



## «OIL AND GAS PRODUCTION FOR NON-SPECIALISTS», 3 days

### COURSE OBJECTIVE:

Development of professional competencies of non-petroleum specialists of oil & gas companies in fundamentals of oil and gas fields search, testing and development.

### ACQUIRED ABILITIES:

- Identify key stages of field development – from exploration to decommissioning;
- Understand hydrocarbon production scheme, and operating company scope of work;
- Select technical and nontechnical issues of company performance;
- Distinguish flushing fluids, constructions and facilities types, be able to use the terminology;
- Identify main issues of field equipment engineering, construction and operation, and explain its components interaction;
- Understand various drilling and well servicing strategies;
- Realize what kind of works are carried out during field development, what equipment is used;
- Know what factors influence a field life-cycle decision making;
- Be aware of current technological innovations in well stimulation techniques.

### COURSE CONTENT:

Module Name	Content
Introduction	Course introduction. Petroleum activities. Field life cycle.
Geology and geological exploration	Elements of hydrocarbon system. Oil and gas fields searching techniques. Main stages of geological exploration. Reservoir layers and fluids analysis and description. Reserves estimate.
Drilling	Outlines of oil and gas wells drilling, Russian and foreign technologies. Drilling methods. Drilling equipment. Drilling services.
Field development	Rock physics. Production mechanics. Field development system. Field management. Field development engineering.
Production technology	Well completion. Well stimulation. Free-flow production and artificial lift. Stimulation and complication control.
Surface facilities	Production fluid gathering and treatment. Water injection system. Oil and gas transportation.
Economics and project management	Project economics fundamentals. Risk management.