

PLAN OF STUDIES

FACULTY: Geoengineering, Mining, and Geology

MAIN FIELD OF STUDY: mining and geology

EDUCATION LEVEL: 1st level, inżynier studies

FORM OF STUDIES: part-time

PROFILE: general academic

LANGUAGE OF STUDY: Polish

Geoengineering, Mining, and Geology Faculty Council Resolution of 05.09.2012

In effect since 01.10.2012

*delete as applicable

Plan of studies structure in hourly layout

1st level part-time studies in the field of mining and geology

sem./ hrs.	1	ECTS points	2	ECTS points	3	ECTS points	4	ECTS points	5	ECTS points	6	ECTS points	7	ECTS points	8	ECTS points		
1	Mathematical Analysis I 22000 E MAP9947	8	Mathematical Analysis II 32000 E MAP9944	8	Physics II 20100 E FZP1015	5	Mathematical Statistics 11000Z MAP9945	3	Introduction to Machine Construction 20010 Z MMG5201	4	Mine Dewatering 20010 E GGG6205	3	Occupational Safety and Health and Rescue Work I 21100 E GGG7202	4	Occupational Safety and Health and Rescue Work II 21000 E GGG8204	3		
2							Electrotechnics 20100 E ELG4804	4									Mineral Processing I 20000 Z GGG5201	3
3					Mineralogy and Petrology 10200 E GEG3201	3			Mineral Deposit and Mining Geology 20110 E GEG4202	5	Foreign Language 04000 Z	3						
4							Physics I 22000 E FZP1014	6									Hydrogeology 20100 E GEG3202	3
5	Algebra and Analytical Geometry 21000 E MAP9943	4	Technical Mechanics 22000E MMG2201	5	Chemistry 20200 E CHG3201	4			Foreign Language 04000 Z	2	Mining Surveying 20210 Z GKG5201	5	Blasting Technique II 00020 Z GGG6207	2	Optional Course 40000 Z	6		
6							Descriptive Geometry and Technical Drawing 10030 Z MMG1201	6									Engineering Surveys 20200 Z GKG2204	4
7	Fundamentals of Mining 20000 E GGG1201	2	Fundamentals of Geology 10020 E GEG2201	4	Soil Mechanics 20100 E GGG3201	4			Applied Geophysics 10010 E GGG4204	2	Blasting Technique I 20000 Z GGG5205	2	Rock Extraction and Processing 10100 Z GGG6209	2	2	2		
8							Introduction to Ecology and Environment Protection 20000 Z OSG1201	2									Strength of Materials 22000 E MMG3202	5
9	Liberal-Managerial Subjects 30000 Z	3	2	2	2	2			2	2	2	2	2	2	2			
10							2	2								2	2	2
11	2	2	2	2	2	2			2	2	2	2	2	2	2			
12							2	2								2	2	2
13	2	2	2	2	2	2			2	2	2	2	2	2	2			
14							2	2								2	2	2
15	2	2	2	2	2	2			2	2	2	2	2	2	2			
16							2	2								2	2	2
17	2	2	2	2	2	2			2	2	2	2	2	2	2			
18							2	2								2	2	2
19	2	2	2	2	2	2			2	2	2	2	2	2	2			
20							2	2								2	2	2
21	2	2	2	2	2	2			2	2	2	2	2	2	2			
22							2	2								2	2	2
23	2	2	2	2	2	2			2	2	2	2	2	2	2			
23							2	2								2	2	2
Total		27		29		26				24		23		27				

1. Set of obligatory and optional courses and groups of courses in semestral arrangement

Semester 1

Obligatory courses, number of ECTS points 12

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	MMG1201	Descriptive Geometry and Technical Drawing	1			3		K_W08 K_U08	40	180	6	4	T	Z			PD	Ob
2	GGG1201	Fundamentals of Mining	2					K_W11 K_K07	20	60	2	2	T	E			K	Ob
3	INZ0535	Information Technologies	2					K_W09 K_K03	20	60	2	2	T	Z	O		KO	Ob
4	OSG1201	Introduction to Ecology and Environment Protection	2					K_W11, 14 K_K02	20	60	2	2	T	Z			KO	Ob
Total			7			3			100	360	12	10						

