

Subjects of the First Study Cycle							
Subject code	Subject	Subject status	Faculty	Department/section	Year/semester	Fund hours	ECTS
02K08-001	Physical metallurgy	Obligatory	FENS	EM-mm/EM	III/V	3/2/0	6
02K08-002	Testing of metallic materials I	Obligatory	FENS	EM/EM	II/IV	3/2/1	5
02K08-003	Testing of metallic materials II	Obligatory	FENS	EM-mm	III/V	2/0/3	6
02K08-017	Testing of metallic materials III	Obligatory	FENS	EM-mm	IV/VII	2/0/2	3
02K08-018	Composite materials	Elective	FENS	ChE	IV/VII-VIII	2/1/1	5
02K08-014	Composite metal materials	Obligatory	FENS	EM-mm	III/VI	2/2/0	5
02K08-004	Iron-based castings	Obligatory	FENS	EM-mm	IV/VII	2/1/1	3
02K08-007	Materials	Obligatory	FENS	SWFP	II/IV	3/2/0	7
02K08-029	Materials	Obligatory	MF	ME	I/I	3/2/0	6
02K08-037	Materials I	Obligatory	MF	ME	I/I	2/2/0	5
02K08-009	Materials and the environment	Elective	FENS	EEP	IV/VII-VIII	2/2/0	5
02K08-019	Materials and the environment	Obligatory/Elective	FENS	IM-mm/Hi	IV/VIII	2/1/0	4
02K08-038	Materials II	Obligatory	MF	ME	I/II	2/2/0	5
02K08-049	Materials in construction I	Obligatory	PTF	CE	I/I	2/2/0	5
02K08-041	Materials in production	Obligatory	PTF	MB	I/I	3/2/0	5
02K08-005	Fracture mechanics	Obligatory	FENS	EM-mm	III/VI	3/2/0	6
02K08-006	Metal materials	Obligatory	FENS	EM/EM	II/IV	2/1/0	4
02K08-020	Metallography	Elective	FENS	EM-mm	IV/VII	2/0/2	5
02K08-021	Welding metallurgy	Obligatory	FENS	EM-mm	IV/VII	3/1/2	7
02K08-022	Microstructures of metallic materials	Elective	FENS	ChE	IV/VII-VIII	2/1/1	5
02K08-023	Nanomaterials	Elective	FENS	EM-mm	IV/VII-VIII	2/2/0	5
02K08-008	Materials Science	Obligatory	FENS	EM/MI	II/III	2/2/0	4
02K08-024	Low temperature alloys	Elective	FENS	EM-mm	IV/VII-VIII	2/0/2	5
02K08-025	Principles of material selection	Obligatory	FENS	EM-mm	IV/VII	2/2/0	6
02K08-026	Principles of material selection	Elective	FENS	EM-nm	IV/VII	2/1/1	5
02K08-010	Special steels	Obligatory	FENS	EM-mm	IV/VII	2/0/1	3
02K08-012	Standardization and quality	Elective	FENS	EEP	IV/VII-VIII	2/2/0	5
02K08-013	Standardization and quality	Elective	FENS	SWFP	IV/VII-VIII	2/2/0	5
02K08-027	Standardization in production	Obligatory	FENS	EM-mm	IV/VIII	2/2/0	6

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02K08-016	Superalloys	Elective	FENS	EM	VII/VIII	2/0/2	5
02K08-011	Heat treatment of metals	Obligatory	FENS	EM-mm	III/VI	3/1/2	7
02K08-028	Heat treatment of metals	Obligatory	FENS	EM	IV/VII	2/1/2	5
02K08-040	Heat treatment of metals	Obligatory	PTF	MB	III/VI	2/2/0	4

FENS – Faculty of Engineering and Natural Sciences, MF – Mechanical faculty, PTF – Polytechnic faculty, EM – Engineering of Metallurgy, EM-mm- Engineering of Materials metallic materials, EM-nm – Engineering of Materials – nonmetallic materials; EEP – Engineering of Environment Protection, ChE – Chemical Engineering, SWFP – Safety at Work and Fire Protection, ME – Mechanical Engineering, MB – Manufacturing Business, CE – Civil Engineering

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02K08-042	Physical metallurgy – selected chapters	Obligatory	FENS	PDS/IM-mm	I/I	3/2/0	6
02K08-043	Material testing of highly demanding components	Elective	FENS	PDS/IM-mm	I/I	3/1/1	6
02K08-044	Calibration of measuring devices for mechanical tests	Elective	FENS	PDS/IM-mm	I/I	3/1/1	6
02K08-045	Metal materials for special purposes	Elective	FENS	PDS/IM-mm	I/I	3/0/2	6
02K08-046	Surface coatings	Elective	FENS	PDS/IM-mm	I/I	3/0/2	6
02K08-047	Modern methods of testing the structure and microstructure of metallic materials	Elective	FENS	PDS/IM-mm	I/I	3/0/2	6
02K08-048	Modern tool steels	Elective	FENS	PDS/IM-mm	I/I	3/1/1	6

Subjects of the Third Study Cycle (Joint study of technical faculties)				
Subject	Subject status	Semester	Fund hours	ECTS
Phase transformations in materials	Elective	I/II/III	20	5
Heat treatment of steel for special purposes and iron castings	Elective	I/II/III	20	5
Selected chapters from the testing of metallic materials	Elective	I/II/III	20	5
Steels for special purposes	Elective	I/II/III	20	5
Heat treatment of non-ferrous metals	Elective	I/II/III	20	5