduction to Aspen Adsorption</td>
<td>Learn how to build and execute simulations rapidly using Aspen Adsorption (2 Days, Intermediate).</td>
<td>None</td>
<td>• Build simple to advanced flowsheets and run simulations. &lt;br&gt;• Apply cyclic steady state models to flowsheet. &lt;br&gt;• Use parameter estimation.</td>
</tr>
<tr>
<td></td>
<td>EAP289: Aspen Chromatography</td>
<td>Learn how to build and execute simulations rapidly using Aspen Chromatography (2 Days, Intermediate).</td>
<td>Attended EAP2311</td>
<td>• Build flowsheets using the batch column and other supporting models. &lt;br&gt;• Create cyclic processes. &lt;br&gt;• Create and execute Chromatography.</td>
</tr>
<tr>
<td></td>
<td>EAP2121: Process Flowsheet Convergence in Aspen Plus</td>
<td>Learn how to develop robust and efficient models using Aspen Plus (1 Day, Intermediate).</td>
<td>Attended EAP101</td>
<td>• Discuss sequential module strategy. &lt;br&gt;• Create simulations to handle tear stream convergence and specify calculation sequence. &lt;br&gt;• Summarize calculator blocks.</td>
</tr>
<tr>
<td></td>
<td>EAP2411: Improved Process Operability and Control through Aspen Plus Dynamic Models</td>
<td>Learn how to solve process design and plant operation using Aspen Plus Dynamics (3 Days, Intermediate).</td>
<td>Attended EAP101</td>
<td>• Create a flowsheet and run simulations. &lt;br&gt;• Discuss and create models including: RadFrac, heat exchanger, and reactor models. &lt;br&gt;• Script, automate, and customize custom models.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisites</td>
<td>Learning Outcomes</td>
</tr>
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<tr>
<td>EAP2510</td>
<td>C02 Removal Path Using Aspen Plus</td>
<td>Learn the steps involved in properly modeling C02 removal processes using Aspen Plus (3 Days, Intermediate).</td>
<td>Attended EAP101</td>
<td>• Describe approach for modeling C02 removal using physical solvents.</td>
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<td>• Determine property parameters using data regression and property estimation.</td>
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<td>• Use electrolyte system modeling.</td>
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<td></td>
<td>• Build and tune rate based distillation models, sensitivity analysis, and flowsheets.</td>
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<td></td>
<td>• Calculate reaction rates.</td>
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<td>• Use the Aspen Plus Data Fit tool to estimate and reconcile plant or lab data.</td>
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<td>• Determine optimal process conditions for new or existing solids processes.</td>
</tr>
<tr>
<td>EAP2980</td>
<td>Modeling of Processes with Aqueous Ionic Solutions Electrolytes and Salts</td>
<td>Learn how set up simulations for electrolyte systems using Aspen Plus (2 Days, Intermediate).</td>
<td>Attended EAP101</td>
<td>• Summarize electrolyte capabilities in Aspen Plus and types of components present.</td>
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<td>• Use appropriate reporting options.</td>
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<td>• Use equilibrium based and rate-based distillation modeling along with liquid-liquid equilibrium.</td>
</tr>
<tr>
<td>EAP301</td>
<td>Real Time Modeling and Optimization</td>
<td>Learn how to do real time optimization using the EO strategy in Aspen Plus (4 Days, Advanced).</td>
<td>Attended EAP101</td>
<td>• Manipulate a flowsheet and run simulations.</td>
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<td>• Use parameter estimation and data reconciliation for model tuning.</td>
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<td>• Optimize to maximize plant profit.</td>
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<tr>
<td>EPD101</td>
<td>Aspen Batch Process Developer</td>
<td>Learn how to model batch data and interpret results using Aspen Batch Process Developer (2 Days, Basic).</td>
<td>None</td>
<td>• Use route selection and cost analysis in early development stage.</td>
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<td></td>
<td>• Define facilities, materials, utilities, and chemical reactions.</td>
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<td>• Create production plans and recipe.</td>
</tr>
</tbody>
</table>
### EPD201: Aspen Batch Modeler
Learn how to simulate batch distillation processes using Aspen Batch Modeler (2 Days, Intermediate).

**Prerequisites:** None  
**Learning Outcomes:**  
- Set up batch distillation for physical properties.  
- Use batch distillation in multiple scenarios.  
- Use reactor data and models for data fitting and modeling batch reactor with fitted kinetics.

### EPD213: Aspen Properties: Introduction to Aspen Solubility Modeler
Learn how to evaluate solubility in various solvents using Aspen Solubility Modeler (0.5 Days, Intermediate).

**Prerequisites:** Attended EAP201  
**Learning Outcomes:**  
- Describe NRTL-SAC and electrolyte NRTL-SAC activity coefficient models.  
- Summarize how the data regression run type drives Aspen Solubility Modeler.  
- Calculate solubility in various solvent types quickly and efficiently.

### EOP171: Develop and Implement Operator Training Simulator (OTS) using Aspen OTS
Learn Aspen OTS Framework using Aspen Plus Dynamics or Aspen HYSYS Dynamics (2 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Use, configure, and implement Aspen OTS to design operator training simulator.  
- Explain the concepts of OPC Server and OPC Client.  
- Use plant view resources.

### EHY101: Aspen HYSYS Process Modeling
Learn how to build and troubleshoot flowsheet simulation models using Aspen HYSYS (3 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Build flowsheet models and summarize basic unit operations.  
- Define facilities, materials, utilities and chemical reactions.  
- Summarize physical properties.

### EHY102: Modeling and Troubleshoot Refinery using Aspen HYSYS
Learn how to build and optimize simulations using Aspen HYSYS Petroleum Refining (3 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Build, run, analyze, and optimize process simulations using Aspen.  
- HYSYS and Aspen HYSYS Petroleum Refining.  
- Summarize refinery reactor capabilities in Aspen HYSYS.

