

2.8.44. Development and operation of oil and gas fields



Уровень Training level:	aspirantura
Form of training:	aboutchnaya
Duration of training:	4 years old
Group of scientific specialties:	<i>Subsurface use and mining sciences</i>
Number of seats:	3 (contract)

Program identification описания программы

The purpose of mastering the postgraduate program is to determine the level of knowledge, write, design and submit for the preparation and defense of a dissertation for the degree of Candidate of Sciences, containing the solution of a scientific problem that is important for the development of the relevant branch of science.

Scientific specialty 2.8.44 Development and operation of oil and gas fields – a field of science and technology that deals with research, development of scientific foundations, improvement of the theory and practice of development and operation of oil and gas fields. The solution of scientific and technical problems of this specialty for the national economy consists in the development and improvement of methods for the development and operation of oil and gas fields and their technological processes. Решение научных и технических проблем данной специальности для народного хозяйства состоит в развитии и улучшении методов разработки и эксплуатации нефтяных и газовых месторождений и входящих в них технологических процессов.

The program is aimed at comprehensive and high-quality training of scientific and scientific-pedagogical personnel in the following areas:

1. Classification of oils by structural and mechanical properties, determination of FES. Composition and properties of oils and gases. Given parameters of gas mixtures, phase transformation diagrams
2. Tohidethe layers. Periods of impact on the formation. Cross-section and basic regularities of the movement of mixtures in pipes. Methods of selecting pumps for studying the mechanism of formation and methods of combating AFS, taking into account the requirements of industrial ecology.
3. Modes and systems of oil field development. Methods for calculating indicators in case of flooding of deposits. Factors affecting the amount of oil recovery in reservoirs.
4. Development and operation of gas and gas condensate fields. Classification of gas and gas condensate fields. Methods for increasing gas and condensate recovery and typical development periods.
5. Evaluation of rheological properties of high-viscosity oil products. Issues of oil preparation to marketable conditions. Principles of calculation of pipelines of collection and preparation systems.