



Faculty of: Geology, Geophysics and Environmental Protection

Field of study: Environmental Engineering Study level: First-cycle studies Form and type of study: Full-time studies

Annual: 2015/2016 Lecture language: Polish

Code	Module name	Lectures	Auditorium classes	Laboratory classes	Project classes	Conversation seminar	Seminar classes	Practical classes	Fieldwork classes	Workshops	Others	E-learning	ECTS	E
<b>Semester 1</b>														
Engineering														
BIS-1-101-s	Information Technology	14	0	28	0	0	0	0	0	0	0	0	2	No
BIS-1-102-s	Contaminations and methods of air protection	14	14	0	0	0	0	0	0	0	0	0	2	No
BIS-1-103-s	Engineering hydrology	14	0	0	14	0	0	0	0	0	0	0	2	No
BIS-1-104-s	Waste Management	14	0	14	14	0	0	0	0	0	0	0	3	No
BIS-1-105-s	Geosphere protection technologies	14	0	0	0	0	0	0	0	0	0	0	1	No
Mathematics														
BIS-1-110-s	Mathematics I	28	28	0	0	0	0	0	0	0	0	0	6	Yes
Other Basic														
BIS-1-106-s	Chemistry	28	0	28	0	0	0	0	0	0	0	0	6	Yes
BIS-1-107-s	Geometry and Computer Graphics	6	0	28	0	0	0	0	0	0	0	8	3	No
BIS-1-108-s	Geology I	28	0	0	0	0	0	28	0	0	0	0	3	No
BIS-1-109-s	Environmental Protection	14	14	0	0	0	0	0	0	0	0	0	2	No
Suma ECTS													30	
<b>Semester 2</b>														
Engineering														
BIS-1-202-s	Geostatistics	14	0	0	0	0	0	28	0	0	0	0	2	No
BIS-1-203-s	Environmental monitoring	14	0	0	14	0	0	0	0	0	0	0	2	No
BIS-1-204-s	Technical Thermodynamics	14	0	0	14	0	0	0	0	0	0	0	2	No

## Study programme - Environmental Engineering - 2015/2016

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BIS-1-205-s	Renewable Energy Sources	28	0	0	14	0	0	0	0	0	0	0	2	No
BIS-1-206-s	Computer Engineering Graphics (CAD)	14	0	0	0	0	0	28	0	0	0	0	2	No
Field classes														
BIS-1-209-s	Field classes of geology	0	0	0	0	0	0	0	90	0	0	0	4	No
Mathematics														
BIS-1-207-s	Mathematics II	28	28	0	0	0	0	0	0	0	0	0	6	Yes
Non-technical														
BIS-1-211-s	Physical Education 1	0	0	0	0	0	0	0	0	0	28	0	0	No
Other Basic														
BIS-1-208-s	Geology II	28	0	0	0	0	0	28	0	0	0	0	4	Yes
Physics														
BIS-1-201-s	Physics I	28	28	0	0	0	0	0	0	0	0	0	6	Yes
Suma ECTS													30	
<b>Semester 3</b>														
Engineering														
BIS-1-302-s	Hydrogeology	28	0	0	14	0	0	0	0	0	0	0	5	Yes
BIS-1-303-s	Soil Engineering	14	0	28	0	0	0	0	0	0	0	0	3	No
BIS-1-304-s	Basics geophysical methods	28	0	0	14	0	0	0	0	0	0	0	3	No
<b>Foreign Language</b>														
The rules for selecting groups/modules:														
BIS-1-310-s	English B-2 - obligatory course 140h - semester 1/4	0	42	0	0	0	0	0	0	0	0	0	0	No
Non-technical														
BIS-1-305-s	Principles of economics and management	14	14	0	0	0	0	0	0	0	0	0	2	No
BIS-1-312-s	Physical Education 2	0	0	0	0	0	0	0	0	0	14	0	0	No
Other Basic														
BIS-1-306-s	Mineralogy and petrography	28	0	28	0	0	0	0	0	0	0	0	5	Yes
BIS-1-307-s	Geomorphology and geology of Quarternary	28	0	0	28	0	0	0	0	0	0	0	4	No
BIS-1-308-s	Work Safety and Ergonomics	28	0	0	0	0	0	0	0	0	0	0	2	No
Physics														
BIS-1-301-s	Physics II	28	28	0	0	0	0	0	0	0	0	0	6	Yes
Suma ECTS													30	
<b>Semester 4</b>														
Engineering														
BIS-1-401-s	Environmental Geophysics	28	0	0	28	0	0	0	0	0	0	0	4	No
BIS-1-402-s	Environmental Impact Assessment	14	0	0	14	0	0	0	0	0	0	0	2	No
BIS-1-403-s	Remediation and revitalisation of degraded areas	28	0	0	14	0	0	0	0	0	0	0	3	No
BIS-1-404-s	Soil science and remediation	28	0	14	0	0	0	0	0	0	0	0	4	Yes
Field classes														
BIS-1-411-s	Field practise of cartography	0	0	0	0	0	0	0	60	0	0	0	3	No
BIS-1-412-s	Field classes of Renewable Energy Sources	0	0	0	0	0	0	0	30	0	0	0	2	No