Optional courses (minimum 100 hours in semester, 15 ECTS points)

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	MAP9947	Mathematical Analysis I	2	2				K_W01 K_U02 K_K07	40	240	8	4	T	E, Z	O		PD	W
2	MAP9943	Algebra and Analytical Geometry	2	1				K_W02 K_U03 K_K07	30	120	4	2,5	Z	E, Z	O		PD	W
3	FLG108846	Liberal-Managerial Subjects	2					K_W06	20	60	2	1	T	Z	O		KO	W
4	PKG108847	Liberal-Managerial Subjects	1					K_W06	10	30	1	0,5	T	Z	O		KO	W
Total			7	3					100	450	15	8						

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Altogether in semester:

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
14	3	3			200	810	27	18

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Semester 2

Obligatory courses, number of ECTS points 11

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	MMG2201	Technical Mechanics	2	2				K_W13 K_U11 K_K07	40	150	5	4	T	E, Z			K	Ob
2	GKG2201	Engineering Surveys	2		2			K_W12 K_U10	40	120	4	3	T	Z			K	Ob
3	EKG2201	Introduction to Economics	1				1	K_W07, 10, 35 K_U01, 05, 09 K_K02, 03	20	60	2	2	T	E, Z			KO	Ob
Total			5	2	2		1		100	330	11	9						

Groups of obligatory courses, number of ECTS points 4

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GEG2201	Fundamentals of Mining (GK)	1				2	K_W11, 14 K_U12 K_K01-07	30	120	4	3	T	E (lec), Z			K	Ob
Total			1				2											

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Optional courses (minimum 90 hours in semester, 14 ECTS points)

No.	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	MAP009944	Mathematical Analysis II	3	2				K_W01 K_U02 K_K01, 07	50	240	8	4	T	E, Z	O		PD	W
2	FZP1014	Physics I	2	2				K_W04 K_U06 K_K01	40	180	6	6	T	E, Z	O		PD	W
Total			5	4					90	420	14	10						

Altogether in semester:

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
11	6	2	2	1	220	870	29	22

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Semester 3

Obligatory courses number of ECTS points 18

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GEG3202	Hydrogeology	2		1			K_W17 K_U15 K_K04	30	90	3	3	T	E, Z			K	Ob
2	CHG3201	Chemistry	2		2			K_W05 K_U07 K_K07	40	120	4	3,5	T	E, Z			PD	Ob
3	GGG3202	Drilling Technology	2					K_W21 K_K02, 07	20	60	2	1	T	Z			K	Ob
4	GGG3201	Soil Mechanics	2		1			K_W18 K_U16 K_K01	30	120	4	2,5	T	E, Z			K	Ob
5	MMG3202	Strength of Materials	2	2				K_W15 K_U13 K_K07	40	150	5	4	T	E, Z			K	Ob
Total			10	2	4				160	540	18	14						

Groups of obligatory courses, number of ECTS points 3

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GEG3201	Mineralogy and Petrology (GK)	1		2			K_W05, 16, 22 K_U14, 18 K_K01-07	30	90	3	4	T	E (lec), Z			K	Ob
Total			1		2				30	90	3	4						

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Optional courses (minimum 30 hours in semester, 5 ECTS points)

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	FZP	Physics II	2		1			K_W04 K_U06	30	150	5	5	T	E, Z	O		PD	W
		Total	2		1													

Altogether in semester:

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
13	2	7			220	780	26	23

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Semester 4

Obligatory courses number of ECTS points 22

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	MAP9945	Mathematical Statistics	1	1				K_W03 K_U04 K_K07	20	90	3	1,5	T	Z	O		PD	Ob
2	ELG4804	Electrotechnics	2		1			K_W25 K_U22 K_K01	30	120	4	1,25	T	E, Z			K	Ob
3	GEG4202	Mineral Deposit and Mining Geology	2		1	1		K_W20 K_U18	40	150	5	4	T	E, Z			K	Ob
4	ING3201	Computer Science			2			K_U05 K_K01	20	60	2	1	T	Z			PD	Ob
5	GGG4203	Rock Mass Mechanics	2		1	1		K_W23 K_U20 K_K04	40	180	6	4,5	T	E, Z			K	Ob
6	GGG4204	Applied Geophysics	1			1		K_W20 K_U18	20	60	2	1,5	T	E, Z			K	Ob
Total			8	1	5	3			170	660	22	13,75						

