

TEACHING SUBJECTS IN DEPARTMENT

Bachelor's degree

№	Item Title	Briefly about the subject
1	Cartography	It describes the nature and characters of events and phenomena in society, their interrelations, changes over the time. It draws a generalized images in mathematic models by using special image of models, and using them as a source of research.
2	Designing and creating of maps	One of the important parts of cartography is creating and redacting the original copy of the map (original).
3	Socio - economic cartography	Analyzing and designing maps on socio-economic topics.
4	Topographic Drafting	Tasks: studying rules and works with drafting materials and instruments, graphic design of maps and comply with graphical rules and techniques.
5	Geodesy	Defining and calculating the size of the Earth. Different geodetic instruments are used to calculate a surface of the Earth on the bases of mathematical rules.
6	Engineering geodesy	Engineering and geodetic investigation will be conducted at the place of designing of buildings and installations.
7	The geodetic works in planning	It is being taught the geodetic works in planning
8	High geodesy	To determine the size and shape of the earth, build a base of geodetic networks, also a large part of its work with geodetic works.
9	Digital photogrammetry	A science that uses aerospace and space photography for making up plans and maps and studying problems on them.
10	Computer graphics and cartography in planning	Using of computer graphics and creation of a system of cards and symbols on the basis of ground handling and efficient use. A special image can give a generalized illustration of the image by mathematically drafting in the models and using it as a source for research.
11	Introduction to the speciality	A great attention is paid to the students` skills and habits.

Master's Degree

№	Item Title	Briefly about the subject
1.	Scientific basics of geoinformative systems	Studying of scientific basics of geoinformative systems.
2.	Applied Geodesy	Geodetic investigations are used for engineering, relocating, and constructing various engineering installations.
3.	Telemeters	Using of aerospace and space photography for making up plans and maps and studying problems on them.
4.	Cartography	Making up of maps and plans, publishing them, using space photographs, creating custom maps and plans, and identifying of alternative dimensions for users of agricultural enterprises.
5.	Geoinformative cartography	In cartographic informative system were given dates, images, MapInfo, ArcGIS software, digital cards, the map for mathematical usage, basics of geographic and cartographic prognosis.
6.	Data acquisition and integration	Used as a source of data for GIS, data acquisition, methods of coordinate linking, classification and cataloging techniques are used for publishing cards, geodetic lines, laser scanning, GPS dams, surface photodolitic fuels, aerospace and distant sensing materials.
7.	Spatial models of datas	It explains the importance of practical and theoretical aspects of modeling the spatial datas in geographic researchs.
8.	Geospatial database and its architecture	The concepts of these problems.
9.	Cartography and Geovizualization	Geo-information and GIS, informatics, cartography and remote sensing for determining the interrelation between scientific models, geoinformative methods and ways of getting the map.
10.	Formalization and management of the project	Theoretical and practical aspects of managing GIS projects, also planning, compiling and realizing of GIS projects, monitoring the realization of the projects.
11.	Scientific researchs in geodesy and cartography	Mathematical modeling of water management and engineering installations, mathematical statistics and experimental planning in the analysis of the results; studying the ways of analysing and analyzing of geodetic and cartographic processes.