



AGH

AGH UNIVERSITY OF SCIENCE
AND TECHNOLOGY

Faculty of: Metals Engineering and Industrial Computer Science

Field of study: Heat Engineering

Study level: First-cycle studies

Form and type of study: Full-time studies

Annual: 2017/2018

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
Semester 1														
Chemia														
MIC-1-104-s	Chemistry	28	14	14	0	0	0	0	0	0	0	0	6	Yes
Engineering														
MIC-1-106-s	Podstawy informatyki	28	0	0	28	0	0	0	0	0	0	0	5	No
Humanities														
MIC-1-107-s	Selected issues of industrial safety regulations and ergonomics.	14	0	0	0	0	14	0	0	0	0	0	2	No
Mathematics														
MIC-1-101-s	Mathematical Analysis 1	30	45	0	0	0	0	0	0	0	0	0	6	Yes
MIC-1-102-s	Algebra	15	15	0	0	0	0	0	0	0	0	0	3	No
Non-technical														
MIC-1-105-s	Environmental Protection	14	0	0	14	0	0	0	0	0	0	0	2	No
Physics														
MIC-1-103-s	Fizyka I	30	30	0	0	0	0	0	0	0	0	0	6	Yes
Suma ECTS													30	
Semester 2														
Engineering														
MIC-1-203-s	Mechanika i wytrzymałość materiałów	28	28	0	0	0	0	0	0	0	0	0	5	Yes
MIC-1-204-s	Fundamentals of material science	28	0	14	0	0	14	0	0	0	0	0	5	No
MIC-1-206-s	Podstawy termodynamiki	28	28	0	0	0	0	0	0	0	0	0	5	Yes

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MIC-1-208-s	Grafika inżynierska i systemy CAD	28	0	0	28	0	0	0	0	0	0	0	5	No
Humanities														
MIC-1-207-s	Ekonomika i Zarządzanie	14	0	0	0	0	14	0	0	0	0	0	1	No
Mathematics														
MIC-1-201-s	Mathematical Analysis 2	15	30	0	0	0	0	0	0	0	0	0	3	No
Non-technical														
MIC-1-209-s	Physical Education 1	0	0	0	0	0	0	0	0	0	30	0	0	No
Physics														
MIC-1-202-s	Physics II	30	15	15	0	0	0	0	0	0	0	0	6	Yes
Język obcy do wyboru - I st. - ZALICZENIE														
The rules for selecting groups/modules: Student wybiera dowolny język obcy i uczestniczy w zajęciach z tego języka przez 4 semestry														
MIC-1-205-s	English B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 1/3	0	30	0	0	0	0	0	0	0	0	0	0	No
MIC-1-210-s	French B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 1/3	0	30	0	0	0	0	0	0	0	0	0	0	No
MIC-1-211-s	Spanish B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 1/3	0	30	0	0	0	0	0	0	0	0	0	0	No
MIC-1-212-s	German B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 1/3	0	30	0	0	0	0	0	0	0	0	0	0	No
MIC-1-213-s	Russian B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 1/3	0	30	0	0	0	0	0	0	0	0	0	0	No
Suma ECTS													30	
Semester 3														
Engineering														
MIC-1-302-s	Heat and Mass Transfer	28	14	0	14	0	0	0	0	0	0	0	5	Yes
MIC-1-304-s	Engineering Materials	28	14	14	0	0	0	0	0	0	0	0	5	Yes
MIC-1-308-s	Technology of production and processing of metals	28	0	28	0	0	0	0	0	0	0	0	5	No
MIC-1-311-s	Theory of measurements and experiment planning	14	14	0	0	0	0	0	0	0	0	0	3	No
Mathematics														
MIC-1-301-s	Równania różniczkowe i rachunek wariacyjny	30	30	0	0	0	0	0	0	0	0	0	6	Yes
Non-technical														
MIC-1-303-s	Physical Education 2	0	0	0	0	0	0	0	0	0	15	0	0	No
IC D01														
The rules for selecting groups/modules: Student wybiera dowolnie jeden moduł o minimalnej liczbie 6 pkt ECTS														
MIC-1-309-s	Biofuels	28	0	14	14	0	0	0	0	0	0	0	6	No
MIC-1-310-s	Korozja i ochrona przed korozją	28	14	14	0	0	0	0	0	0	0	0	6	No
Język obcy do wyboru - I st. - ZALICZENIE														
The rules for selecting groups/modules: Student wybiera dowolny język obcy i uczestniczy w zajęciach z tego języka przez 4 semestry														
MIC-1-305-s	English B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 2/3	0	45	0	0	0	0	0	0	0	0	0	0	No