### EHY105: Refining: Operations & Troubleshooting of the Crude Unit & Preheat Train (New)
Learn how to solve common engineering problems using Aspen HYSYS (1 Day, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Use specific applications to troubleshoot and perform engineering studies.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHY106:</td>
<td>Optimize from the Wellhead to a Gas Processing Facility with Aspen HYSYS (New)</td>
<td>Learn how to optimize using Aspen HYSYS Upstream and Aspen HYSYS (1 Day, Basic).</td>
<td>None</td>
<td>Use the latest features in Aspen HYSYS and Aspen HYSYS Upstream for optimization.</td>
</tr>
<tr>
<td>EHY121:</td>
<td>Building MS Excel User Interfaces</td>
<td>Learn how to embed and link MS Excel using Aspen HYSYS (1 Day, Basic).</td>
<td>None</td>
<td>Integrate Aspen Simulation Workbook with add in tools in MS Excel®. Use features of the Aspen Simulation Workbook and publish and deploy models. Link models to plant process data.</td>
</tr>
<tr>
<td>EHY150:</td>
<td>Refinery Process Modeling using Aspen HYSYS and Aspen HYSYS Petroleum Refining</td>
<td>Learn how to embed and link MS Excel using Aspen HYSYS (1 Day, Basic).</td>
<td>None</td>
<td>Use flowsheet models to build models and analyze flowsheet convergence issues. Use the following models: Catalytic Reformer, Delayed Cooker, and Visbreaker. Use Aspen PIMS for refinery planning and scheduling with Aspen HYSYS.</td>
</tr>
<tr>
<td>EHY2314:</td>
<td>Developing Dynamic Unit Operation Extensions for Aspen HYSYS using VB.NET</td>
<td>Learn VB.NET to implement Dynamic Unit Operation Extension model using Aspen HYSYS (1 Day, Basic).</td>
<td>None</td>
<td>Describe the fundamentals of creating the base code for Dynamic Unit Operation Extension. Use the VB.NET environment and implement Dynamic Unit Operation Extension model. Optimize the implemented code.</td>
</tr>
<tr>
<td>EHY2511:</td>
<td>Flare Network Design and Rating</td>
<td>Learn how to reduce capital cost and assure the safety of the plant using Aspen HYSYS (2 Days, Basic).</td>
<td>None</td>
<td>Identify potential process bottlenecks, and validate the capacity of the flare network.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>Prerequisites</td>
<td>Learning Outcomes</td>
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<tr>
<td>EHY2611</td>
<td><strong>Heat Transfer Modeling Using Aspen HYSYS – EHY2611</strong></td>
<td>Learn how to integrate Aspen HYSYS with heat exchanger modeling software (1 Day, Basic).</td>
<td>None</td>
<td>• Compare the different types of heat exchangers with focus on shell &amp; tube and air cooled.</td>
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<td>• Embed a rigorous heat exchanger model using the Activated EDR feature.</td>
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<td>• Generate physical properties to use in Aspen Exchanger and Rating programs.</td>
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<tr>
<td>EHY901</td>
<td><strong>Multi-Stage Compressors – Conducting Operational Safety Studies Using Dynamic Analysis</strong></td>
<td>Learn how to use Aspen HYSYS Dynamics to evaluate scenarios software using Aspen HYSYS (0.5 Days, Basic).</td>
<td>None</td>
<td>• Evaluate several scenarios to ensure the compressor is protected in an emergency shutdown.</td>
</tr>
<tr>
<td>EHY902</td>
<td><strong>Crude Unit Optimization – Debottlenecking Options using Aspen HYSYS</strong></td>
<td>Compare options for increasing crude unit throughput capacity using Aspen HYSYS (0.5 Days, Basic).</td>
<td>None</td>
<td>• Evaluate scenarios to reduce costs or improve the likely outcomes.</td>
</tr>
<tr>
<td>EHY903</td>
<td><strong>Characterization, Manipulation and Utilization of Petroleum Assays</strong></td>
<td>Learn the modeling techniques for petroleum characterization using Aspen HYSYS (0.5 Days, Basic).</td>
<td>None</td>
<td>• Use Petroleum Assay Management tools.</td>
</tr>
<tr>
<td>EHY904</td>
<td><strong>PSV – Improve Pressure Relief Analysis Workflow using Aspen HYSYS</strong></td>
<td>Learn how to use HYSYS Dynamics, HYSYS Safety Environment, and Flare System Analyzer (0.5 Days, Basic).</td>
<td>None</td>
<td>• Use Dynamics, Safety Environment, and Flare System Analysis to complete the pressure relief analysis.</td>
</tr>
<tr>
<td>EHY905</td>
<td><strong>Aspen HYSYS Sulsim – Modeling and Optimizing Sulfur Recovery Process</strong></td>
<td>Learn how to optimize overall Sulfur recovery, and build a tail gas treating section (0.5 Days. Basic).</td>
<td>None</td>
<td>• Use Aspen HYSYS and the Sulsim Sulfar Recovery functionality.</td>
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<td>• Optimize overall Sulfar recovery.</td>
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<td>• Evaluate new process configurations.</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<td>Learning Outcomes</td>
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</tbody>
</table>
  • Calculate hydrate formation temperatures and pressures.  
  • Use the LNG Exchanger operation to simulate multi-pass heat exchangers.                                                                                               |
| EHY202      | Aspen HYSYS Advanced Process Modeling Topics     | Learn how to apply advanced modeling techniques to enhance flowsheets (2 Days, Intermediate).                                                                                                               | Attended EHY101               | • Build a plant model and use LNG Exchanger operation to simulate multi-pass heat exchangers.  
  • Simulate vessel depressurization and complex relief scenarios.  
  • Define reaction sets and utilize different types of reactor models.                                                                                                       |
  • Use safety analysis environment.  
  • Use Assay Management.                                                                                                                                                    |
| EHY223      | Aspen HYSYS Dynamics: Introduction to Dynamic Modeling | Build dynamic models and discovery shortcuts using Aspen HYSYS Dynamics (3 Days, Intermediate).                                                                                                           | Attended EHY121               | • Create dynamic simulations to model real equipment.  
  • Use PID controllers and Strip Charts.  
  • Use pipeline modeling options in Aspen HYSYS.                                                                                                                             |
| EHY250      | Determine Rapid Depressurization Safety Limits for Design and Rating | Learn how to use the Blowdown Technology to model depressurization (0.5 Days, Intermediate).                                                                                                                  | Attended EHY101               | • Discuss the industrial importance of accurate depressurizing simulations.  
  • Add BLOWDOWN analysis to an existing Aspen HYSY simulation.  
  • Perform design and rating calculations.                                                                                                                                          |
| EHY251      | Flare Network Design and Rating                  | Solve Complex problems using Aspen Flare System Analyzer (2 Days, Intermediate).                                                                                                                         | None                          | • Summarize the capabilities and Aspen Flare System Analyzer.  
  • Perform process safety studies.                                                                                                                                                    |
## EHY252: Pressure Relief Analysis Using Aspen HYSYS
Learn how to define overpressure systems using Aspen HYSYS (1 Day, Intermediate).
**Prerequisites:** Attended EHY101
**Learning Outcomes:**
- Define overpressure systems using Aspen HYSYS in accordance with API 250, 251, 2000.
- Document the full overpressure analysis with Aspen HYSYS.