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<b>Foreign Language</b>															
The rules for selecting groups/modules:															
BIS-1-410-s	English B-2 – obligatory course 140 - semester 2/4	0	42	0	0	0	0	0	0	0	0	0	0	No	
Non-technical															
BIS-1-405-s	Ecological space and sustainable development	0	0	0	0	0	14	0	0	0	0	0	2	No	
BIS-1-414-s	Physical Education 3	0	0	0	0	0	0	0	0	0	14	0	0	No	
Other Basic															
BIS-1-406-s	Environmental chemistry	28	0	0	0	0	0	28	0	0	0	0	4	Yes	
BIS-1-407-s	Water management	14	0	0	0	0	0	14	0	0	0	0	2	No	
BIS-1-408-s	Cartography	30	0	0	30	0	0	0	0	0	0	0	4	Yes	
Suma ECTS													30		
<b>Semester 5</b>															
Engineering															
BIS-1-501-s	Geographic Information Systems (GIS)	15	0	0	0	0	0	30	0	0	0	0	3	No	
BIS-1-502-s	Influence of exploitation of energy resources on environment	30	0	0	0	0	0	15	0	0	0	0	3	No	
BIS-1-503-s	Materials Science	15	0	15	0	0	0	0	0	0	0	0	2	No	
BIS-1-504-s	Mechanics and durability of materials	15	15	0	0	0	0	0	0	0	0	0	2	No	
BIS-1-505-s	Quality and Reliability Engineering	15	0	0	15	0	0	0	0	0	0	0	2	No	
BIS-1-506-s	Basics of economic geology	30	0	0	0	0	0	30	0	0	0	0	4	No	
<b>Foreign Language</b>															
The rules for selecting groups/modules:															
BIS-1-510-s	English B-2 – obligatory course 140h - semester 3/4	0	28	0	0	0	0	0	0	0	0	0	0	No	
<b>Elective block of EE, semester 5</b>													14		
The rules for selecting groups/modules: Wybór ścieżki kształcenia w ramach bloku obieralnego dokonywany jest przez studenta przed 5 semestrem studiów. Uruchomienie danej ścieżki uzależnione jest od minimalnej ilości chętnych (ustalanej odpowiednio każdego roku przez władze wydziału). W przypadku większej ilości chętnych niż miejsc, decydować będzie średnia ocen studenta.															
<b>Module 1, semester 5 (KHGI + KGIS)</b>													11		
The rules for selecting groups/modules:															
BIS-1-507-s	Engineering geology	30	0	0	15	0	0	0	0	0	0	0	6	Yes	
BIS-1-508-s	Basics of applied hydrogeology	30	0	0	0	0	0	30	0	0	0	0	6	Yes	
BIS-1-509-s	Regional Geology	30	0	0	0	0	0	0	0	0	0	0	2	Yes	
<b>Module 2, semester 5 (KOŚ + KMPG)</b>													11		
The rules for selecting groups/modules:															
BIS-1-511-s	Strategic raw materials of Poland and world	45	0	0	0	0	0	0	0	0	0	0	6	Yes	
BIS-1-512-s	The Basics of Spatial Planning	0	0	0	0	0	30	0	0	0	0	0	3	No	
BIS-1-513-s	Fundamentals of analytical chemistry	15	0	45	0	0	0	0	0	0	0	0	5	No	
<b>Module 3, semester 5 (KASKG + KSE)</b>													11		
The rules for selecting groups/modules:															
BIS-1-514-s	Heating, ventilation and air conditioning	15	15	0	30	0	0	0	0	0	0	0	6	Yes	
BIS-1-515-s	Isotopes in geological and energy studies	0	0	0	0	0	45	0	0	0	0	0	4	No	

