



## Aspen HYSYS®

Study Guide for Aspen Academic User Certification



## Prove Your Credibility

An Aspen HYSYS Academic Certified User demonstrates skills in building process simulations including defining the properties environment, developing flowsheets with unit operations, and utilizing available tools for analysis and reporting. This person also demonstrates understanding of topics such as pipe segments with flow assurance, adjust and recycle operations, and troubleshooting in HYSYS.

## Practice

AspenTech training is highly recommended though not required. This guide contains 100% coverage of all objectives required for the certification exam.

## Grading

Grade	Weight
Multiple choice questions	100%

## Get Certified

After passing the exam you will receive an email to post your certificate and digital badge on social media, which is a cross-industry recognition of technical skills you may share on LinkedIn, as well as in your email signature. [View the instructions](#) on how to post your credentials on LinkedIn profile

## Exam Scope for Aspen HYSYS

- ☐ Properties Environment
- ☐ Simulation Environment
- ☐ Reporting
- ☐ Troubleshooting

Scope	Competency Objective for Aspen HYSYS
Explore Properties Environment	<b>Create</b> a component list and <b>identify</b> the different component databases available.
	<b>Add</b> hypothetical components
	<b>Identify</b> the different property methods databases available and <b>define</b> a fluid package.
Explore Simulation Environment	<b>Recognize</b> the default unit sets and <b>Customize</b> unit sets
	<b>Identify</b> transferring process information and objects options
	<b>Configure</b> and customize user preferences, options and default settings and <b>Illustrate</b> case management options
	<b>Create</b> and <b>install</b> a template file
	<b>Identify</b> various logical operations available
	<b>Identify</b> the key differences in the three separator operations
	<b>Optimize</b> the simulation by using adjust operation and other logical operations
	<b>Identify</b> various heat transfer operations
	<b>Describe</b> the different heat exchanger models
	<b>Analyze</b> the performance of the heat exchanger
	<b>Identify</b> the heat transfer operations that can be integrated with Aspen Exchanger Design and Rating (EDR) tools
	<b>Recognize</b> pressure drop correlation options for different phases
	<b>Identify</b> different heat transfer options for pipe segment
	<b>Identify</b> different flow assurance for pipe segment
	<b>Build</b> a piping network using pipe segments
	<b>List</b> the available column templates
	<b>Determine</b> parameters required to solve a column and summarize the method to modify stage efficiencies and the different efficiency types available.
	<b>Identify</b> different types of column specifications available
	<b>Analyze</b> the Degrees of Freedom (DOF) of different column templates
	<b>Identify</b> the side operations available to be added to a column
	<b>Identify</b> four case study types and their differences
	<b>Customize</b> properties/correlations for all streams using Correlation Manager
	<b>Monitor</b> the key process variables of any type in the simulation by using Data Table
	<b>List</b> the different stream analysis types
	<b>Identify</b> the different ways to add the stream analysis

	<b>Perform</b> stream analysis to acquire more stream information
	<b>Identify</b> four case study types and their differences
	<b>Identify</b> case study reporting tools
	<b>Monitor</b> the key process variable response to other changes in process using case study
	<b>List</b> the common reporting options
	<b>Identify</b> what kind of reports can be added to the flowsheet
	<b>Identify</b> the ways of exporting workbook reports
<b>Troubleshooting</b>	<b>Recognize</b> the various methods of troubleshooting flowsheet, columns, and other unit operations.
	<b>Explain</b> the Consistency Error table