Learn to build, evaluate, and optimize models using Aspen HYSYS Petroleum Refining (3 Days, Intermediate).
**Prerequisites:** Attended EHY101
**Learning Outcomes:**
- Summarize the capabilities of Aspen HYSYS and Activated Analysis tools.
- Use Aspen PIMS.

## EHY2311: Developing Automation Solutions for Aspen HYSYS
Use Visual Basic and Excel to create solutions for Aspen HYSYS simulation models (2 Days, Intermediate).
**Prerequisites:** Attended EHY101
**Learning Outcomes:**
- Describe capabilities of Aspen HYSYS and User Unit Operation.
- Develop programming style using VS Syntax.
- Use tools such as the HYSYS Type Library, automation objects, VB Debugger, and Macro Language Editor.

## EHY2312: Create Custom Unit Operations and Kinetic Model Extensions with VB.net for Aspen HYSYS
Learn how to develop custom unit operations using Aspen HYSYS (2 Days, Intermediate).
**Prerequisites:** Attended EHY2311
**Learning Outcomes:**
- Develop programming style using VB Syntax.
- Use tools such as the HYSYS Type Library, automation objects, and user unit operations.
- Use extensions definition file (EDF) for building kinetic reaction extension and unit operation extensions.

## EHY2351: Modeling Heavy Oil & Gas Production and facilities using Aspen HYSYS Upstream
Learn new advanced capabilities of Aspen HYSYS Upstream (2 Days, Intermediate).
**Prerequisites:** None
**Learning Outcomes:**
- Summarize the Aspen HYSYS Upstream concepts.
- Use Heavy Oil Characterization.
- Convert steady state into dynamics.

