

CURRICULUM

Educational and qualification degree **BACHELOR**

Degree course **MINE SURVEYING AND GEODESY**

Professional branch 5.7: Architecture, Construction and Geodesy

Professional qualification: Mine Surveying and Geology Engineer

Type of training: Full-time

Period of training: 4 years

Accepted on a sitting of the Academic Council at the University of

Mining and Geology: Report №6/20.05.2005

Winter semester duration – 13 academic weeks

Summer semester duration – 14 academic weeks

Number	Subject code	Full name of the subjects (course projects, practical training)	Form of control Examination (E) / Process of continuous assessment (PCA)	Teaching hours, weekly		Total hours for the semester	ECTS
				L	PE		

1	361101	Mathematics I (Linear Algebra and Analytical Geometry)	E	3	2	65	6,4
2	251101	Geodesy	E	5	3	104	10,3
3	371108	Informatics	E	2	2	52	5,2
4	361104	Descriptive Geometry	E	2	2	52	5,2
5	431143	Sport – 2 hours weekly	PCA				0,9
First semester:				12	9	273	28,0

6	361102	Mathematics II (Mathematical Analysis)	E	2	2	56	5,5
7	251101	Geodesy	E	4	2	84	8,3
8	181102	Physics	E	1	2	42	4,2
9	251102	Mine surveying, Drawing and CAD Systems	E	1	2	42	4,2
10	121121	Geology, Mineralogy and Petrography	E	3	1	56	5,5
11	431143	Sport – 2 hours weekly	PCA				0,9
Second semester:				11	9	280	28,6

1	251132	Practical Training on Geodesy - 12 days (72 academic hours)	PCA				2,4
2	371147	Practical Training on Informatics - 5 days (30 academic hours)	PCA				1,0

Total for the first year:				23	18	553	60,0
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12	361103	Mathematics III (Differential Equations and Mathematical Statistics)	E	2	2	52	5,6
13	281101	Technical Mechanics	E	2	2	52	5,6
14	181103	Physics	E	2	1	39	4,2

number	Subject code	Full name of the subjects (course projects, practical training)	Form of control Examination (E) / Process of continuous assessment (PCA)	Teaching hours, weekly		Total hours for the semester	ECTS
				L	PE		

15	251103	Mine Surveying in Underground Mining of Mineral Resources	E	5	2	91	9,8
16	251104	Engineering Geodesy	E	2	2	52	5,6
17	431143	Sport – 2 hours weekly	PCA				0,9
Third semester:				13	9	286	31,7

18	111118	Mineral Resources	E	2	1	42	4,5
19	151112	Hydrogeology and Engineering Geology	E	2	2	56	6,0
20	251125	Course Project on Mine Surveying in Underground Mining of Mineral Resources	PCA	0	1	14	1,5
21	251105	Mathematical Processing of Geodesic and Surveying Measurements	E	3	2	70	7,5
22	341103	Electrical Engineering and Electronics	E	2	1	42	4,5
23	431143	Sport – 2 hours weekly	PCA				0,9
Fourth semester:				9	7	224	24,9

3	251133	<i>Practical Training on Mine Surveying in Underground Mining of Mineral Resources 12 days (72 academic hours)</i>	PCA				2,4
4	251134	<i>Practical Training on Mine Surveying in Underground Mining of Mineral Resources - 5 days (30 academic hours)</i>	PCA				1,0

Total for the second year:				9+1	22	16	510	60,0
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24	251110	Higher Geodesy – Part I	E	3	3	78	7,1
25	231123	Underground Construction	E	2	1	39	3,5
26	251107	Photogrammetry	E	4	2	78	7,1
27	371115	Informatics – Database Management System	E	1	2	39	3,5
28	211118	Underground Mining of Mineral	E	2	2	52	4,7

		Resources					
29		Foreign Language – eligible:	PCA	0	2	26	2,4
	421201	English					
	421202	German					
	421203	French					
	421204	Russian					
Fifth semester:				12	12	312	28,3

30	251108	Mine Surveying in Mine Construction	E	1	1	28	2,5
31	251109	Mine Surveying in Opencast Mining	E	2	1	42	3,8
32	271108	Economics and Finances	E	2	2	56	5,1

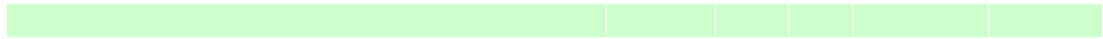
number	Subject code	Full name of the subjects (course projects, practical training)	Form of control Examination (E) / Process of continuous assessment (PCA)	Teaching hours, weekly		Total hours for the semester	ECTS
				L	PE		

33	221139	Opencast Mining of Mineral Resources	E	2	2	56	5,1
34	251112	Higher Geodesy – Part II	E	3	3	84	7,7
35		Foreign Language – eligible:	PCA		2	28	2,5
	421201	English					
	421202	German					
	421203	French					
	421204	Russian					
Sixth semester:				10	11	294	26,7

5	251135	<i>Practical Training on Higher Geodesy - 10 days (60 ак.ч.)</i>	PCA				2,0
6	251136	<i>Practical Training on Photogrammetry, 10 days (60 academic hours)</i>	PCA				2,0
7	251137	<i>Production Practical Training on Mine Surveying 5 days (30 academic hours)</i>	PCA				1,0

Total for the third year				22	23	606	60,0
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36	251111	Rock Movement	E	4	1	65	6,5
37	251106	Mine Geometry	E	4	2	78	7,9
38	271103	Organization and Management of Mining Companies	E	2	1	39	3,9
39	251113	Cadastre	E	1	1	26	2,6
40	251114	Geographical Information Systems (GIS)	PCA	1	1	26	2,6
41		Foreign Language – eligible:	PCA	0	2	26	2,6
	421201	English					
	421202	German					
	421203	French					
	421204	Russian					
42	251126	Course Project on Mine Geometry	PCA	0	1	13	1,3
43	251115	GPS (Global Positioning Systems)	E	1	1	26	2,6
Seventh semester:				13	10	299	30,0



44		Eligible:	E	4	2	84	5,6
	411201	History of Philosophy					
	411202	Philosophical Anthropology					
	411203	Introduction to Classic Formal Logics (Logics)					
	411205	Theory and History of Culture (Culturology)					

number	Subject code	Full name of the subjects (course projects, practical training)	Form of control Examination (E) / Process of continuous assessment (PCA)	Teaching hours, weekly		Total hours for the semester	ECTS
				L	PE		

45	261129	Technical Safety and Ventilation	E	2	2	56	3,8
46	251116	Regulation and Vertical Planning	E	2	1	42	2,9
47	311121	Mining and Building Machines	E	2	1	42	2,9
48	171126	Ecology	E	2	1	42	2,9
49	251127	Course Project on Rock Movement	PCA	0	1	14	1,0
50	251128	Course Project on Higher Geodesy	PCA	0	1	14	1,0
<i>Eighth semester:</i>				12	9	294	20,0

1		Preparation for State Exam on Geodesy					5,0
2		Preparation for State Exam on Mine Surveying					5,0

<i>Total for the fourth year:</i>				25	19	593	60,0
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TOTAL FOR THE WHOLE COURSE OF EDUCATION:				92	76	2262	240,0
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