Optional courses (minimum 60 hours in semester, 2 ECTS points)

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	JZL100611	Foreign Language		4				K_U01	40	60	2	2	T	Z	O		KO	W
Total				4					40	60	2	2						

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²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Altogether in semester

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
8	5	5	3		210	720	24	15,75

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Semester 5

Obligatory courses number of ECTS points 16

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG5201	Mineral Processing	2					K_W22 K_U19 K_K07	20	90	3	3	T	Z			K	Ob
2	GGG5204	Surface Mining Technology	3			2		K_W07, 08, 19 K_U05, 17 K_K01, 02	50	180	6	5	T	E, Z			K	Ob
3	GKG5201	Mining Surveying	2		2	1		K_W12, 27 K_U10, 24 K_K01	50	150	5	4	T	Z			K	Ob
4	GGG5205	Blasting Technique I	2					K_W19	20	60	2	2	T	Z			K	Ob
Total			9		2	3			140	480	16	14						

Groups of obligatory courses number of ECTS points 4

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	MMG5201	Introduction to Machine Construction (GK)	2			1		K_WE24 K_U21 K_K07	30	120	4	3	T	Z (lec)			K	Ob
Total			2			1			30	120	4	3						

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²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷Optional – enter W, obligatory – enter Ob

Optional courses (minimum 40 hours in semester, 3 ECTS points)

No.	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	JZL100611	Foreign Language		4				K_U01	40	90	3	3	T	Z	O		KO	W
		Total		4					40	90	3	3						

Altogether in semester:

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
11	4	2	4		210	690	23	20

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Semester 6

Obligatory courses number of ECTS points 21

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG6205	Mine Dewatering	2			1		K_W28 K_U25 K_K02	30	90	3	2	T	E, Z			K	Ob
2	GGG6206	Underground Mining Technology	3			2		K_W05, 07, 26, 30, 32 K_K01, 02	50	180	6	5	T	E, Z			K	Ob
3	MMG6202	Machinery Systems	3		1	1	1	K_W24 K_U29	60	150	5	4	T	E, Z			K	Ob
4	GGG6207	Blasting Technique II				2		K_U23, 32 K_K01	20	60	2	1	T	Z			K	Ob
5	GGG6208	Mineral Processing II	2		2			K_W22 K_U19 K_K07	40	90	3	3	T	E, Z			K	Ob
6	GGG62009	Rock Extraction and Processing	1		1			K_W19, 22 K_U04, 19 K_K02	20	60	2	1,5	T	Z			K	Ob
Total			11		4	6	1		220	630	21	16,5						

Optional courses (minimum 120 hours in semester, 6 ECTS points)

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG106012	Training		30					120	180	6						K	Ob
Total				30					120	180	6							

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Altogether in semester:

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
11		4	6	1	340	810	27	16,5

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Semester 7

Obligatory courses number of ECTS points 15

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG7202	Occupational Safety and Health and Rescue Work I	2	1	1			K_W33 K_U33, 34 K_K04	40	120	4	3,5	T	E, Z			K	Ob
2	EKG7202	Economics in Mining	3		2	1		K_W06, 10, 31, 35 K_U28 K_K04-06	60	150	5	4,5	T	E, Z			KO	Ob
3	GGG7204	Mine Ventilation and Fires I	2		1			K_W30 K_U27 K_K02, 04	30	180	6	5	T	E, Z			K	Ob
Total			7	1	4	1			130	450	15	13						

Groups of obligatory courses number of ECTS points 4

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	OSG7204	Postmining Land Reclamation and Development (GK)	1			1	1	K_W26, 29 K_U01, 05, 26., 32, 34 K_K02, 06	30	120	4	2,5	T	Z (lec)			K	Ob
Total			1			1	1		30	120	4	2,5						