## EAU2831: Introduction to Energy Optimization Using Aspen Utilities Planner
Reduce risk and optimize utility variability using Aspen Utilities Planner (2 Days, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Develop and optimize utilities flowsheet with Excel Interface.
- Minimize the total utilities cost by considering economic, operational and environmental constraints.
- Run multi-period optimization to establish the optimum loads on utility equipment.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Duration</th>
<th>Level</th>
<th>Prerequisites</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAU901</td>
<td>Energy Management – Optimizing Site Utilities to Save Energy using Aspen Utilities Planner</td>
<td>0.5 Days</td>
<td>Basic</td>
<td>None</td>
<td>Use a pre-built model make decisions to optimize tariff evaluation, manage contracts, and plan investments.</td>
</tr>
<tr>
<td>EHX101</td>
<td>Design and Rate Shell and Tube Heat Exchangers</td>
<td>2 Days</td>
<td>Basic</td>
<td>None</td>
<td>Summarize Shell and Tube Heat Exchanger features, calculation modes and geometry. Identify best practices for choosing physical properties for heat exchanger modeling. Rigorously rate a variety of heat exchanger types.</td>
</tr>
<tr>
<td>EHX131</td>
<td>Heat Exchanger Mechanical Design using Aspen Shell &amp; Tube Mechanical</td>
<td>1 Day</td>
<td>Basic</td>
<td>None</td>
<td>Summarize Shell and Tube Mechanical features and capabilities. Identify input requirements needed to design a heat exchanger. Perform the mechanical calculations, and interpret the results.</td>
</tr>
<tr>
<td>EHX1021</td>
<td>Design and Rate Air Cooled Heat Exchangers</td>
<td>1 Day</td>
<td>Basic</td>
<td>None</td>
<td>Summarize Aspen Air Cooled Exchanger features, calculation modes, and capabilities. Discuss the characteristics and applicability of tubular crossflow exchangers. Practice by using the Aspen Air Cooled Exchanger features and capabilities.</td>
</tr>
<tr>
<td>EHX1031</td>
<td>Design and Simulation of Fired Heaters Using Aspen Fired Heater</td>
<td>1 Day</td>
<td>Basic</td>
<td>None</td>
<td>Summarize Aspen Fired Heater features and capabilities. Practice by using the Aspen Fired Heater features and capabilities.</td>
</tr>
<tr>
<td>EHX1041</td>
<td>Introduction to Aspen Plate Fin Exchanger</td>
<td>1 Day</td>
<td>Basic</td>
<td>None</td>
<td>Summarize Aspen Plate Fin Exchanger features and capabilities. Practice by using the Aspen Plate Fin Exchanger features and capabilities.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Prerequisites</td>
<td>Learning Outcomes</td>
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<tr>
<td>EHX1100</td>
<td>Modeling Heat Exchangers Using the Exchanger Design and Rating Suite</td>
<td>Learn how to integrate Heat Exchangers with Aspen HYSYS or Aspen Plus (3 Days, Basic).</td>
<td>None</td>
<td>- Summarize Shell and Tube Heat Exchanger features, calculation modes and geometry.</td>
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<tr>
<td></td>
<td></td>
<td>- Discuss the characteristics and applicability of tubular crossflow exchangers.</td>
<td></td>
<td>- Practice by using suite features and functionality: Aspen Air Cooled Exchanger, Plate Fin Exchanger,</td>
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<tr>
<td></td>
<td></td>
<td>- and Fired Heater.</td>
<td></td>
<td>and Fired Heater.</td>
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<tr>
<td>EHX2911</td>
<td>Improved Energy Efficiency through Heat Integration</td>
<td>Design better and more efficient heat exchanger networks (2 Days, Basic).</td>
<td>EHY101</td>
<td>- Summarize Aspen Energy Analyzer features and capabilities.</td>
<td></td>
</tr>
<tr>
<td>EHX901</td>
<td>LNG – Designing and Evaluating the Performance of Air Coolers and LNG Heat Exchangers</td>
<td>Learn how to perform design and rating calculations of air-cooled and LNG heat exchanger (0.5 Days, Basic).</td>
<td>None</td>
<td>- Use design and rating calculations of air-cooled and LNG heat exchangers.</td>
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<tr>
<td></td>
<td></td>
<td>- Implement parametric studies using Aspen Simulation Workbook.</td>
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<td>- Implement parametric studies using Aspen Simulation Workbook.</td>
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</tr>
<tr>
<td>EHX902</td>
<td>LNG – Refinery Exchangers – Designing and Evaluating the Performance of a Preheat Train</td>
<td>Learn Aspen Exchanger Design &amp; Rating with Aspen HYSYS (0.5 Days, Basic).</td>
<td>None</td>
<td>- Overcome the challenges in the design and simulation of CDU heat exchangers.</td>
<td></td>
</tr>
<tr>
<td>EHX903</td>
<td>Reboilers – Designing and Troubleshooting Thermosiphon Reboilers</td>
<td>Perform design and rating calculations using Aspen Simulation Workbook (0.5 Days, Basic).</td>
<td>None</td>
<td>- Use Aspen Exchanger Design &amp; Rating and its integration with Aspen Plus Simulation Workbook.</td>
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<tr>
<td></td>
<td></td>
<td>- Explore the impact of changing operating conditions.</td>
<td></td>
<td>- Use Reboiler Wizard and its ability to simplify more detailed modeling of reboilers in RadFrac models.</td>
<td></td>
</tr>
<tr>
<td>EEE901</td>
<td>Develop Comparisons using Aspen Capital Cost Estimator</td>
<td>Learn how to accelerate the decision-making process for evaluating a construction project (0.5 Days, Basic).</td>
<td>None</td>
<td>- Improve and accelerate the decision-making process for evaluating the construction methodology for a</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- project.</td>
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<td>project.</td>
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</tbody>
</table>
### EEE101: Introduction to Capital Cost Estimator
Use capital Cost Estimator to evaluate your company’s projects (4 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Define project scope, material, labor costs, buildings, site development, and piping specifications.  
- Make detailed adjustments to a project per local area conditions.  
- Apply your project knowledge to topics for Contracts, Engineering, Construction, and project schedule.

### EEE102: Introduction to Aspen Process Economic Analyzer
Learn to develop an economic evaluation and design using Aspen Process Economic Analyzer (3 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Use existing simulation models to evaluate project economics and maximize your return on investment.  
- Gather detailed design results by integrating operating cost, capital cost, and schedule.  
- Analyze different process alternatives in simulation and determine the most profitable approach.

### EE201: Aspen Capital Cost Estimator: Advanced Topics
Learn how to build detailed project estimates using Aspen Capital Cost Estimator (5 Days, Advanced).

**Prerequisites:** Attended EEE101, EEE103  
**Learning Outcomes:**  
- Use existing simulation models to evaluate equipment costs and labor requirements.  
- Define Contracts Work Scope, unit rates, and user piping envelope.  
- Use system documentation for consistent cost estimations.

### EBE101: Aspen Basic Engineering: End User Basics
Learn how to conduct engineering studies and projects using Aspen Basic Engineering (2 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Create process flow diagram using the Drawing Editor.  
- Integrate tools to perform cost calculations and perform detailed heat exchanger design.  
- Create P&IDs.

### EBE201: Aspen Basic Engineering: Project and Administrator Configuration
Learn how to configure ABE to create a customized knowledge base (2 Days, Intermediate).

**Prerequisites:** Attended EBE101  
**Learning Outcomes:**  
- Discuss features, capability, and architecture implementation options of Aspen Basic Engineering (ABE).  
- Create class libraries, define datasheets, and create symbols and labels.  
- Integrate tools such as the Bridge Application.

### ADVANCED PROCESS CONTROL

### APC100: AspenOne Advanced Process Control – Installation and Configuration
Learn how to deploy the Advanced Control Product suite (2 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Access various functions of Production Control Web Server (PCWS) and Install the AspenWatch Server.  
- Migrate APC Software.
### APC101: Intro to Aspen DMCplus for APC Engineers
Learn how Aspen DMCplus and Aspen DMC3 models are developed through step testing (5 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Identify characteristics of linear versus nonlinear, dynamic, and empirical models.  
- Use DMCplus and DMC3 Models.

