BASIC DATA	
Name of the programme:	**Materials Engineering**
Degree awarded:	**BSc**
Name of qualification:	**BSc in Materials engineering**
Field of the programme:	engineering
Branch of the programme:	Metal Technologies

Name of the course			1. semester				2. semester				3. semester				4. semester				5. semester				6. semester				7. semester			
Courses	NEPTUN ID	PRE-REQUISITE (if any)	LECTURE	PRACTICAL COURSE	CREDIT	REQUIREMENTS*	LECTURE	PRACTICAL COURSE	CREDIT	REQUIREMENTS*	LECTURE	PRACTICAL COURSE	CREDIT	REQUIREMENTS*	LECTURE	PRACTICAL COURSE	CREDIT	REQUIREMENTS*	LECTURE	PRACTICAL COURSE	CREDIT	REQUIREMENTS*	LECTURE	PRACTICAL COURSE	CREDIT	REQUIREMENTS*	LECTURE	PRACTICAL COURSE	CREDIT	REQUIREMENTS*
CORE COURSES																														
Descriptive Geometry	GEAGT104-B		0	3	3	P																								
General Chemistry	MAKKEM218VB		2	2	4	E																								
Materials Science	MAKFKT120B		2	2	4	E																								
Material testing	MAKPOL227B		2	2	4	E																								
Basics of Physics	GEFIT051B		0	2	2	P																								
Scientific work technics for engineers	MAKETT120B		0	2	2	P																								
Basic Legal Studies	AJPJT11KO1NB		2	0	2	P																								
Mathematics I.	GEMAN011B		3	3	6	E																								
Everyday's material knowledge	MAKFKT121B		2	0	2	R																								
Energy Rroduction and Transformation	MAKETT301B						2	0	2	E																				
Physics I.	GEFIT056B	Basics of Physics					2	2	4	E																				
Physical Chemistry	MAKKEM222-17-B	General Chemistry					2	3	5	E																				
Mechanical Drawing-Machine Elements	GEGET224B	Descriptive Geometry					2	2	4	E																				
Heat transfer calculations	MAKETT121B						0	2	2	P																				
Investigation of Material Structure	MAKFKT101-22-B	Materials Science					2	2	4	E																				
Mathematics II.	GEMAN012B	Mathematics I.					3	3	6	E																				
Physical metallurgy	MAKFKT225-22-B										3	3	6	E																
Furnances and Burners	MAKETT302-22-B	Energy Release and Transformation									2	2	4	E																
Theory of Ceramics	MAKKSZ218-22-B										3	3	6	E																
Mechanics	GEMET266B										2	2	4	E																
Polymer study	MAKPOL228-22-B										3	3	6	E																
CAD	MAKÖNT120B	Mechanical Drawing-Machine Elements									0	3	3	P																
Engineering Calculations	MAKKSZ219-22-B														1	2	3	P												
Powder technologies	MAKMKT214-17-B														2	1	3	E												
Quality affair	MAKFKT122B														2	0	2	E												
Nano and space materials															3	0	3	E												
Analytical Chemistry	MAKKEM231B	General Chemistry																	2	2	4	E								
Introduction to electronics	MAKKSZ241B																		2	2	4	E								
Waste utilization	MAKETT304-22-B																		1	2	3	P								
Special Materials	MAKFKT104B																		2	0	2	B								
Additive technologies	MAKÖNT126-22-B	Physical Chemistry																	2	2	4	P								
Metallic materials	MAKFKT128-22-B	Physical metallurgy																					2	2	4	E				
Automatization	MAKÖNT121-22-B	Basics in Electrotechnic																					1	2	3	P				
Environmental Protection	MAKETT124B	Energy Release and Transformation																					2	0	2	E				
Management and Business studies	MAKMKT215VB																						2	0	2	E				
Energy storage	MAKETT293B																										2	0	2	E
Engineering communication	MAKMET124B																										0	2	2	P
Conformity of Measurements	MAKFKT112-22-B																										0	3	3	P
SPECIALIZATION COURSES																														
Physical metallurgy of cast alloys	MAKFKT303-22-B	Physical metallurgy													2	2	4	P												
Form and Core Making	MAKÖNT124B	Physical Chemistry													2	1	3	E												
General casting	MAKÖNT006-22-B	Physical Chemistry													2	1	3	E												

Surface treatment and coatings	MAKFKT123B	General Chemistry													2	2	4	P												
Metallurgy of light-metal alloys	MAKMET121-22-B														2	1	3	E												
Iron and Steel Metallurgy	MAKMET256B														2	1	3	E												
Aluminium casting	MAKÖNT123B	General casting																	2	1	3	E								
Secondary steel metallurgy and continuous casting	MAKMET123B																		2	0	2	E								
Pressure and die casting	MAKFKT125B	General casting																	2	2	4	P								
Forging technologies and equipments	MAKÖNT125B	Physical metallurgy																					2	2	4	E				
Heat treatment of Ferrous alloys	MAKFKT126B	Physical metallurgy																					2	2	4	E				
Heat treatment of non-ferrous and light met	MAKFKT127B	Physical metallurgy																					2	2	4	E				
Iron casting	MAKÖNT127B	General casting																					2	1	3	E				
Rolling	MAKMET120-22-B																						2	1	3	E				
Simulation of technologies	MAKÖNT128-22-B																										1	3	4	P
Industrial case studies	MAKFKT118-22-B																										0	3	3	R
OPTIONAL COURSES																														
Optional course											2	0	2	R	2	0	2	R	2	0	2	R	2	0	2	R	2	0	2	R
DISSERTATION/THESIS WORK																														
Thesis work	MAKDH210B																										0	15	15	P
OTHER/SPECIAL COURSES																														
Industrial practice	MAKDH207B																		0	40	0	R								
Final practice	MAKDH209-17-B																										0	40	0	R

*Requirements: (e)exam/ (m) practical mark/ (s)signature / (r) report/essay