



## **Aspen Shell & Tube Exchanger™ (Sustainability Focus)**

Study Guide for Heat Exchanger Energy Efficiency Certification Exam



### Prove Your Credibility

A Certified user has an in-depth understanding and practical skills required to design, rate, or simulate a shell and tube heat exchanger using Aspen Exchanger Design & Rating. Passing this exam will demonstrate your skills in rigorously sizing and rating shell and tube exchangers to help optimize heat exchanger designs to achieve sustainability goals.

### Practice

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

**Step 1:** Take Class: [Design and Rate a Shell and Tube Heat Exchanger \(SUS-E101\)](#) – 2 Days

AspenTech offers a variety of delivery methods in which you can take training.

- Register for [public training](#) (face to face or virtual)
- Register for [private training](#) (face to face or virtual)
- Subscribe to [eLearning](#) (on-demand)

### Step 2: Review Scope and Objectives

This guide contains 100% coverage of all objectives for the Heat Exchanger Energy Efficiency certification exam. You can use as both a study tool and an on-the job reference.

### Step 3: Take Heat Exchanger Energy Efficiency certification exam

The total time for the certification exam is one hour.

### 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

**Go to [AspenTech University](#) to register for AspenTech Training & Certification**

### Exam Scope for Heat Exchanger Energy Efficiency certification

- Introduction to EDR
- Heat Exchanger Modeling

### Grading

Grade	Weight
Multiple choice questions	70%
Lab task	30%
Total	100%

SCOPE	TECHNICAL CONTENT	COMPETENCY OBJECTIVE
Introduction to EDR	Calculation Modes	<b>Recognize</b> the features and calculation types available
		<b>Provide</b> required process data input
	Physical Properties	<b>Provide</b> physical properties
		<b>Import</b> physical property data from other programs
	Exchanger Geometry	<b>Review</b> the principal mechanical components associated with the construction of shell and tube heat exchangers
Heat Exchanger Modeling	Aspen Plus	<b>Implement</b> Aspen EDR Software in an Aspen Plus Simulation
	Aspen HYSYS	<b>Implement</b> Aspen EDR Software in an Aspen HYSYS Simulation
	Key Results	<b>Warnings &amp; Messages</b>
		<b>Thermal/Hydraulic Summary</b>
		<b>Mechanical Summary</b>
		<b>Calculation Details</b>