### APC105: Introduction to Aspen Process Controller Builder for APC Engineers
Learn how to troubleshoot typical problems with an Aspen DMCplus or Aspen DMC3 online controller (5 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Identify characteristics of linear versus nonlinear, dynamic, and empirical models.  
- Use DMCplus and DMC3 Mode.  
- Use Production Control Web Server (PCWS) to interact w/ controller.

### APC120: Intro to aspenOne – Operating and Maintaining Controllers Online
Learn how to model test methods and procedures using DMCplus and DMC3 controller (2 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Identify characteristics of linear versus nonlinear, dynamic, and empirical models.  
- Use DMCplus and DMC3 Mode.  
- Use Production Control Web Server (PCWS) to interact w/ controller.

### APC121: Intro to Aspen DMCplus Modeling and Building Controllers for Industrial Processes
Learn how to build applications and calculation modules using DMCplus controllers (3 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Identify characteristics of linear, dynamic, and empirical models.  
- Use DMCplus and DMC3 Models.  
- Connect online controller to operate a plant.

### APC125: Modeling and Building Controllers for Industrial Processes
Learn how to model test methods and procedures using DMCplus and DMC3 controller (3 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Identify characteristics of linear versus nonlinear, dynamic, and empirical models.  
- Use DMCplus and DMC3 Model.  
- Connect online controller to operate a plant.

### APC150: Achievable Sustainable APC Benefits Using Adaptive Process Control (New)
Learn how to reduce maintenance workload by using Aspen DMC3 (2 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Run Aspen DMC3 Calibration mode to collect plant step test data.  
- Evaluate controller performance using Aspen Watch performance monitoring.  
- Improve models through the Adaptive Workflow.
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Prerequisites</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>APC160</td>
<td>Recipe Management and Process Sequencing</td>
<td>Learn how to create recipes and download to InfoPlus.21 (2 Days, Basic).</td>
<td>None</td>
<td>• Create Control Recipe from scratch and existing templates.</td>
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<td></td>
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<td></td>
<td>• Administer Aspen Process Recipe System security.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Use Production Control Web Server (PCWS).</td>
</tr>
<tr>
<td>APC170</td>
<td>Intro to Aspen Inferential Qualities</td>
<td>Learn how to use Aspen IQmodel to develop linear steady state inferential</td>
<td>Attended APC101</td>
<td>• Develop Aspen IQ models.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>predictors (3 Days, Intermediate).</td>
<td></td>
<td>• Use PCWS to interact w/ controller.</td>
</tr>
<tr>
<td>APC185</td>
<td>Introduction to Nonlinear Controllers Using Aspen</td>
<td>Simulate and tune a nonlinear controller using Aspen Process Controller</td>
<td>None</td>
<td>• Use Aspen Watch support for plant testing.</td>
</tr>
<tr>
<td>APC210</td>
<td>Aspen Watch Performance Monitor – Real Time</td>
<td>Learn to use Aspen Watch to monitor the performance of DMCplus Controllers</td>
<td>None</td>
<td>• Use Aspen Watch support for plant testing.</td>
</tr>
<tr>
<td>APC220</td>
<td>APC Best Practices – Adaptive Processes Control</td>
<td>Become familiar with Aspen DMC3 for APC maintenance and deployment</td>
<td>None</td>
<td>• Run Aspen DMC3 Calibration mode to collect plant step test data.</td>
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<tr>
<td></td>
<td></td>
<td>workflows (0.5 Days, Intermediate).</td>
<td></td>
<td>• Evaluate controller performance using Aspen Watch performance monitoring.</td>
</tr>
<tr>
<td>APC221</td>
<td>APC Best Practices – Controller Tuning and</td>
<td>Learn Smart Tune and Robustness features using Aspen DMC3 (0.5 Days,</td>
<td>None</td>
<td>• Run Aspen DMC3 Calibration mode to collect plant step test data.</td>
</tr>
<tr>
<td></td>
<td>Robustness</td>
<td>Intermediate).</td>
<td></td>
<td>• Use Smart Tune to setup pre-defined controller LP strategy.</td>
</tr>
</tbody>
</table>
### APC230: Aspen DMCplus – APC Project Pretesting Using a Virtual Plant
Learn how to use a virtual plant to execute the pre-testing phase of an APC Project (2 Days, Intermediate).

**Prerequisites:** None  
**Learning Outcomes:**  
- Discuss APC Project Pretesting.  
- Complete an APC pre-testing project.

### APC240: Aspen DMCplus – APC Project Step Testing and Commissioning Using a Virtual Plant
Configure DMCplus Online, Aspen Watch and APC Web Server software (3 Days, Intermediate).

**Prerequisites:** None  
**Learning Outcomes:**  
- Conduct preliminary plant testing as you would execute the pre-testing phase of an APC project.  
- Collect and Extract Data.

### APC250: Aspen DMC3 – APC Calibrate and Aspen Adaptive Modeling
Learn the fundamentals of Calibrate mode for APC applications (3 Days, Intermediate)

**Prerequisites:** Attended APC101, APC105 and APC240  
**Learning Outcomes:**  
- Configure and tune controllers on the APC builder platform.  
- Complete adaptive modeling and commission a DMC3 controller.

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### MANUFACTURING EXECUTION SYSTEMS

#### MES021: Process Analysis Using aspenOne Process Explorer (New)
Learn how to use analytical tools to identify reasons for performance shortfalls (0.5 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Incorporate context in analysis to improve problem solving.  
- Use ad-hoc events for analyzing continuous processes and performance issues.  
- Use assessment tools to monitor production records and equipment performance.