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BIS-1-516-s	Exploration and exploitation of natural gas deposits and geothermal water resources	15	15	0	0	0	0	0	0	0	0	0	4	No
Suma ECTS													30	
<b>Semester 6</b>														
Engineering														
BIS-1-601-s	Professional practice	0	0	0	0	0	0	120	0	0	0	0	4	No
<b>Foreign Language</b>														
The rules for selecting groups/modules:														
BIS-1-602-s	English B-2 – obligatory course 140 - semester 4/4	0	28	0	0	0	0	0	0	0	0	0	5	Yes
Non-technical														
BIS-1-603-s	Small and medium-sized enterprises	15	15	0	0	0	0	0	0	0	0	0	2	No
BIS-1-624-s	Intellectual property rights	15	0	0	0	0	0	0	0	0	0	0	1	No
<b>Elective block of EE, semester 6</b>													18	
The rules for selecting groups/modules:														
<b>Module 1, semester 6 (KHGI + KGIS)</b>														
The rules for selecting groups/modules:														
BIS-1-609-s	Hydrogeochemistry	15	0	30	0	0	0	0	0	0	0	0	3	Yes
BIS-1-610-s	Designing and documenting hydrogeological and geotechnical studies	0	0	0	30	0	0	30	0	0	0	0	3	No
BIS-1-611-s	Spatial Database	15	0	0	0	0	0	30	0	0	0	0	3	No
BIS-1-612-s	Construction of groundwater intakes and dewatering	15	0	0	30	0	0	0	0	0	0	0	3	No
BIS-1-613-s	Basis soil mechanics	30	15	0	0	0	0	0	0	0	0	0	3	Yes
<b>Subject in English (KHGI + KGIS)</b>													3	
The rules for selecting groups/modules: Należy wybrać jeden moduł														
BIS-1-614-s	Zastosowanie znaczników sztucznych do określenia parametrów przepływu i transportu w ośrodkach wodonośnych	15	0	0	0	0	0	15	0	0	0	0	3	No
BIS-1-615-s	Hydrogeological English	15	15	0	0	0	0	0	0	0	0	0	3	No
<b>Module 2, semester 6 (KOŚ + KMPG)</b>													19	
The rules for selecting groups/modules:														
BIS-1-604-s	Basics of Bioprocess Engineering	30	0	60	0	0	0	0	0	0	0	0	5	Yes
BIS-1-605-s	Methods of phase analysis	15	30	30	0	0	0	0	0	0	0	0	5	Yes
BIS-1-606-s	Fundamentals of waste management	15	0	0	30	0	0	0	0	0	0	0	3	No
BIS-1-607-s	Technical restoration of river valleys systems	15	0	0	20	0	0	10	0	0	0	0	3	No
BIS-1-608-s	Mineral engineering	30	0	0	0	0	0	0	0	0	0	0	2	No
<b>Module 3, semester 6 (KASKG + KSE)</b>													18	
The rules for selecting groups/modules:														
BIS-1-616-s	Balancing of conventional and unconventional hydrocarbon resources	30	0	0	15	0	0	0	0	0	0	0	3	No
BIS-1-617-s	Wykorzystanie w OZE energii płynów - energetyka wodna i wiatrowa	35	21	21	0	0	0	0	0	0	0	0	4	Yes
BIS-1-618-s	Projects and standardization in research and environmental work	15	0	0	0	0	15	0	0	0	0	0	2	No
BIS-1-619-s	Engineering and production of hydrocarbon fields	30	15	0	0	0	0	0	0	0	0	0	2	Yes
BIS-1-620-s	Environmental Mapping	15	0	0	0	0	0	30	0	0	0	0	2	No
BIS-1-621-s	Organic geochemistry	15	0	15	0	0	0	0	0	0	0	0	2	No

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BIS-1-622-s	Fluid Mechanics	30	15	0	0	0	0	0	0	0	0	0	3	Yes
Suma ECTS													30	
<b>Semester 7</b>														
Thesis														
BIS-1-701-s	Engineering thesis	0	0	0	0	0	0	0	0	0	0	0	15	Yes
BIS-1-702-s	Diploma seminar	0	0	0	0	0	15	0	0	0	0	0	1	No
<b>Elective block of EE, semester 7</b>													14	
The rules for selecting groups/modules:														
<b>Module 1, semester 7 (KHGI + KGIS)</b>													14	
The rules for selecting groups/modules:														
BIS-1-707-s	Design and interpretation of pumping tests	15	0	15	0	0	0	15	0	0	0	0	3	No
BIS-1-708-s	Zarys geotechniki	15	0	0	0	0	0	15	0	0	0	0	3	Yes
BIS-1-709-s	Geodynamika inżynierska	15	0	0	15	0	0	0	0	0	0	0	3	No
BIS-1-710-s	Computer aid in engineering geology and geotechnics	0	0	30	0	0	0	0	0	0	0	0	2	No
BIS-1-711-s	Basics of groundwater modeling	15	0	30	0	0	0	0	0	0	0	0	3	No
<b>Module 2, semester 7 (KOŚ + KMPG)</b>													14	
The rules for selecting groups/modules:														
BIS-1-703-s	Environmental Management Systems	15	0	0	30	0	0	0	0	0	0	0	4	Yes
BIS-1-704-s	Clay soil and raw materials in environmental engineering	15	0	30	0	0	0	0	0	0	0	0	3	No
BIS-1-705-s	Validation of Analytical Methods in Environmental Engineering	15	0	30	0	0	0	0	0	0	0	0	3	No
BIS-1-706-s	Analiza ryzyka środowiskowego	15	15	0	15	0	0	0	0	0	0	0	4	Yes
<b>Module 3, semester 7 (KASKG + KSE)</b>													14	
The rules for selecting groups/modules:														
BIS-1-712-s	Environmental aspects of exploration and exploitation of unconventional fuels	15	0	0	15	0	0	0	0	0	0	0	3	No
BIS-1-713-s	Nuclear energy	0	0	0	0	21	0	0	0	0	0	0	2	No
BIS-1-714-s	Solar Energy	15	7	15	0	0	0	0	0	0	0	0	2	Yes
BIS-1-715-s	Biomass energy	15	7	15	0	0	0	0	0	0	0	0	2	Yes
BIS-1-716-s	Geothermal Energy	15	7	15	0	0	0	0	0	0	0	0	3	Yes
BIS-1-717-s	Heat pump systems	15	7	15	0	0	0	0	0	0	0	0	2	No
Suma ECTS													30	