



SVEUČILIŠTE U ZAGREBU
METALURŠKI FAKULTET

UNIVERSITY OF ZAGREB
FACULTY OF METALLURGY

UNDERGRADUATE UNIVERSITY VOCATIONAL PART-TIME STUDY PROGRAMME IN FOUNDING



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FIRST YEAR

I. semester

COURSE	Hours per week			ECTS
	L	S	E	
Mathematics	3	0	2	6
Physics	3	0	2	6
General and inorganic chemistry	3	0	2	7
Technical drawing and machine elements	2	0	2	5
Introduction to entrepreneurship	2	1	0	3
English language I	1	0	1	3
	24			30

II. semester

COURSE	Hours per week			ECTS
	L	S	E	
Fundamentals of physical metallurgy	3	1	0	6
Thermodynamics and kinetics of metallurgical processes	3	0	0	6
Heating technology	2	0	2	5
Chemical analysis and measurements in founding	2	0	2	5
Quality management	2	0	2	5
English language II	1	0	1	3
	21			30

SECOND YEAR

III. semester

COURSE	Hours per week			ECTS
	L	S	E	
Technology of making molds and cores	3	0	2	5
Classification and properties of casting alloys	2	1	0	5
Fundamentals of solidification and microstructure development	3	0	1	6
Furnaces in founding and refractory materials	3	0	1	5
Melting technology and quality control of the melt	3	0	2	5
Disposal and recycling of the casting materials	2	1	0	4
	24			30

IV. semester

COURSE	Hours per week			ECTS
	L	S	E	
Designing of gating and feeding systems	2	0	2	5
Casting technology of ferrous metals	3	0	1	5
Casting technology of non-ferrous metals	3	0	1	5
Application of information technologies in founding	2	0	2	5
Heat treatment	2	0	0	5
Materials testing	2	0	2	5
	22			30

THIRD YEAR

V. semester

COURSE	Hours per week			ECTS
	L	S	E	
Metallographic analysis	2	0	2	5
Analysis of casting defects	2	0	0	5
Welding	2	0	1	4
Casting of aluminum semi-products ^{(e)*}	2	1	0	4
Fundamentals of modeling in founding ^{(e)*}	2	0	1	4
Corrosion and protection of castings ^{(e)*}	2	1	0	4
Surfaces engineering ^{(e)*}	2	1	0	4
Vocational practice	0	0	4	6
Final thesis	0	5	0	6
	21			30

L – lectures, S – seminars, E – exercises

* from four elective courses (e) choose one