#### MES101: Aspen InfoPlus.21 Real Time Information Management Foundation
Learn how to deploy the Advanced Control Product suite (5 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Summarize Aspen InfoPlus.21 features and capabilities to effectively monitor critical plant data.  
- Implement and configure an Aspen InfoPlus.21 system.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Learning Outcomes</th>
</tr>
</thead>
</table>
| MES121      | AspenOne Process Explorer: Using and Configuring                             | Learn how to use AspenONE Process Explorer interface to trend process data (3 days, Basic). | None             | • Summarize features and capability of AspenOne Process Explorer.  
• Customize trend plots to suit your application.  
• Specify plots based on statistical analysis of process data.                                                                                     |
| MES122      | Aspen Process Explorer: Using and Configuring                                 | Learn how to view data from your process using Aspen Process Explorer (1 Day, Basic). | None             | • Customize trend plots to suit your application.  
• Specify plots based on statistical analysis of process data.  
• Integrate real-time or historic data from your process into Windows desktop programs.                                                            |
| MES123      | Aspen Calc: Using and Configuring                                            | Learn how to use Aspen InfoPlus.21 without programming (1.5 Days, Basic).      | Attended MES122  | • Build simple and complex calculations that use formulas, Excel, and VB Script.  
• Create ad-hoc and share calculations.  
• Create and view reports.                                                                                                                          |
| MES151      | Aspen Operations Reconciliation and Accounting (AORA)                         | Learn how to supervise and maintain an AORA system (3 Days, Basic).            | None             | • Build the AORA model using vessels, pipes, and instruments.  
• Import Data and perform AORA database administration.  
• Generate reports and automate AORA processes.                                                                                                      |
| MES171      | Aspen Production Record Manager: Retrieving Batch Data Using the Reporting Tools | Learn the Reporting tools of Aspen Production Record Manager using Aspen InfoPlus.21 (1 Day, Basic). | Attended MES122  | • Build simple and complex calculations that use formulas, Excel, and VB Script.  
• Create ad-hoc and share calculations.  
• Create and view reports.                                                                                                                          |
| MES1200     | Calculations and Data Analysis for Engineers                                 | Learn how to make decisions based on the process data stored using Aspen InfoPlus.21 (3 Days, Basic). | Attended MES122  | • Build simple and complex calculations integrated with Aspen InfoPlus.21 without programming.  
• Analyze historic data.  
• Configure key performance indicator (KPIs) to monitor unit performance and retrieve plant data into Microsoft Excel.                                    |
<table>
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<tr>
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<tbody>
<tr>
<td>MES201</td>
<td>Aspen SQLplus for Aspen InfoPlus.21: Using and Configuring for Power Users</td>
<td>Learn how to write and run SQL queries using Aspen InfoPlus.21 data (5 Days, Intermediate).</td>
<td>Attended MES101</td>
<td>• Use intermediate to advanced SQL statements to view or manipulate data.</td>
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<td>• Integrate real-time or historic data.</td>
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<td>• Create customized reports.</td>
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<tr>
<td>MES205</td>
<td>Aspen InfoPlus.21: System Administration</td>
<td>Learn the best practices for performing an Aspen InfoPlus.21 system upgrade (2 Days, Intermediate).</td>
<td>Attended MES101</td>
<td>• Use intermediate to advanced SQL statements to view or manipulate data.</td>
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<td></td>
<td>• Create customized reports.</td>
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<td>• Optimize the way in which SQL is used for processing.</td>
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<tr>
<td>MES222</td>
<td>Building Content for Aspen Roles Based Visualization (RBV)</td>
<td>Enable real-time quality control using RBV (3 Days, Intermediate).</td>
<td>None</td>
<td>• Discuss RBV capabilities.</td>
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<td>• Build RBV content.</td>
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<td>• Review security requirements.</td>
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<tr>
<td>MES231</td>
<td>Building Content for Aspen Roles Based Visualization (RBV)</td>
<td>Learn how to improve users access to critical information using Aspen RBV (3 Days, Intermediate).</td>
<td>Attended MES201</td>
<td>• Create and modify records that support SPC product.</td>
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<td>• Implement an SPC system.</td>
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<td>• Monitor and report on variables that influence product quality.</td>
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<tr>
<td>MES235</td>
<td>AspenOne Process Explorer: Aspen Real-Time SPC: Using and Configuring in aspenOne Process Explorer</td>
<td>Learn how to reduce manufacturing costs using aspenONE Process Explorer (2 Days, Intermediate).</td>
<td>None</td>
<td>• Use the SPC tools to monitor and improve process quality, as well as reduce manufacturing costs.</td>
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<tr>
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<td>• Implement an SPC system.</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>• Monitor and report on variables that influence product quality.</td>
</tr>
<tr>
<td>MES261</td>
<td>Aspen Product Execution Manager: Programming Concepts</td>
<td>Learn how to develop an application using an Aspen Production Execution Manager (3 Days, Intermediate).</td>
<td>None</td>
<td>• Develop an Aspen Product Execution Manager application.</td>
</tr>
<tr>
<td>Course Code</td>
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<td>Prerequisites</td>
<td>Learning Outcomes</td>
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</tbody>
</table>
| MES271      | Aspen Production Record Manager: Configuring the Batch Area and Feed Application | Learn how to prepare and configure a Batch system (2 Days, Intermediate). | Attended MES171                      | • Describe the functional design, architecture and main features of Aspen Production Record Manager (APRM).  
• Configure Batch Feed Application.  
• Use Aspen Process Explorer to examine both Ad Hoc and Online Batch Real-time SPC chart. |
| MES275      | Aspen Batch and Event Extractor: Transferring Data from Batch Execution Systems | Learn how to populate tables from your batch execution system (1 Day, Intermediate). | None                                 | • Populate Aspen Production Record Manager tables with data from your batch execution systems.  
• Create, schedule, test, and deploy configuration rules.  
• Monitor execution progress and verify that batches have been created. |
| MES311      | Aspen InfoPlus.21 Applications Development                                   | Learn how to tailor Aspen InfoPlus.21 records to fit your process (5 Days, Advanced). | Attended MES201                      | • Summarize how the historian works.  
• Implement advanced features and implement role based security for Aspen InfoPlus.21 and client applications. |
| MES361      | Aspen Production Execution Manager - Administration                          | Learn how to use the Production Execution Manager Web Server (2 Days, Advanced). | None                                 | • Create and assign roles, permissions, workstations, and workstation roles.  
• Use appropriate Aspen Production Execution Manager modules to create and track orders.  
• Use the Production Execution Manager Web Server. |
# PETROLEUM SUPPLY CHAIN

