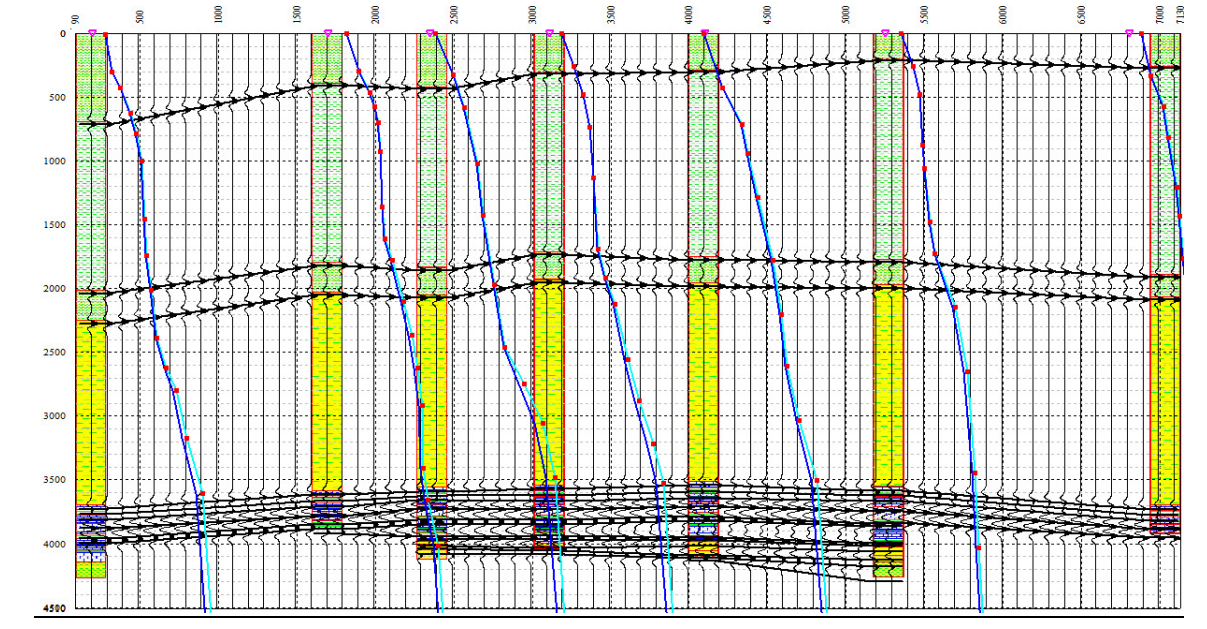


# GP-410: Digital Geological Columns & Sections



## Who Should Attend

Geologists & Geophysicists involved in Geological Mapping, Geological Columns Correlation and Digital Geo-Section Creation as well as Digitization, Seismic Interpretation, Horizon Slice based Velocity Models and Time to Depth Conversions.

## Overview

This course is based on **X-Works** software which provides tools for creation, digitization, storage and on-scale visualization of geological cross-sections (or interpreted seismic sections). In addition Geological Columns can be correlated to create a cross-section. 3D horizon models can be exported by using multiple cross-sections along with their spatial locations. Several Processing tools are also available for computing crustal shortening, seismic modeling and time to depth conversion of interpreted seismic sections. The software will be distributed to the participants. The digital sections can be printed on any scale as well as exported to Word (Reports) and Power Point (Presentations).

## Contents

- Field Data Inputs
- Scanned Geological/Seismic Section Image Preprocessing
- Image Referencing and Section Document Creation
- Interactive Tools for Marking/Editing Horizons and Faults
- Geological Columns Correlations
- Computing Crustal Shortening
- Seismic Modeling with multiple types of Source Wavelets
- Seismic Velocities and Time to Depth Conversion
- Exporting Horizon Times, Depths and Velocities for Contouring
- Iso-Chrone and Iso-Patch Maps