



AGH

AGH UNIVERSITY OF SCIENCE
AND TECHNOLOGY

Faculty of: Materials Science and Ceramics

Field of study: Materials Science Study level: Second-cycle studies Form and type of study: Full-time studies

Specialty: Functional Materials 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														
Other Basic														
CIM-2-105-FM-s	Computer...	45	0	0	0	0	0	0	0	0	0	0	4	Yes
CIM-2-106-FM-s	Materials from renewable sources	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-111-FM-s	Surface engineering	30	0	0	0	0	0	0	0	0	0	0	3	No
CIM-2-112-FM-s	Advanced Materials Engineering	45	0	0	0	0	15	0	0	0	0	0	4	Yes
CIM-2-115-FM-s	Advanced Materials Research Methods	15	0	0	0	0	30	0	0	0	0	0	4	No
Functional Materials													10	
The rules for selecting groups/modules: Student wybiera pięć przedmiotów z grupy "Functional Materials"														
CIM-2-101-FM-s	Materials for the conversion and storage of energy	30	0	0	0	0	0	0	0	0	0	0	2	No
CIM-2-102-FM-s	Nanotechnology	15	0	0	0	0	15	0	0	0	0	0	2	Yes
CIM-2-103-FM-s	Novel functional coatings	15	0	0	0	0	15	0	0	0	0	0	2	No
CIM-2-104-FM-s	Advanced materials modeling	15	0	0	0	0	15	0	0	0	0	0	2	Yes
CIM-2-107-FM-s	High temperature resistant materials	15	0	0	0	0	15	0	0	0	0	0	2	No
CIM-2-113-FM-s	Advanced methods of surface investigation	30	0	0	0	0	0	0	0	0	0	0	2	No
CIM-2-114-FM-s	Drug design	30	0	0	0	0	0	0	0	0	0	0	2	No
Suma ECTS													28	
Semester 2														
Elective														
CIM-2-201-FM-s	Functional materials	30	0	69	0	0	30	0	0	0	0	0	9	Yes

Study programme - Materials Science - 2017/2018

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CIM-2-206-FM-s	Seminarium magisterskie	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-207-FM-s	Praca magisterska	0	0	0	15	0	0	0	0	0	0	0	0	No
Other Basic														
CIM-2-202-FM-s	Design and physics of engineering materials	45	0	0	0	0	0	0	0	0	0	0	4	No
CIM-2-203-FM-s	Bioceramics	15	0	0	0	0	15	0	0	0	0	0	2	No
CIM-2-204-FM-s	Engineering of functional materials	30	0	0	0	0	30	0	0	0	0	0	4	Yes
CIM-2-205-FM-s	Structure and function of materials	30	0	0	0	0	30	0	0	0	0	0	4	Yes
Foreign language													2	
The rules for selecting groups/modules: Student wybiera jeden z przedmiotów z grupy język obcy.														
CIM-2-225-FM-s	Angielska terminologia techniczna	0	0	0	0	0	30	0	0	0	0	0	2	Yes
CIM-2-226-FM-s	Język angielski B2+ - obowiązkowy kurs języka specjalistycznego na studiach II stopnia dla studentów Wydziału Inżynierii Materiałowej i Ceramiki	0	30	0	0	0	0	0	0	0	0	0	2	Yes
Przedmiot obieralny z obszaru nauk humanistycznych i społecznych													3	
The rules for selecting groups/modules: Student wybiera jeden przedmiot z bloku.														
CIM-2-209-FM-s	Bioethics	30	0	0	0	0	0	0	0	0	0	0	3	No
CIM-2-211-FM-s	Fashion engineering	30	0	0	0	0	0	0	0	0	0	0	3	No
Specialized subject Sf													2	
The rules for selecting groups/modules: Student wybiera jeden z modułów z listy.														
CIM-2-208-FM-s	Kierowana krystalizacja szkła i tworzywa szklanokrystaliczne	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-210-FM-s	Akustyczne badania materiałów	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-212-FM-s	Korozja materiałów budowlanych	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-213-FM-s	Metody i narzędzia rozwiązywania problemów produkcyjnych i technologicznych	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-214-FM-s	Mikroskopia Optyczna w badaniach materiałów	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-215-FM-s	Modyfikowanie barwy ceramicznych materiałów budowlanych	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-216-FM-s	Nieorganiczne materiały jonowo-kowalencyjne	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-217-FM-s	Nowoczesne materiały i techniki w analityce	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-218-FM-s	Nowoczesne metody instrumentalne w kontroli procesów przemysłowych i ochronie środowiska	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-219-FM-s	Optyka i spektroskopia szkieł	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-220-FM-s	Otrzymywanie tworzyw metodą krystalizacji z fazy gazowej	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-221-FM-s	Przemiany fazowe	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-222-FM-s	Spektroskopia oscylacyjna ciała stałego	0	0	0	0	0	30	0	0	0	0	0	2	No
Suma ECTS													32	
Semester 3														
Elective														
CIM-2-301-FM-s	Seminarium specjalistyczne	0	0	0	0	0	30	0	0	0	0	0	2	No
CIM-2-302-FM-s	Seminarium magisterskie	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-305-FM-s	Praca magisterska	0	0	0	30	0	0	0	0	0	0	0	20	No
Other Basic														
CIM-2-303-FM-s	Zarządzanie produkcją, usługami i personelem	30	0	0	0	0	30	0	0	0	0	0	2	No

Study programme - Materials Science - 2017/2018

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Przedmiot obieralny anglojęzyczny (Df)													3	
The rules for selecting groups/modules: Student wybiera jeden przedmiot z listy modułów.														
CIM-2-304-FM-s	BioComposites	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-306-FM-s	Theory and practice of ceramics processes	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-307-FM-s	Thermoelectric materials	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-308-FM-s	Synthesis of nanosized particles and their application in nanoceramics and nanocomposite technology (Prof. Thomas Graule)	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-309-FM-s	Syntesis, sintering and behaviour of nanostructured materials (Prof. Kiyotaka Matsuura)	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-310-FM-s	Numerical methods in materials science	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-311-FM-s	Advanced forming methods	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-312-FM-s	BioSurface Engineering (Prof. Dieter Scharnweber)	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-313-FM-s	Degradation of engineering materials	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-314-FM-s	Recent developments and applications of refractories (Dr hab. Janusz Zborowski)	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-315-FM-s	Advanced chemical analysis	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-316-FM-s	Chemistry and technology of cementitious materials	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-317-FM-s	Materials Science in Space Technologies	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-318-FM-s	Physical Chemistry of Surfaces and Surface Analytical Techniques	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-319-FM-s	Experimental methods in solid state chemistry	15	0	0	0	0	15	0	0	0	0	0	3	No
CIM-2-320-FM-s	Neurochemistry and Neuropharmacology	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-321-FM-s	Neurobiology of drug dependence	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-322-FM-s	Introductory Quantum Chemistry	0	0	0	0	0	30	0	0	0	0	0	3	No
CIM-2-323-FM-s	Wear behaviour of high-temperature ceramics in extreme environment applications	0	0	0	0	0	28	0	0	0	0	0	3	No
CIM-2-324-FM-s	Atomic Force Microscopy and its variants in advanced measurements	0	0	0	0	0	30	0	0	0	0	0	3	No
Suma ECTS													30	