## RPA100: Essential PIMS Concepts and Economic Analysis for Managers & Economists
Learn how to use the report data to perform economic evaluations using Aspen PIMS (4 Days, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Analyze and interpret information for an executed model and develop Linear Programming structure.
- Perform economic evaluations.
- Use PIMS Assay Management.

## RPA101: Aspen PIMS: Introduction to Refinery Planning
Learn to build refinery planning models in PIMS to generate optimum plans (5 Days, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Develop Linear Programming (LP) structure.
- Use data tables, case stacking, and product blending required to build and maintain a model.
- Use PIMS Assay Management, PIMS Miscellaneous Tables, and Aspen PIMS Analytics.

## RPA102: Introduction to Aspen PIMS for Petrochemical Planning
Learn to build petrochemical planning models in PIMS to generate optimum plans (3.5 Days, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Build petrochemical planning models to generate optimum plans.
- Develop Linear Programming (LP) structure.
- Use structures for developing typical petrochemical process units.

## RPA135: Economic Optimization of Distribution Networks using Aspen Petroleum Supply Planner
Learn how to use Aspen MPIMS to solve planning problems using Aspen MPIMS (4 Days, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Summarize the functionality of Aspen Petroleum Supply Planner and basic Linear Concepts.
- Solve problems using Aspen Petroleum Supply Planner.

## RPA150: Deliver Refinery Planning Results through Industry Best Practices (New)
Learn PIMS / PIMS-AO best practices (1 Day, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Troubleshoot common modeling mistakes
- Solve problems using PIMS-AO

## RPA153: Aspen Report Writer for Aspen PIMS
Build reports using PIMS, Aspen Petroleum Scheduler and Aspen Multi-Blend Optimizer (1 Day, Basic).
**Prerequisites:** None
**Learning Outcomes:**
- Use the data functions using different data sets.
- Build Report Writer templates to generate reports in Excel format.
### RPA206: Multi-Period Refinery Modeling with Aspen PPIMS
Learn how to build and analyze a multi-period LP models using Aspen PIMS (2 Days, Basic)

**Prerequisites:** None  
**Learning Outcomes:**  
- Explain the differences between non-periodic and periodic models.  
- Transfer inventory from period-to-period.  
- Control blending recipes across multiple periods.

### RPA207: Multiple Plant Planning with Aspen MPIMS Users
Learn how to use Aspen MPIMS to solve planning problems using Aspen MPIMS (2 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Discuss how Aspen MPIMS is used to link multiple single plant Aspen PIMS models.  
- Use various tables to evaluate models and transfer materials into local plants.  
- Summarize global and local reports.

### RPA201: Aspen PIMS: Solving Refinery Planning Problems
Learn how to model and interpret sophisticated plant relationships using Aspen PIMS (5 Days, Intermediate).

**Prerequisites:** Attended RPA101  
**Learning Outcomes:**  
- Implement real-world plant into your Aspen PIMS planning model.  
- Identify & resolve problems that may hinder a planner’s productivity.  
- Perform common economic evaluations.

### RPA208: Aspen PIMS platinum and Assay Manager for Experienced Aspen PIMS Users
Learn how to customize Aspen PIMS Platinum and modify assay data (1 Day, Intermediate).

**Prerequisites:** None  
**Learning Outcomes:**  
- Run a case using Aspen PIMS Platinum Case Runner.  

### RPA221: Aspen PIMS: Advanced Optimization Features
Learn to troubleshoot solutions inherent to non-linear optimization problems (2 Days, Intermediate).

**Prerequisites:** Attended RPA101  
**Learning Outcomes:**  
- Execute different Global Optimization procedures.  
- Set Up and run High Performance Computing architecture.  
- Add and edit non-linear formulas to model.

### RPA301: Aspen PIMS: Advanced Refinery Planning
Learn how to troubleshoot problems and use PIM’s non-linear functionalities (5 Days, Advanced).

**Prerequisites:** Attended RPA201  
**Learning Outcomes:**  
- Model rigorous blending.  
- Use non-linear functionalities.  
- Perform Solution Analysis using Aspen PIMS-Advanced Optimization tool.
Learn how to use Aspen Petroleum Scheduler effectively for daily scheduling operations (2 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Discuss refinery scheduling management issues.
- Build a process flowsheet and simulate a refinery model.
- Integrate products such as Aspen Report Writer, Refinery Report Wizard, and Excel Integration (EI).

RBS121: Aspen Petroleum Scheduler: Building and Using Models
Learn how to setup processes using Aspen Petroleum Scheduler (5 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Part 1: Use Petroleum Scheduler to build a model and schedule the refinery operations.
- Part 2: Model solutions for both common and unique configuration and schedule logic problems.

RBS131: Aspen Refinery Multi-Blend Optimizer: Blend Planning and Scheduling
Learn how to build a model for seamless scheduling and optimization of daily blend activities (2 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Identify the planning, scheduling and blending integrated work process.
- Configure and build an MBO model with all the necessary components to run the optimizer.

