

# BASIN MODELING FOR HYDROCARBON EXPLORATION

TRAINING COURSE  
(2 DAYS)

## Course Description

The course will examine modern and ancient continental margin tectonics, sedimentation, and stratigraphy and is intended to emphasise the practical geological applications of basin analysis studies to petroleum exploration.

We will (1) build a basic understanding of margin processes, stratigraphy, and structure through review of modern literature, published and unpublished research (2) examine representative examples of modern and ancient continental margins, and (3) through seismic and well-log projects will provide hands-on experience in describing and interpreting margin successions.

This course takes the trainee up to just below the level of full play fairway and petroleum systems analysis. However, it stresses the importance of basin evolution to petroleum generation, migration and accumulation. It will include examples from rift basins, foreland basins and wrench basins and will emphasise the combined roles of tectonics and eustasy, palaeoclimate and biotic evolution. The course content will be conveyed through formal presentations, discussion, both informal presentation and informal debate and question/answer sessions. An annotated reference list will be provided participants.

## List of Contents

**Main objectives of the course are:**

1. Understand basin-forming processes and basin architecture
2. Evaluate controls on sediment generation, transport and deposition and use sequence stratigraphy to predict sediment distribution
3. Review key analytical techniques with a focus on burial history analysis
4. Apply and integrate datasets to model basin evolution

## Participants

The course is designed for petroleum professionals including geophysicists, geologists, geoscientists, geomodellers and subsurface engineers working for the exploration. Ideally, the components of a subsurface team would greatly benefit from participating together.

The minimum number of participants to run the course is 4, while the maximum number is 8.

## Instructors

The course will be run by Alberto Riva, part of the GEPlan Consulting team.

Alberto is a geoscientist specialized in exploration and development of carbonate reservoirs and adjunct professor of Petroleum Systems Modeling at the University of Ferrara. Alberto holds a PhD in stratigraphy and sedimentology from the University of Ferrara.

## Location

The course will be run in GEPlan Consulting office in Ferrara (Italy). GEPlan office is easily accessible from everywhere due to its location close to the main transport routes and to international airports (Bologna, Venice). The course can be also run in other locations, if required by a minimum (5) number of participants.

## Registration cost

The cost of the course (when run in GEPlan Consulting office) is 1.200 euro per participant. The cost includes the material presented during the course. When the course is run in GEPlan Consulting office it also includes coffee breaks and lunches.

## About GEPlan Consulting

GEPlan is a consulting firm based in Italy that provides innovative and integrated geoscience consulting services for exploration and reservoir characterization activities to international E&P companies.

GEPlan also offer a series of training courses, field trips and seminars for petroleum industry professionals. Since 2004 we have run more than 50 courses & field trips with more than 700 participants working for international and national oil companies. Our training courses are run with innovative techniques of teaching and communication with original visual aids and materials. We have run field courses in Italy, France, Spain and Middle East with participants coming from all over the world.

for more information  
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## GEPLAN CONSULTING

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