

## **PLAN OF STUDIES**

**FACULTY:** Geoengineering, Mining, and Geology

**MAIN FIELD OF STUDY:** mining and geology

**EDUCATION LEVEL:** 2<sup>nd</sup> level, magister studies

**FORM OF STUDIES:** full-time

**PROFILE:** general academic

**SPECIALIZATION:** Exploratory and Mining Geology

**LANGUAGE OF STUDY:** Polish

Geoengineering, Mining, and Geology Faculty Council Resolution of 05.09.2012

In effect since 01.10.2012

## Plan of studies structure in hourly layout

### 2<sup>nd</sup> level full-time studies in the field of mining and geology, specialization: Exploratory and Mining Geology

sem./ hrs.	1	ETCS points	2	ECTS points	3	ECTS points
1	Physics – The Structure of Matter 20000 Z FZP1013	2	Geophysics 20021 E GGG2306	6	Methods for Mineral Resources Examination 20100 E GGG4408	2
2						
3	Foreign Language 03000 Z	2				
4						
5						
6	Foreign Language 01000 Z	1			Geology of Mineral Deposits I 20101 E GEG2306	5
7						
8	Geochemistry 30201 E CHG1303	7	Geology of Mineral Deposits II 10201 E GEG2307	5	Finance Management 11100 E ZMG3301	3
9						
10						
11			Mineral Deposits Exploration and Reconnaissance Methodology 22001 E GEG1312	7	Environment Management 10001Z OSG3303	2
12						
13	Mining Geology 20210 E GEG2308	6			Economic Geology 10001 Z GEG3305	2
14					Diploma Seminar 00002 Z GGG3310	1
15	Computer Applications in Geological Works 10100 Z ING1305	3	Occupational Safety and Health 10100 Z GGG3308	2		
16						
17			Ore Body Modelling 10200 Z	3	Diploma Dissertation GGG3312	15
18						
19	Geostatistics 10300 Z GEG1311	5	Optional Course 20000 Z	3		
20						
21			Liberal-Managerial Subjects 10000 Z	1		
22						
23	Optional Course 20000 Z	3	Diploma Seminar 00001 Z GGG2303	1		
24						
25	Optional Course 20000 Z	3				
<b>Total</b>		<b>30</b>		<b>30</b>		<b>30</b>

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

## Semester 1

### Obligatory courses number of ECTS points 24

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol <b>GK</b> )	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form <sup>2</sup> of course/group of courses	Way <sup>3</sup> of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes <sup>1</sup>			university-wide <sup>4</sup>	practical <sup>5</sup>	kind <sup>6</sup>	type <sup>7</sup>
1	CHG1303	Geochemistry	3		2		1	K_W04 K_U06 K_K06	90	210	7	4,5	T	E, Z			S	Ob
2	GEG1312	Mineral Deposits Exploration and Reconnaissance Methodology	2	2			1	K_W03 K_U02 K_K01, 02	75	210	7	5,5	T	E, Z			S	Ob
3	ING1305	Computer Applications in Geological Works	1		1			K_W03 K_U02 K-K01, 02	30	90	3	2,5	T	Z			S	Ob
4	GEG1311	Geostatistics	1		3			K_W01, 08 K_U01, 07	60	150	5	3	T	Z			S	Ob
5	FZP1013	Physics-The Structure of Matter	2					K_W02	30	60	2	2	T	Z			PD	Ob
Total			9	2	6		2		285	720	24	17,5						

### Optional courses (minimum 90 hours in semester, 6 ECTS points)

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol <b>GK</b> )	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form <sup>2</sup> of course/group of courses	Way <sup>3</sup> of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes <sup>1</sup>			university-wide <sup>4</sup>	practical <sup>5</sup>	kind <sup>6</sup>	type <sup>7</sup>
1	JZL000000BK	Foreign Language		3				K_U14	45	60	2	1	T	Z	O		KO	W
2	JZL000000BK	Foreign Language		1				K_U13	15	30	1	0,5	T	Z	O		KO	W
3	GEG104262	Optional Course	2						30	90	3		T	Z			S	W
Total			2	4					90	180	6	1,5						

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

<sup>2</sup>Traditional – enter T, remote – enter Z

<sup>3</sup>Exam – 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)

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

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

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

<sup>7</sup> 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 <sup>1</sup>
lec	cl	lab	pr	sem				
<b>11</b>	<b>6</b>	<b>6</b>		<b>2</b>	<b>375</b>	<b>900</b>	<b>30</b>	<b>19</b>

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

<sup>2</sup>Traditional – enter T, remote – enter Z

<sup>3</sup>Exam – 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)

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

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

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

<sup>7</sup> Optional – enter W, obligatory – enter Ob

## Semester 2

### Obligatory courses number of ECTS points 25

No.	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol <b>GK</b> )	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form <sup>2</sup> of course/group of courses	Way <sup>3</sup> of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes <sup>1</sup>			university-wide <sup>4</sup>	practical <sup>5</sup>	kind <sup>6</sup>	type <sup>7</sup>
1	GGG2306	Geophysics	2			2	1	K_W05 K_U03 K_K06	75	180	6	4,5	T	E, Z			S	Ob
2	GEG2306	Geology of Mineral Deposits I	2		1		1	K_W06 K_U05 K_K06	60	150	5	4	T	E, Z			S	Ob
3	GEG2307	Geology of Mineral Deposits II	1		2		1	K_W06 K_U05 K_K01, 02	60	150	5	4,5	T	E, Z			S	Ob
4	GEG 2308	Mining Geology	2		2	1		K_W07 K_U04 K_K02	75	180	6	5	T	E, Z			S	Ob
5	GEG2309	The Ore Body Modelling	1		2			K_W08 K_U07 K_K01, 02	45	90	3	2	T	Z			S	Ob
Total			8		7	3	3		315	750	25	20						

