

Aspen SeisEarth™ Study Guide

Study Guide for Certification



Prove your Credibility

An Aspen SeisEarth Certified User has the essential knowledge and practical skills needed to interpret both 2D and 3D seismic data. They understand how to display, manage and review seismic data. They can conduct seismic mis-tie corrections, calibrate wells to seismic data, and perform structural interpretation of horizons and faults. They are also able to interpret stratigraphic features and create grids and associated mapping objects.



Exam Scope for Aspen SeisEarth Multi-Survey Seismic Interpretation User Certification (ACU-SEI01)

- ☐ Getting Started in Epos
- ☐ Introduction to Integrated Canvas
- ☐ Opening and Displaying Seismic Data
- ☐ Seismic Mis-Tie Analysis and Correction
- ☐ Multi-Attribute Volume Visualization
- ☐ Interpretation Data Management and Visualization
- ☐ Well Data Management and Visualization
- ☐ Well to Seismic Calibration
- ☐ Interpreting Faults
- ☐ Interpreting Horizons
- ☐ Gridding, Volumetrics and Plotting
- ☐ Stratigraphic Interpretation

Step 1: Take the Class: Multi-Survey (2D/3D) Seismic Interpretation (SEI101) – 4 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 study guide covers all the objectives for the Aspen SeisEarth User Certification exam and serves as both a study tool and an on-the-job reference.

Step 3: Take the Exam: Aspen SeisEarth Multi-Survey Seismic Interpretation User Certification (ACU-SEI01)

The total time for the certification exam is four hours.

The passing score is 70%.

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SCOPE	TECHNICAL CONTENT	COMPETENCY OBJECTIVE
Getting Started in Epos	Selecting the Products, Epos User and Project	Explain what an Epos User is
	Examining the Project Information	Identify the project and survey parameters and 2D line geometry
Introduction to Integrated Canvas	Line Lists	Create and manage line and survey lists
	Cultural Data	Register and Display cultural data
Opening and Displaying Seismic Data	Managing Seismic Data	Activate seismic data and create a collection
	Seismic Data in 3D Canvas	Open and Manipulate seismic in 3D Canvas
		Modify the seismic display properties in 3D Canvas
	Seismic Data in Section	Open seismic in Section
		Recognize the different ways of opening seismic data
		Modify the seismic display properties in Section
Seismic Mis-Tie Analysis and Correction	Calculating Mis-Ties	Recognize the impact of applying different parameters
		Analyze the results of Mis-Tie calculation
		Save and activate Mis-Tie corrections
Multi-Attribute Volume Visualization	Single Attribute Visualization	Identify channel features in thick slab by modifying opacity
	Multi Attribute Visualization	Apply RGBA merge on Spectral decomposition volumes to identify features
		Apply Addition and Alpha Blend merge and identify features by applying opacity
Interpretation Data Management and Visualization	Managing Interpretation	Manage interpretation data and Create an interpretation list
	Open Interpretation	Display and Modify display properties of Interpretation data in 3D Canvas
Well Data Management and Visualization	Managing and Displaying Wells	Create and Manage Well Lists
		Assign horizon features to markers
		Activate well data
		Customize the well data load settings
	Well Log Window	Create a new template

SCOPE	TECHNICAL CONTENT	COMPETENCY OBJECTIVE
Well to Seismic Calibration	Synthetic Utility	Create and Calibrate the synthetic seismogram
Interpreting Faults	Manually Picking Faults	Interpret and Edit fault picks in 3D Canvas and Section
		Interpret fault on 3D volume guided by tessellated surface and fault projection
	FaultTrak	Run FaultTrak
	Fault T-Surfaces	Create T-surface from multi-survey picks
	Unassigned Faults	Interpret an unassigned fault
		Reassign fault segments
Interpreting Horizons	3D Propagator	Examine reflectors using correlation polygon
		Pick seeds and run propagator
		Edit results using threshold, heredity and polygons
	2D Propagator	Propagate 2D picks on 2D survey
	Fault-Horizon Contacts	Generate and Manage Fault-Horizon Contacts
Gridding, Volumetrics and Plotting	Fault Outlines	Extract fault outline with heave
		Understand impact of varying fault outline parameters
	Gridding	Create a multi-survey grid using picks from 2D and 3D surveys
		Understand impact of varying gridding parameters
	Contours	Create contours in BaseMap and Modify display properties
	Attributes	Extract amplitudes along a multi-survey grid in BaseMap
	Volumetrics	Calculate volumetrics for a region defined by a polygon
Stratigraphic Interpretation	Horizon-Based Volume Flattening	Flatten volumes using horizons and visualize features
		Interpret features on flattened volume