Engineering geology and hydrogeology

Study plans for the bachelor's program

Language of instruction – Russian

Career prospects – mineral exploration and production / research / civil engineering / environmental safety

Campus – Kazan

Year 1	**Year 2**
Chemistry Introduction to the specialization Basics of scientific research Paleontology and stratigraphy Foreign language Fundamentals of Russia's statehood History of Russia Mathematics Physics Physical education Basics of public safety and disaster relief Russian language General geology Geodesy Crystallography IT IT in geology Elective courses Internship	General hydrogeology Physics Mathematics Foreign language Structural geology Mathematical methods in geology Probability theory and statistics in geology Geology of minerals Lithology Paleontology and stratigraphy Law and anti-corruption education Geophysics Petrology Mineralogy Geology of fuels Historical geology Basics of drilling Elective courses Basics of geomorphology and Quaternary geology Engineering geology Geology and geochemistry of oil and gas
Year 3	**Year 4**
General geochemistry Tectonics Elective courses Geographical information systems Mathematical methods in geology Annual thesis Methods of studies of geological materials Petrophysics Basics of dynamics and hydrogeochemistry of underground waters Soil science Methods of soil reclamation	Geology of Russia Environmental geology Economics Philosophy Basics of geological modelling Instrumental methods of hydrogeology Geology of agricultural technology territories Basics of regional hydrogeology and hydrogeological stratigraphy Engineering constructions Hydrogeoecology Environmental mapping

Engineering geodynamics Engineering geology of minerals Geology and geochemistry of oil and gas Methods of studies of reservoirs and fluid supports Oilfield geology Geological interpretation of geophysical data Digital modelling of geological filtration processes Computer modelling in hydrogeology Basics of computer modelling of oil and gas fields Basics of geological well surveys Basics of geomorphology and Quaternary geology Applied methods in hydrogeology and engineering geology Elective courses	Lithology of oil-bearing and gas-bearing strata Organizing and implementation of geological exploration Statistical treatment of data Elective courses Digital technology Computer modelling in hydrogeology Computer modelling in engineering geology Basics of computer modelling of oil and gas fields GIS in oil-bearing capacity forecasting Geocryology and basics of the cryogenesis of lithosphere Soil mechanics Underground water reserve calculations Hydrogeology and mineral waters Pre-graduation internship Graduation thesis