### Optional courses (minimum 60 hours in semester, 5 ECTS points)

No.	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol <b>GK</b> )	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form <sup>2</sup> of course/group of courses	Way <sup>3</sup> of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes <sup>1</sup>			university-wide <sup>4</sup>	practical <sup>5</sup>	kind <sup>6</sup>	type <sup>7</sup>
1	PSG108838	Liberal-Managerial Subjects	1					K_W19 K_K02	15	30	1	1	T	Z	O		KO	W
2	GEG104262	Optional Course	2						30	90	3		T	Z			S	W
3	GGG2303	Diploma Seminar					1		15	30	1	1	T	Z			S	W
Total			3				1		60	150	5	2						

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

<sup>2</sup>Traditional – enter T, remote – enter Z

<sup>3</sup>Exam – 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)

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

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

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

<sup>7</sup> 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 <sup>1</sup>
lec	cl	lab	pr	sem				
<b>11</b>	<b>7</b>		<b>3</b>	<b>4</b>	<b>375</b>	<b>900</b>	<b>30</b>	<b>22</b>

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

<sup>2</sup>Traditional – enter T, remote – enter Z

<sup>3</sup>Exam – 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)

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

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

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

<sup>7</sup> Optional – enter W, obligatory – enter Ob

## Semester 3

### Obligatory courses number of ECTS points 7

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol <b>GK</b> )	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form <sup>2</sup> of course/group of courses	Way <sup>3</sup> of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes <sup>1</sup>			university-wide <sup>4</sup>	practical <sup>5</sup>	kind <sup>6</sup>	type <sup>7</sup>
1	GEG3304	Geological and Mining Conditions of Exploitation	3		1	1		K_W09, 11, 16 K_U09, 10, 19 K_K01	75	90	3	2	T	E, Z			S	Ob
2	GEG3305	Economic Geology	1				1	K_W10 K_U10 K_K01, 02	30	60	2	2	T	Z			S	Ob
3	GGG3308	Occupational Safety and Health	1		1			K_W11 K_U01 K_K05	30	60	2	1,5	T	Z			S	Ob
Total			5		2	1	1		135	210	7	5,5						

### Groups of obligatory courses number of ECTS points 7

No..	Course/group of courses code	Name of course/group of courses (denote group of courses with symbol <b>GK</b> )	Weekly number of hours					Field-of-study educational effect symbol	Number of hours		Number of ECTS points		Form <sup>2</sup> of course/group of courses	Way <sup>3</sup> of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes <sup>1</sup>			university-wide <sup>4</sup>	practical <sup>5</sup>	kind <sup>6</sup>	type <sup>7</sup>
1	GGG4408	Methods for Mineral Resources Examination (GK)	2		1			K_W09 K_U05, 08, 13 K_K01, 02	45	60	2	1,5	T	E (lec), Z			S	Ob
2	ZMG3301	Finance Management (GK)	1	1	1			K_W17 K_U20 K_K01	45	90	3	2,5	T	E (lec), Z			KO	Ob
3	OSG3303	Environment Management (GK)	1				1	K_W12 K_U12, 13 K_K05	30	60	2	1,5	T	Z (lec)			S	Ob
Total			4	1	2		1		120	210	7	5,5						

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<sup>3</sup>Exam – 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)

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

<sup>5</sup>Practical 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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<sup>7</sup> Optional – enter W, obligatory – enter Ob

### Optional courses (minimum 75 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 <sup>2</sup> of course/group of courses	Way <sup>3</sup> of crediting	Course/group of courses			
			lec	cl	lab	pr	sem		ZZU	CNPS	total	BK classes <sup>1</sup>			university-wide <sup>4</sup>	practical <sup>5</sup>	kind <sup>6</sup>	type <sup>7</sup>
1	GGG3310	Diploma Seminar					2		30	30	1	1	T	Z			S	W
2	GGG3311	Diploma Dissertation		3					45	450	15	5	T	Z			S	W
Total				3			2		75	480	16	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 <sup>1</sup>
lec	cl	lab	pr	sem				
<b>9</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>330</b>	<b>900</b>	<b>30</b>	<b>17</b>

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

<sup>2</sup>Traditional – enter T, remote – enter Z

<sup>3</sup>Exam – 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)

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

<sup>5</sup>Practical 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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<sup>7</sup> Optional – enter W, obligatory – enter Ob



## 2. Set of examinations in semestral arrangement

Course code	Names of courses ending with examination	Semester
CHG1303	1.Geochemistry	1
GEG1312	2.Mineral Deposits Exploration and Reconnaissance Methodology	1
GEG2306	1.Geophysics	2
GEG2306	2.Geology of Mineral Deposits I	2
GEG2307	3.Geology of Mineral Deposits II	2
GEG2308	4.Mining Geology	2
GEG3304	1.Geological and Mining Conditions of Exploitation	3
GEG4408	2.Methods for Mineral Resources Examination	3
ZMG3301	3.Finance Management	3

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

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

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

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<sup>3</sup>Exam – 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)

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

<sup>5</sup>Practical 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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<sup>7</sup> Optional – enter W, obligatory – enter Ob

Opinion of student government legislative body

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Date Name and surname, signature of student representative

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Date Dean's signature

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<sup>2</sup>Traditional – enter T, remote – enter Z

<sup>3</sup>Exam – 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)

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

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<sup>7</sup> Optional – enter W, obligatory – enter Ob