



## Seismic Acquisition, Processing, and Migration - Virtual Short Course - Instructor-led + eLearning

### COURSE

#### About the Course

This short course is a blend of self-paced online modules, virtual instructor-led lectures, problem assignments, virtual instructor-led problem debriefs with real-world application examples and knowledge sharing.

Over two days, this course includes approximately 2 hours of virtual, instructor-led training, plus 6.5 hours of e-Learning. [See full schedule](#)

This PetroAcademy short course is designed to familiarize anyone using seismic data with how seismic data is acquired processed and migrated to form a section that can be used by an interpreter. One of the key goals is to explain the large and confusing amount of jargon that is used by the geophysical community when they use seismic data.

This short course is part of our Basic Geophysics (BGP) program.

[See the full BGP Short Course listing here](#)

#### Target Audience

Geoscientists, engineers, team leaders, geoscience technicians, asset managers, and anyone involved in using seismic data that needs to understand and use this data at a basic level or to communicate with others that use it.

#### You Will Learn

Participants will learn how to:

- Describe the marine configuration for a 3D survey including:
  - Components used for data acquisition
  - Arrays to attenuate noise
  - Bin gathering as a CMP assemblage of reflections
- Describe the land configuration for a 3D survey including:
  - Bin gathering for a land 3D survey
  - Compare the costs of 2D and 3D surveys
- Describe processing flow
- Explain the concept of deconvolution

- Identify what the processors do to produce the seismic image

## Course Content

### BLENDDED LEARNING WORKSHOP STRUCTURE

This program is comprised of the following activities:

| Activity                       | Hours<br>(Approx) | Subjects                                                  |
|--------------------------------|-------------------|-----------------------------------------------------------|
| Day 1                          |                   |                                                           |
| e-Learning                     | 3.75              | Marine Data Acquisition                                   |
|                                |                   | Land Data Acquisition                                     |
|                                |                   | Exercise: Acquisition and Processing Fold (Trace Density) |
|                                |                   | Seismic Velocities                                        |
|                                |                   | Overview of Seismic Data Processing                       |
|                                |                   | Producing the Seismic Image                               |
| Day 2                          |                   |                                                           |
| e-Learning                     | 2.5               | Seismic Migration                                         |
|                                |                   | Velocity Analysis Reading                                 |
|                                |                   | Acquisition Reading                                       |
|                                |                   | QC for Seismic Processing                                 |
|                                |                   | Seismic Processing Basics Reading                         |
|                                |                   | Introduction to Migration Reading                         |
| Virtual Instructor-Led Session | 2.0               | Instructor Debrief / Problems                             |

## Product Details

Categories: [Upstream](#)

Disciplines: [Geophysics](#)

Levels: [Basic](#)

Product Type: [Course](#)

Formats Available: [Virtual](#)

Instructors: [Tom Temples](#)