Attachment no. 1 to Programme of Studies

PLAN OF STUDIES

FACULTY:. Geoengineering, Mining, and Geology

MAIN FIELD OF STUDY: mining and geology

EDUCATION LEVEL: 2nd level, magister studies

FORM OF STUDIES: part-time

PROFILE: general academic

SPECIALIZATION: Underground and Surface Mining

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 2^{nd} level part-time studies in the field of mining and geology, specialization: Underground and Surface Mining

sem./	1	ETCS points	2	ETCS points	3	ETCS points	4	ETCS points
hrs.								
1							Finance	
2	Surface Mining Technology		Foreign Language 03000 Z	2	Computer-Aided		Management	3
3	20020 E GGG1401	5	00000 2		Mine Planning and Design	5	11100 E ZMG4401	
4	GGG1401		Foreign Language 01000 Z	1	20300 E ING3402		Geological and Mining Law and	
5							Rescue Work 11001 E	3
6	Geostatistics		Underground Mining Technology		Mine Ventilation		PRG4401	
7	10300 Z GEG1403	4	20020 E	5	and Fires	4	Dragoning	
8	0_0.100		GGG2401		10020 E GGG3401		Processing Systems	2
9			Operational Research in				10020 E GGG4404	
	Rock Mass Mechanics		Management	3	Machinery Systems		Occupational	
10	20010 E	4	10100 Z ZMG2402		20110 E	5	Safety and Health 10100 Z	2
11	GGG1408				MMG3403		GGG4407	
12	Physics -		Rock Engineering in Mines	3			Diploma Seminar	
	The Structure of Matter 20000 Z	2	20010 E GGG2415	3			00002 Z GGG4405	1
13	FZP1016		Industrial		Environment		000+100	
14	Geology and		Automation 10100 Z	2	Management 20001 Z	2	Optional Course 20000 Z	2
15	Exploration of Mineral Deposits	4	ELG2401		OSG3404		20000 2	
16	20020 E GEG1412		Rock Mass Changes					
17	OLO 1412		Monitoring and		Optional Course			
18	AutoCAD 00200 Z	2	Mining Area Surface Protection 20100 Z GKG2401	3	30000 Z	4	Diploma Dissertation GGG4408	15
19	GFG1401		Liberal-Managerial Subjects 10000 Z	1	Diploma Seminar 00001 Z GGG3403	1		
Total		21		20		21		28

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

Semester 1

Obligatory courses number of ECTS points 21

		Course/group	Name of course/group of courses	г	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numb	er of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	rses	
1,		of courses code	(denote group of courses with symbol GK)	lec	Ť		pr		study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses			practical ⁵		type ⁷
	1	GEG1412	Geology and Exploration of Mineral Deposits	2				2	K_W04 K_U06 K_K01, 02	40	120	4	3	Т	E, Z			S	Ob
	2	GFG1401	AutoCAD			2			K_U10 K_K01	20	60	2	1	T	Z			S	Ob
	3	GEG1403	Geostatistics	1		3			K_W01 K_U01, 04, 09, 10	40	120	4	3	Т	Z			S	Ob
	4	GGG1408	Rock Mass Mechanics	2				1	K_W02, 03, 09, 11 K_U05, 09, 13, 14 K_K01	30	120	4	3	T	E, Z			S	Ob
	5	GGG1401	Surface Mining Technology	2				2	K_W05 K_U07 K_K01	40	150	5	4	Т	E, Z			S	Ob
	6	FZP1016	Physics-The Structure of Matter	2					K_W02	20	60	2	2	T	Z	0		PD	Ob
			Total	9		5		5		190	630	21	16						

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

					of ZZU hours	of CNPS hours	of ECTS points	for BK classes ¹
lec	cl	lab	pr	sem				
9		5	5		190	630	21	16

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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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Semester 2

Obligatory courses number of ECTS points 16

No	Course/group	Name of course/group of courses	Wee	kly 1	numbe	r of l	hours	Field-of-	Numbe	er of hours	Numb	per of ECTS points		Way3 of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol $\mathbf{G}\mathbf{K}$)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	ZMG2402	Operational Research in Management	1		1			K_W06 K_U08 K_K01	20	90	3	2	T	Z			S	Ob
2	GKG2401	Rock Mass Changes Monitoring and Mining Area Surface Protection	2		1			K_W10, 15 K_K01, 02	30	90	3	2,5	T	Z			S	Ob
3	GGG2415	Rock Engineering in Mines	2			1		K_W03, 09, 11 K_U05, 09, 13, 14 K_K01, 02	30	90	3	2	Т	E, Z			S	Ob
4	GGG2401	Underground Mining Technology	2			2		K_W07, 09 K_U05 K_K01, 02	40	150	5	4	Т	E, Z			S	Ob
5	ELG2401	Industrial Automation	1		1			K_W12 K_U15K_K 01	20	60	2	0,8	Т	Z			S	Ob
		Total	8		3	3			140	480	16	11,3						

Optional courses (minimum 50 hours in semester, 4 ECTS points)

No.	Course/group	Name of course/group of courses	We	ekly	numb	er of l	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	PSG108837	Liberal-Managerial Subjects	1					K_W19 K_K01	10	30	1	1	T	Z	0		КО	W
2	JZL100622	Foreign Language		3				K_U14	30	60	2	1	T	Z	0		KO	W
3	JZL100622	Foreign Language		1	•			K_U13	10	30	1	0,5	T	Z	0		KO	W
		Total	1	4					50	120	4	2,5						

