

Objectives and Learning Outcomes of the Master's Degree Programme 7M07170 - Chemical Technology of Organic Substances

Programme Goal: Training of highly qualified specialists who master modern approaches to production organization and enterprise management, as well as technological design, and who are capable of carrying out scientific and pedagogical activities.

Learning Outcomes of the Master's Degree Programme:

LO1 Analyzes and summarizes scientific and technical information with the involvement of information resources, using knowledge of a foreign language; summarizes the results of research work in the form of a scientific article, report.

LO2 To design and conduct comprehensive and interdisciplinary research based on a holistic systematic scientific worldview using knowledge in the field of history and philosophy of science.

LO3 Performs scientific and pedagogical activities using the scientific and pedagogical activities using the scientific organization of pedagogical activities in higher education, innovative and digital learning technologies, effective teaching methods in the field of chemical technology of organic substances.

LO4 They lead a team of specialists using the principles and methods of management psychology, showing creativity and logical thinking in non-standard production situations.

LO5 Coordinates technological processes of processing of hydrocarbon raw materials, production of organic substances, assess the economic efficiency of technological processes and their environmental safety in order to comply with the safety of life and environmental cleanliness.

LO6 Develops a proposal for the modernization and reconstruction of existing installations that ensure the production of products that meet environmental quality standards.

LO7 Implements independent scientific developments into production; conducts marketing of high-tech technologies.

LO8 Designs new technological equipment and its elements for deep processing of hydrocarbon raw materials, synthetic fibers, production of sulfur from natural gas using application software packages.

LO9 Using neural networks, the skills of using special products, additives, selecting and regulating the properties of technical liquids, and preparing recipes for polymer compositions are mastered.

LO10 Solves problems in interdisciplinary related fields of knowledge, having skills in learning; skills in making informed decisions and a responsible attitude to issues of environmental protection, ensuring economic viability and a fair foundation for the existence of society in the interests of present and future generations.

