ABOUT THE PROGRAM

The master’s program “Offshore Field Development Technology” is implemented at the Department of Offshore Oil and Gas Field Development, Faculty of Oil and Gas Field Development, Gubkin Russian State University (National Research University) of Oil and Gas (in short: Gubkin University) together with the University of Stavanger (Stavanger, Norway) at the Department of Mechanics, Design and Materials Science, Faculty of Science and Technology. The program’s supervisor is Professor of the Department of Development and Operation of Oil Fields, Doctor of Technical Sciences, Professor, Academician of the Russian Academy of Natural Sciences Anatoly Borisovich Zolotukhin.

The program is aimed at training of highly qualified specialists in the field of design and development of offshore oil and gas fields with an emphasis on Arctic shelf deposits. The most complex tasks of their exploration and development require the combined efforts of different countries to train specialists in this field. Disciplines are conducted by the faculty of the Gubkin University and the University of Stavanger, experts and prominent industry leaders, which provides in-depth knowledge, communication with practical work experience and a global vision of the studied disciplines of the program. Upon completion of training, a student who has completed all the requirements of educational institutions receives a diploma of each partner university and a master’s degree:
- Gubkin University — state diploma of a master’s degree in the field of oil and gas business;
- University of Stavanger — Master of Science diploma in Offshore Field Development Technology.

SPECIALIZATION

21.04.01. “Oil and gas business”, program “Technologies for the development of offshore oil and gas fields” (25).

Duration of study: 2 years. The complexity of the program is 120 credits (ECTS) for the entire period of study, including the defense of a master’s thesis. ECTS (European Credit Transfer and Accumulation System) – European credit transfer and accumulation system. One academic year corresponds to 60 ECTS point, which is equivalent to about 1500-1800 academic hours.

APPLICATION REQUIREMENTS

Applicants to the magistracy must meet the requirements of both the University of Stavanger and the similar requirements of the Gubkin University. Candidates are interviewed and may be offered tests.

Applicants to the magistracy must have a bachelor’s, specialist or master’s diploma in the oil and gas industry, be fluent in English, as a rule, confirming this with a certificate.

TRAINING

Training is conducted in English. The joint program meets all modern pan-European criteria for master’s programs. The curriculum provides modules for compulsory study and elective courses. The curriculum is designed in such a way as to teach students to solve problems at a high technological level in leadership positions not only within...
the specialization, but also in related fields. The program is based on the disciplines taught at both universities, with a focus on offshore oil and gas technology. The master’s thesis, as a rule, is written on the basis of Gubkin University. Joint management of the undergraduate is envisaged when writing a dissertation by professors of both universities. The master’s thesis should be devoted to relevant topics and be based on the research work of recent years, performed at one of the universities or at the enterprise. In the process of training, students undergo training in oil and gas companies lasting at least 4 weeks. The internship is carried out in the summer after the first course of study.

In the process of training students:
• will have the opportunity to study world experience and modern techniques and technologies for developing offshore oil and gas fields;
• master the approaches to the conceptual and detailed design of offshore development, including Arctic shelf deposits;
• study the theoretical and practical experience of Norwegian specialists in deposits on the Norwegian continental shelf, including deposits in the Far North;
• learn to analyze and generalize the experience of developing new technological processes and technological equipment necessary for the effective development of offshore oil and gas fields.

An approximate list of curriculum disciplines:

1st semester (Gubkin University):
• Information and communication technologies;
• Organization and management of oil and gas production;
• Methodology of project activities (project management);
• System analysis and modeling;
• Hydrodynamics of multiphase flows in wells and pipes;
• Material science in the oil and gas complex;
• Information systems, design and management of oil and gas field development;
• Modern methods of increasing oil recovery and intensification of oil production. Performance evaluation with elements of fuzzy logic;
• Well productivity. Engineering calculations;
• Dispersion systems in the construction and operation of wells.

2nd semester (Gubkin University):
• Modern oil and gas technologies;
• Risk assessment and analysis;
• Development of offshore oil and gas fields;
• Designing the process of drilling oil and gas wells;
• Unconventional hydrocarbon resources;
• Measurements in oil and gas production;
• Environmental safety of offshore oil and gas development;
• Offshore oil and gas technologies;
• Prevention and elimination of complications and accidents during the construction and operation of oil and gas wells;
• Arctic gas;
• Mechanics of continuous media.

3rd semester (University of Stavanger):
• Work at sea;
• Pipelines and risers;
• Arctic oil and gas technology;
• Finite element method;
• Underwater technology.

PRACTICES

The following types of practices are planned as part of the training program:
• technological practice;
• undergraduate practice.
In the process of training undergraduates have the opportunity to undergo practical training (internship) and obtain the necessary information in oil and gas and service companies.

## EMPLOYMENT

The main area for employment is the offshore oil and gas industry in the main and related specialties. The high level of training of graduates allows them to work in traditional industries. The program prepares students for work in international and national oil and gas companies, service companies, government agencies, including university and research centers. Students can gain a career impulse due to the university’s close ties with industry and communication in the classroom and in the process of internships with specialists and managers of large companies. Graduates of the program currently work in the most prestigious Russian and foreign companies and have good career prospects.

## COST OF EDUCATION

Training is conducted on a commercial basis. With self-financing, the cost of training is 600,000 rubles. The full cost of training for a program designed for 2 years, taking into account expenses in Norway (500,000 rubles), is 1,100,000 rubles (2019/2020 academic year).

## CONTACTS

National University of Oil and Gas “Gubkin University”, 119991, Moscow, Leninsky Prospect, 65, building 1, office 327
Department of Development and Operation of Oil Fields
Phone: +7 (499) 507-82-97

Program Supervisor: Professor, Advisor to the Rectorate for International Relations Zolotukhin Anatoly Borisovich
Email: anatoly.zolotukhin@gmail.com

Program coordinator: Streletskaya Vlada Vladimirovna
Email: vlada.streletskaya@gmail.com

Protocol Division of the Office for International Relations:
Email: protocol@gubkin.ru
Phone: +7 (499) 507-89-28