RBS901: Using Aspen Petroleum Scheduler for Crude & Process Unit Scheduling
Learn how to use Aspen Petroleum Scheduler in this hands-on workshop (0.5 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Perform crude and process unit scheduling.
- Import daily inventories and events for the “Roll Forward” process.
- Generate reports using customizable report wizard templates.

SUPPLY CHAIN MANAGEMENT

SCM121: Using Aspen Petroleum Scheduler for Crude & Process Unit Scheduling
Learn how to build or modify a new scheduling model for plants using Aspen Plant Scheduler (3 Days, Basic)
Prerequisites: None
Learning Outcomes:
- Build models that manufactures or packages basic chemicals or polymers.
- Configure an Aspen Plant Scheduler model by following the steps.

SCM201: Introduction to aspenONE Supply Chain Management V8 for Modelers
Learn the new configuration steps using aspenONE Supply Chain Management (Aspen SCM) (4 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Use XML programming.
- Use Trace functionality
- Review best practices to upgrade
SM905: Building a Planning Model
Learn the new configuration steps using aspenONE Supply Chain Management (Aspen SCM) (3 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Use a business problem through this course to: build and solve an LP model and build reports.
- Automate model maintenance and execution.
- Create and execute macros, solve mixed integer programming, and use scenario-based planning.

SM906: Configuring aspenOne Supply Chain Management Applications
Learn the basics of aspenONE Supply Chain Management (Aspen SCM) (4 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Manipulate data via commands, macros, and rules.
- Design user interfaces via dialogs, graphs, menus, workspaces and reports.
- Use application basics such as utility programs, case size management, and security.

SM908: Configuring the Aspen Demand Manager CAP
Learn the basics of Aspen Demand Manager CAP (3 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Discuss business issues and how demand and supply planning process can solve the issues.
- Run reports.
- Configure forecast metrics and collaborate forecasting.

SCM912: Implementing Aspen Supply Planner
Learn the basics of Aspen Supply Chain Planner (2 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Define time periods and specify correct optimizer.
- Set up data maintenance, model generation, model optimization, scenario creation, and analysis.
- Discuss how changes to the LP formulation impact other Supply Planner structures.

SM913: Using Aspen Supply Planner
Learn how to use Supply Planner efficiently for business planning (2 Days, Basic)
Prerequisites: None
Learning Outcomes:
- Discuss examples of how Aspen Supply Planner can help with planning issues.
- Generate and publish a plan.
- Discuss plan analysis including bottleneck analysis and “what if” analysis.

SM915: Implementing Aspen Collaborative Forecasting
Learn the basics of Aspen Collaborative Forecasting application (2 Days, Basic)
Prerequisites: Attended SM908
Learning Outcomes:
- Discuss business issues and how Collaborate Forecasting can solve the issues.
- Use the Aspen Collaborative Forecasting Web Based Application.
- Discuss main stages of implementation and how to manage security along with operation.
### AAA101: Monitor Distillation Column Operation to Predict and Prevent Failures *(New)*
Learn to predict and prevent column failures using Aspen Column Analytic (1 Day, Basic).

**Prerequisites:** Attended SM908  
**Learning Outcomes:**  
- Describe RadFrac.  
- Model a C2 splitter.  
- Use Aspen Asset and Aspen Column Analytics.

### AAA102: Early Failure Detection using Pattern Matching, Root Cause Analysis and Empirical Modeling *(New)*
Learn how to monitor and optimize asset performance using Aspen Column Analytic (1 Day, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Identify Data Trends with Aspen Pattern Matching.  
- Build a distillation model based on empirical data.

### AFR101: Introduction to Aspen Fidelis Reliability
Learn how to generate predictions of future performance using Aspen Fidelis Reliability (3 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Discuss the fundamentals of asset management, system engineering, reliability modeling.  
- Build simple to medium complexity models.  
- Change basic inputs, view results and customize any model for specific requirements.

### AFR150: Maximize Plant Performance using Reliability Analysis *(New)*
Learn how to generate predictions of future performance using Aspen Fidelis Reliability (3 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Discuss the fundamentals of making economic cases to drive decisions.  
- Identify system limitations.

### APR101: Aspen Mtell Previse: Deploy & Use
Learn how to stop machines from breaking down and to last longer using Aspen Mtell Previse (3 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Perform conditioning and analysis of time-series sensor data.  
- Build and deploy advanced condition monitoring strategies.  
- Implement Operator Maintenance Advisory capabilities enabling operators to track open work orders.

### PMV101: Optimize Plant Performance using multivariate data analysis
Learn how to use Aspen ProMV to improve understanding of key process relationships (2 Days, Basic).

**Prerequisites:** None  
**Learning Outcomes:**  
- Use multi-block modelling to model your process.  
- Identify key contributors to poor process performance.  
- Optimize process performance.
PMV121: Optimize Batch Process Performance using multivariate data analysis
Learn how to relate time-varying process data using Aspen ProMV (1 Day, Basic).
Prerequisites: None
Learning Outcomes:
- Use multi-block modelling to model your batch process.
- Identify key contributors to poor process performance for batch processes.
- Optimize process performance for batch processes.

LICENSE MANAGEMENT

SLM101: Aspen Software License Management and Deployment
Learn the installation and configuration process (2 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Explain the purpose and requirements of Software License Manager.
- Install and configure a license server along with the SLM client tools.

Aspen Dynamic Optimization

GDOT101: Fundamentals of Aspen Generic Dynamic Optimization Technology
Learn the fundamentals of GDOT (3 Days, Basic).
Prerequisites: None
Learning Outcomes:
- Use typical Aspen GDOT applications in petroleum refining and bulk chemicals
- Configure applications using standard templates and connect to OPC server (online)
- Use best practices for implementing Aspen GDOT applications as well as sustaining benefits