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²Traditional – enter T, remote – enter Z

³Exam – enter E, crediting – enter Z. For the group of courses – after the letter E or Z - enter in brackets the final course form (lec, cl, lab, pr, sem)

⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Optional courses (minimum 40 hours in semester, 6 ECTS points)

No.	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG020001	Optional Course	4					40	180	6		T	Z			K	W	
		Total	4					40	180	6								

Altogether in semester

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
12	1	4	2	1	200	750	25	15,5

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⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

⁶ KO – general education, PD – basic sciences, K – field-of-studies, S – specialization

⁷ Optional – enter W, obligatory – enter Ob

Semester 8

Obligatory courses number of ECTS points 9

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG8204	Occupational Safety and Health and Rescue Work II	2	1				K_W33 K_U30 K_K02	30	90	3	3	T	E, Z			K	Ob
2	GGG8206	Mine Ventilation and Fires	2		1	1		K_W30 K_U27 K_K02	40	120	4	3,5	T	E, Z			K	Ob
3	PRG8201	Geological and Mining Law	1				1	K_W34 K_U31 K_K02	20	60	2	1,5	T	Z			K	Ob
Total			5	1	1	1	1		90	270	9	8						

Groups of obligatory courses number of ECTS points 4

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG8203	Mineral Deposit and Production Management (GK)	1			2		K_W35 K_U32 K_K07	30	120	4	3	T	Z (lec)			K	Ob
Total			1			2			30	120	4	3						

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Optional courses (minimum 10 hours in semester, 16 ECTS points)

No.	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol GK)	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form ² of course/group of courses	Way ³ of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes ¹			university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG8205	Diploma Seminar					2		20	60	2	2	T	Z			K	Ob
2	GGG8207	Diploma Dissertation		8					80	420	14	5					K	Ob
Total				8			2		100	480	16	7						

Altogether in semester

Total number of hours					Total number of ZZU hours	Total number of CNPS hours	Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
6	9	1	3	3	220	870	29	18

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⁴University-wide course /group of courses – enter O

⁵Practical course / group of courses – enter P. For the group of courses – in brackets enter the number of ECTS points assigned to practical courses

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2. Set of examinations in semestral arrangement

Course code	Names of courses ending with examination	Semester
MAP9947	1.Mathematical Analysis I	1
GGG1201	2.Fundamentals of Mining	1
MAP9943	3.Algebra and Analytical Geometry	1
MAP009944	1.Mathematical Analysis II	2
FZP1014	2.Physics I	2
MMG2201	3.Technical Mechanics	2
EKG2201	4.Introduction to Economics	2
GEG2201	5.Fundamentals of Geology	2
GEG3201	1.Mineralogy and Petrology	3
GEG3202	2.Hydrogeology	3
CHG3201	3.Chemistry	3
GGG3201	4.Soil Mechanics	3
MMG3202	5.Strength of Materials	3
ELG4804	1.Electrotechnics	4
GEG4201	2.Mineral Deposit and Mining Geology	4
GGG4203	3.Rock Mass Mechanics	4
GGG4204	4.Applied Geophysics	4
GGG5204	1.Surface Mining Technology	5
GGG6205	1.Mine Dewatering	6
GGG6206	2.Underground Mining Technology	6
MMG6202	3.Machinery Systems	6
GGG6208	4.Mineral Processing II	6
GGG7202	1.Occupational Safety and Health and Rescue Work I	7
EKG7202	2.Economics in Mining	7
GGG7204	3.Mine Ventilation and Fires	7
GGG8204	1.Occupational Safety and Health and Rescue Work II	8
GGG8206	2.Mine Ventilation and Fires	8

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3. Numbers of allowable deficit of ECTS points after particular semesters

Semester	Allowable deficit of ECTS points after semester
1	8
2	8
3	12
4	12
5	12
6	12
7	6

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⁷ Optional – enter W, obligatory – enter Ob

Opinion of student government legislative body

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Date Name and surname, signature of student representative

.....

Date Dean's signature

¹BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students

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