Technologies of Hydrocarbons Processing

Siberian Federal University

Degree or qualification is awarded: **Certificate (30 ECTS)**

Language of study: **English** Mode of study: **full-time** Duration: **1 semester**

Availability of free education: no

Price: 110 000 RUB

Programme webpage at the university website:

http://www.sfu-kras.ru/en/education/masters/technologies-of-refinning#tab1

Programme curator:

Tel.:

E-mail: study@sfu-kras.ru

The Semester Program gives the information about general technologies of oil refining, technologies of refining low-quality oil and means of significant increasing of oil refining depth. The aim is to provide students with knowledge of modern means of crude oil refining.

Objectives:

- to provide students with development prospects of technologies of first crude oil processing, secondary processing and polymers production;
- to give an overview of modern oil refining technologies;
- to develop innovative approaches in solving extraordinary tasks of integration of the latest scientific achievements into oil refining industry.

Learning outcomes

By the end of the program, students will be able to:

- use acquired knowledge in solving real tasks in hydrocarbon processing industry;
- construct and describe different technological schemes of petroleum refining processes and also calculate the material balance of technological units;
- select the necessary equipment for deep processing plants, determine the quality and reliability of technological machines;
- evaluate modern conditions of oil and gas industry.

Teaching methods

The course includes lectures, home assignments and a final exams. Independent learning implies studying informational resources recommended by a teacher and performing individual tasks.

Career prospects

Students who successfully passed the module may continue their education in Master's Program 'Petroleum Chemistry and Refining', and further continue studying to earn a PhD SibFU Degree.

This Semester Module of Master's Level is designed for current and future employees of oil and gas companies. The program provides students with means of promotion.

Currently, the worlds' main sources of energy are hydrocarbons. Processing of hydrocarbons allows synthesis of a wide range of different valuable products such as motor fuels, liquefied gases and petrochemical products.

There is a tendency of gradual depletion of traditional light oil. During the module, the problems of production of clean

fuels and accordance with clean fuel regulations are considered. The module is especially focused on processing heavy oils and oil residues.

This International Semester Program "Technologies of Hydrocarbons Processing" is offered by School of Petroleum and Natural Gas Engineering at Siberian Federal University (SibFU). School is positioned as the modern scientific and educational complex on preparation of highly qualified specialists of all levels for oil and gas branch of Krasnoyarsk Region, Eastern Siberia, the Far East and the Pacific Rim countries.

Partners School of Petroleum and Natural Gas Engineering are <u>Rosneft</u>, <u>Gazprom</u>, the Siberian Branch of the Russian Academy of Science and other.

Specializations within this programme