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MIC-1-306-s	French B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 2/3	0	45	0	0	0	0	0	0	0	0	0	0	No
MIC-1-307-s	Spanish B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 2/3	0	45	0	0	0	0	0	0	0	0	0	0	No
MIC-1-312-s	German B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 2/3	0	45	0	0	0	0	0	0	0	0	0	0	No
MIC-1-313-s	Russian B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 2/3	0	45	0	0	0	0	0	0	0	0	0	0	No
Suma ECTS													30	
Semester 4														
Engineering														
MIC-1-403-s	Heat engineering	28	0	14	14	0	0	0	0	0	0	0	5	No
MIC-1-404-s	Metody numeryczne	28	0	28	0	0	0	0	0	0	0	0	4	No
MIC-1-416-s	Fluid mechanics	28	28	0	0	0	0	0	0	0	0	0	4	Yes
Humanities														
MIC-1-414-s	Historia techniki i kultury materialnej	14	0	0	0	0	0	0	14	0	0	0	2	No
Non-technical														
MIC-1-407-s	Physical Education 3	0	0	0	0	0	0	0	0	0	15	0	0	No
IC D02													5	
The rules for selecting groups/modules: Student wybiera dowolnie jeden moduł o minimalnej liczbie 5 pkt ECTS														
MIC-1-405-s	Heating and refrigerating engineering	28	14	0	14	0	0	0	0	0	0	0	5	Yes
MIC-1-415-s	Odnawialne źródła energii	28	28	0	0	0	0	0	0	0	0	0	5	Yes
IC D03													5	
The rules for selecting groups/modules: Student wybiera dowolnie jeden moduł o minimalnej liczbie 5 pkt ECTS														
MIC-1-406-s	Databases	28	0	0	28	0	0	0	0	0	0	0	5	No
MIC-1-411-s	Inżynieria powierzchni w energetyce	28	0	28	0	0	0	0	0	0	0	0	5	No
Język obcy do wyboru - I st. - EGZAMIN													5	
The rules for selecting groups/modules: Student uczestniczy w zajęciach z języka obcego, który wybrał na 3 semestrze. Na 6 semestrze student zdaje egzamin.														
MIC-1-401-s	English B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 3/3	0	60	0	0	0	0	0	0	0	0	0	5	Yes
MIC-1-408-s	French B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 3/3	0	60	0	0	0	0	0	0	0	0	0	5	Yes
MIC-1-409-s	Spanish B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 3/3	0	60	0	0	0	0	0	0	0	0	0	5	Yes
MIC-1-410-s	German B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 3/3	0	60	0	0	0	0	0	0	0	0	0	5	Yes
MIC-1-412-s	Russian B2 course - compulsory course of 135 hours for students of FIRST-CYCLE studies - semester 3/3	0	60	0	0	0	0	0	0	0	0	0	5	Yes
Suma ECTS													30	
Semester 5														
Engineering														
MIC-1-504-s	Energy management	28	0	0	28	0	0	0	0	0	0	0	5	No

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MIC-1-505-s	Electrical engineering and electronics	28	0	14	0	0	0	0	0	0	0	0	4	No
MIC-1-507-s	Urządzenia ciepłne	28	0	0	28	0	0	0	0	0	0	0	5	No
MIC-1-510-s	Miernictwo energetyczne	28	0	14	14	0	0	0	0	0	0	0	4	No
IC D04														
The rules for selecting groups/modules: Student wybiera dowolnie jeden moduł (prowadzony w języku angielskim) o minimalnej liczbie 6 pkt ECTS													6	
MIC-1-508-s	Automation and Control	14	14	0	14	0	0	0	0	0	0	0	6	No
MIC-1-509-s	Metody badań materiałów	14	14	14	0	0	0	0	0	0	0	0	6	No
IC D05														
The rules for selecting groups/modules: Student wybiera dowolnie jeden moduł o minimalnej liczbie 6 pkt ECTS													6	
MIC-1-506-s	Podstawy sztucznej inteligencji	28	0	14	14	0	0	0	0	0	0	0	6	Yes
MIC-1-511-s	Inżynieria Spajania	28	0	28	0	0	0	0	0	0	0	0	6	Yes
MIC-1-514-s	Low-emission combustion	28	0	28	0	0	0	0	0	0	0	0	6	Yes
Suma ECTS													30	
Semester 6														
Engineering														
MIC-1-602-s	Programowanie proceduralne i obiektowe	28	0	28	0	0	0	0	0	0	0	0	5	No
Praktyki														
MIC-1-615-s	Pra	0	0	0	0	0	0	100	0	0	0	0	4	No
IC D08														
The rules for selecting groups/modules: Student wybiera dowolnie jeden moduł o minimalnej liczbie 5 pkt ECTS													5	
MIC-1-612-s	Ceramic Materials for Heat Engineering	28	0	28	0	0	0	0	0	0	0	0	5	Yes
MIC-1-614-s	Energetyka jądrowa	28	0	0	28	0	0	0	0	0	0	0	5	Yes
Suma ECTS													14	
Semester 7														
Thesis														
MIC-1-701-s	Projekt inżynierski	0	0	0	0	0	0	0	0	0	0	0	15	Yes
Blok obieralny 2														
The rules for selecting groups/modules: Studenci wybierają blok trzech modułów IC D9 lub IC D10													15	
IC D09														
The rules for selecting groups/modules: Studenci wybierają blok trzech modułów IC D9 lub IC D10													15	
MIC-1-702-s	Korozja wysokotemperaturowa	28	0	14	14	0	0	0	0	0	0	0	5	No
MIC-1-703-s	Mechanizmy zużycia warstw wierzchnich	28	0	28	0	0	0	0	0	0	0	0	5	Yes
MIC-1-704-s	Urządzenia do obróbki powierzchniowej	28	0	28	0	0	0	0	0	0	0	0	5	No
IC D10														
The rules for selecting groups/modules: Studenci wybierają blok trzech modułów IC D9 lub IC D10													15	
MIC-1-705-s	Gospodarka i utylizacja odpadów	28	0	0	28	0	0	0	0	0	0	0	5	Yes
MIC-1-706-s	Pakiety numeryczne dla energetyki	28	0	28	0	0	0	0	0	0	0	0	5	No
MIC-1-707-s	Surowce energetyczne i paliwa	28	0	28	0	0	0	0	0	0	0	0	5	No
Suma ECTS													30	