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

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Optional – enter W, obligatory – enter Ob

lec cl lab pr sem			
	190 600	20	13,8

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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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⁷ Optional – enter W, obligatory – enter Ob

Semester 3

Obligatory courses number of ECTS points 21

No	Course/group	Name of course/group of courses	Wee	ekly	numbe	r of l	hours	Field-of-	Numbe	r of hours	Numb	er of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	educational	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
		- /						effect symbol										
1	MMG3403	Machinery Systems	2		1	1		K_W08 K_U11	40	150	5	4,5	Т	E, Z			S	Ob
2	ING3402	Computer-Aided Mine Planning and Design	2			3		K_W06, 07 K_U09, 10	50	150	5	4	T	E, Z			S	Ob
3	GGG3401	Mine Ventilation and Fires	1			2		K_W16 K_U19	30	120	4	3	T	E, Z			S	Ob
								K_K01, 02										
		Total	5		1	6			120	420	14	11,5						

Groups of obligatory courses number of ECTS points 2

N	Ю	Course/group	Name of course/group of courses	We	ekly	numb	er of l	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cour	rses	
		of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr		study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
	1	OSG3404	Environment Management (GK)	2				1	K_W15 K_U01, 18 K_K01	30	60	2	1,5	T	Z (lec)			S	Ob
	-		Total	2				1		30	60	2	1,5						

 $^{^{1}}$ BK – number of ECTS points assigned to hours of classes requiring direct contact of teachers with students 2 Traditional – 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 course 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, 5 ECTS points)

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No	Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numl	per of ECTS points	Form ² of	way of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG020002	Optional Course	3						30	120	4		T	Z			S	W
2	GGG3403	Diploma Seminar					1		10	30	1	1	T	Z			S	W
		Total	3				1		40	150	5	1						

	Tota	al number of	hours		Total number of ZZU hours		Total number of ECTS points	Number of ECTS points for BK classes ¹
lec	cl	lab	pr	sem				
10		1	6	2	190	630	21	14

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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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⁷ Optional – enter W, obligatory – enter Ob

Semester 4

Obligatory courses number of ECTS points 5

No	Course/group		We	ekly	numb	er of	hours	Field-of-	Numbe	r of hours	Numb	per of ECTS points	Form ² of	Way3 of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr		study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG4407	Occupational Safety and Health	1		1			K_W18 K_U21 K_K01	20	60	2	1,5	T	Z			S	Ob
2	PRG4401	Geological and Mining Law and Rescue Work	1	1			1	K_W14 K_U18, 21 K_K02	30	90	3	2,5	T	E, Z			S	Ob
		Total	2	1	1		1		50	150	5	4						

Groups of obligatory courses number of ECTS points 5

No.	. Course/group	Name of course/group of courses	We	ekly	numb	er of	hours	Field-of-	Numbe	er of hours	Numl	ber of ECTS points	Form ² of	Way ³ of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr		study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	ZMG4401	Finance Management (GK)	1	1	1			K_W17 K_U20 K_K01	30	90	3	2,5	Т	E (lec), Z			КО	Ob
2	GGG4404	Processing Systems (GK)	1			2		K_W13 K_U16	30	60	2	2	T	E (lec), Z			S	Ob
		Total	2	1	1	2			60	150	5	4,5						

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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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Optional courses (minimum 80 hours in semester, 18 ECTS points)

No	Course/group	Name of course/group of courses		Weekly number of hours				Field-of- Number of		r of hours	Irs Number of ECTS points		Form ² of	Way ³ of	Course/gr	oup of cou	rses	
	of courses code	(denote group of courses with symbol GK)	lec	cl	lab	pr	sem	study educational effect symbol	ZZU	CNPS	total	BK classes ¹	course/group of courses	crediting	university-wide ⁴	practical ⁵	kind ⁶	type ⁷
1	GGG020002	Optional Course	2						20	60	2		T	Z			S	W
2	GGG4405	Diploma Seminar					2		20	30	1	1	T	Z			S	W
3	GGG4408	Diploma Dissertation		4					40	450	15	5	T	Z			S	W
		Total	2	4			2		80	540	18	6						

lec 6	6	1ab 2	2	sem 3	190	840	28	14,5
				I	hours		1	
	To	otal number o	Total number of ZZU	Total number of CNPS hours		1		

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2. Set of examinations in semestral arrangement

Course code	Names of courses ending with examination	Semester
GEG1412	1.Geology and Exploration of Mineral Deposits	1
GGG1408	2.Rock Mass Mechanics	1
GGG1401	3.Surface Mining Technology	1
GGG2415	1.Rock Engineering in Mines	2
GGG2401	2.Underground Mining Technology	2
MMG3403	1.Machinery Systems	3
ING3402	2.Computer-Aided Mine Planning and Design	3
GGG3401	3.Mine Ventilation and Fires	3
ZMG4401	1.Finance Management	4
PRG4401	2.Geological and Mining Law and Rescue Work	4
GGG4404	3.Processing Systems	4

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

Semester	Allowable deficit of ECTS points after semester
1	10
2	10
3	6

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Opin	ion of student government legislative body
Date	Name and surname, signature of student representative
Date	Dean's signature

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