

Training Course Data Sheet	
<h1>Essential Aspen PIMS™</h1>	Course Number: <b>SP800</b>
	Duration: <b>5 days</b>
	CEUs Awarded: <b>3.5</b>
	Level: <b>Introductory</b>

<p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>To provide an introduction to linear programming concepts and an overview of the Aspen PIMS system. Emphasis is placed on learning how to use the Aspen PIMS system to solve typical planning problems</li> <li>The course is oriented toward the practical aspects of refinery planning as well as the terminologies and theories of linear programming</li> </ul> <p><b>Who Should Attend</b></p> <ul style="list-style-type: none"> <li>Technical as well as non-technical personnel who have no experience in linear programming and limited knowledge of refinery operations. Also, this course provides a person who is knowledgeable in LP (but not necessarily knowledgeable in Aspen PIMS) with a quick way to gain a good understanding of the system</li> </ul>	<p><b>Approach</b></p> <ul style="list-style-type: none"> <li>Instruction on principle topics</li> <li>Hands-on problem solving approach allows the student to gain an understanding of all Aspen PIMS data tables, menu options and reports.</li> <li>The class problems are designed to illustrate how to model and resolve real world planning problems and also how to interpret and troubleshoot LP solutions</li> </ul> <p><b>Prerequisites</b></p> <ul style="list-style-type: none"> <li>A basic understanding of Microsoft Windows and a working knowledge of spreadsheets such as Microsoft Excel, together with a general awareness of the interaction between refining technology operations and planning is strongly suggested</li> </ul>
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## Essential Aspen PIMS™ Course Agenda

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- Linear Programming Concepts: Definitions of constraints, variables, right hand sides, ranges, bounds, matrix coefficients, PI values and DJ's
  - Aspen PIMS Menu Options: Explanation of all PIMS menu options
  - Aspen PIMS Reports: Obtain, analyze and understand Model Documentor, Validation Summary, Iteration & Recursion Log, MPSProb, Matrix Listing, Primal/Dual, Summary and Full Solution Reports
  - Aspen PIMS Data Tables: Overview of all the data tables, structures and data requirements necessary to build and optimize an Aspen PIMS model.
  - Aspen PIMS On-Line Help: Description of the system
  - Analysis & Troubleshooting of Error and Warning Messages: How to troubleshoot model errors and warnings
  - Aspen PIMS Model Building: Overview of the sample model illustrating structures for developing crude distillation architecture, product blending, typical refinery process units, distributive recursion, vector and delta based models
  - Case Study Analysis: Use the Aspen PIMS case stacking feature to run alternate scenarios; show how to stack solutions side by side for quick analysis; illustrate calculations used to examine "break even" values of related cases
  - Class Problems: Provide students with hands-on experience in solving problems such as evaluating alternate crudes, intermediate feedstocks, outside blendstocks, process units, products and markets. The problems are designed to teach the student how to develop the LP structure in order to solve the problem as well as how to interpret and analyze the LP solutions
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*Aspen Technology, Inc. awards Continuing Education Units (CEUs) for training and development activities conducted by our organization in accordance with the definition established by the International Association of Continuing Education & Training (IACET). One CEU is granted for every 10 hours of class participation.*