Intended learning outcomes for the programme as a whole (competence profile/*learning outcomes*) - Knowledge - Skills - Competences	Corresponding module objectives/modules (operationalisation)
Knowledge a:	Knowledge of modern social problems, know the state and foreign languages, tools of a market economy, security and environmental issues;
Knowledge b:	Knowledge of practical skills in mathematical processing of the results of scientific research, drawing up flow charts of technological processes using modern information technologies;
Knowledge c:	Have the ability to independently acquire, comprehend, structure and use new knowledge and skills in professional activities, develop their abilities by applying the skills of synthesis and evaluation;
Knowledge d:	Have the ability to create and explore models of geological objects based on the use of in-depth theoretical and practical knowledge in the field of oil and gas geology;
Skills a:	Carry out search and exploration of oil, gas, gas condensate fields, apply highly efficient modern methods of geological and geophysical research and information processing;
Skills b:	Plan and conduct research, experimental research activities;
Skills c:	The ability to communicate, speak both written and oral speech in Russian, Kazakh and foreign languages, professionally and ethically;
Skills d:	By the end of the program, undergraduates will be able to demonstrate the skills of teaching in the undergraduate program, working with students, and supervising them;
Competences a:	Perform scientific and industrial tasks using modern specialized software;
Competences b:	The readiness of undergraduates for professional activities through disciplines that provide fundamental knowledge, skills and experience in the geological industry, government organizations and educational institutions;
Competences c:	Ability to apply qualitative and quantitative methods of analysis, collect, integrate and interpret data according to the standards of the oil and gas industry;
Competences d:	The ability to demonstrate high professional qualities and ethics while performing the production and / or scientific tasks of the oil and gas industry.

Table 2: Objectives matrix

	Knowledge a	Knowledge b	Knowledge c	Knowledge d	Skill a	Skill b	Skill c	Skill d	Competence a	Competence b	Competence c	Competence d
LNG210 Foreign language (professional)	+		+	+		+	+	+		+	+	+
HUM208 Management psychology	+		+		+		+	+		+	+	+
HUM210 History and philosophy of science	+				+		+	+		+		+
HUM209 Higher school pedagogy	+					+	+	+	+	+		+
GEO299 Petroleum hydrogeology		+	+	+	+	+			+		+	+
GEO704 Interpretation of geological and geophysical data for the purposes of calculating oil and gas reserves and resources	+	+	+	+	+					+	+	+
GEO287 Organic geochemistry and paleo biomarkers	+	+	+		+				+			+
GEO742 Aerospace methods in the search for oil and gas fields		+	+			+	+		+		+	+
GEO743 Lithology of reservoir of oil and gas	+		+	+	+				+			+
GEO263 Analysis of sedimentary basins		+	+	+	+		+		+		+	+
GEO703 Paleo-temperature regimes of the subsoil, the genesis and migration of hydrocarbons		+	+	+		+			+			+
GEO292 Forecasting and estimation of oil and gas resources		+	+	+	+		+		+		+	+
GEO701 Geostatistics in field geological research	+	+	+		+		+			+		+
GEO744 Regional and local modeling of the evolution of sedimentary basins		+	+	+	+	+			+		+	+
GEO745 Sedimentation and facies conditions during the formation of oil and gas complexes		+	+	+	+					+		+
GEO746 Theoretical and methodological patterns of allocation of resources and hydrocarbon reserves on the shelf and water area.		+	+	+		+	+	+		+	+	+