# MANUFACTURING ENGINEERING

#### **DEGREE TYPE UPON GRADUATION**

Bachelor's Degree

### **DURATION**

4 years (8 semesters)

#### **TEACHING LANGUAGE**

Romanian

#### **ECTS POINTS**

240

#### PROGRAMME DESCRIPTION

The *Manufacturing Engineering* study program prepares research, design and production engineers to operate in any industrial enterprise or service-providing company, in areas related to: classical, unconventional, computer-assisted processing technologies; design of products and installations; design and use of work, control and assembly equipment; design, organization and management of manufacturing processes; industrial management; quality of production.

#### **TUITION**

EU citizens: 3900 RON (approx. € 780)

Non-EU citizens: € 2430

## **ENTRY REQUIREMENTS**

Baccalaureate Diploma

# **REASONS TO CHOOSE THIS PROGRAMME**

- Profession with a wide openness on the labour market;
- Skills with high adaptability in the current economic environment;
- Opportunity for a well-paid job in the field.

## **CAREER OPPORTUNITIES**

- mechanical engineer
- designer mechanical engineer
- · mechanical processing engineer technologist
- research engineer in process equipment

• research engineer in machine building technology

# **PROGRAMME DETAILS**

_		I <sup>st</sup> YEAR			•
I <sup>st</sup> SEMESTER			II <sup>nd</sup> SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Linear Algebra, Analytical and Differential Geometry	4	Е	Mathematical Analysis II	3	Е
Mathematical Analysis I	5	E	Numerical methods	3	E
Chemistry	3	E	Computers programming and programming languages	3	V
Physics	5	Е	Technical Drawing	4	V
Descriptive Geometry	5	V	Technology of Materials	5	Е
Materials Science	5	E	Mechanics I	4	Е
Physical education I *	1	A/R	Basics of the economy	2	Е
French I	3	V	Physical education II	1	A/R
English I			Internship	3	C
			English II	3	V
·			French II	)	· ·

<sup>\*</sup> course credit points (ECTS) are not taken into account within the semester credit points (ECTS)

		II <sup>nd</sup> YE	AR		
I <sup>st</sup> SEMESTER			II <sup>nd</sup> SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Special Mathematics	3	Е	Resistance of Materials II	4	E
Computer Graphics	5	V	Machine Parts I	3	E
Mechanics II	4	Е	Splinting Manufacturing	3	E
Resistance of Materials I	4	Е	Mechanisms	4	E
Electrotechnics and Electrical Machines	3	Е	Machine – tools Vibrations	2	Е
Fluid Mechanics and Pneumatic Equipment	3	Е	Thermotechnics and Thermal Equipment	3	С
Enterprise Economy	3	V	Electrotechnics and Automation	3	V
Physical education III *	1	A/R	Fundamentals of Computer Aided Technological Design	3	V
English III	3	V	Physical education IV *	1	A/R
French III	3	V	Internship II	3	С
Communication		V	English IV	2	V
Ethics and academic integrity	2		French IV		

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		III <sup>rd</sup> YEAF	R			
I <sup>st</sup> SEMESTER			II <sup>nd</sup> SEMESTER			
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment	
Tolerances and Dimensional Control	5	Е	Splinting Tools	4	Е	
Machine Parts II	4	Е	Splinting Tools - project	2	V	
Machine-tools	5	Е	Quality management	4	E	
Functional design	3	Е	Technological Devices I	3	Е	
Functional design - project	2	V	Numerically controlled manufacturing systems	3	С	
Computer Aided Design of Products- CAD systems	5	V	Cold Deformation Technologies I	3	Е	
Thermal treatments	3	Е	Machine building technology I	6	Е	
Finite element method Tribology	3	V	Field Internship	5	С	

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		IV <sup>th</sup> YEAF	l .			
I <sup>st</sup> SEMESTER			II <sup>nd</sup> SEMESTER			
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment	
	3	Е	Assembling Technologies	3	Е	
Cold Deformation Technologies II	4	Е	Cold Deformation Technologies - project	3	V	
Machine building technology II	5	Е	Technology of Non- metallic Parts	4	Е	
Machine building technology - project	3	V	Computer-assisted manufacturing - CAM systems	4	V	
Technological Devices II	5	Е	Organisational culture	2	E	
Technological Devices - project	3	V	Drafting of the BD Thesis	4	V	
Unconventional technologies	3	Е	Internship for BD Thesis	4	С	
Reliability and maintenance			Ergonomics			
Production and operations management I			Competing Engineering	3	Е	
Logistics	4	V	Production and operations management II Risk management	3	С	

<sup>\*</sup> course credit points (ECTS) are not taken into account within the semester credit points (ECTS)

<sup>\*</sup> V = test taken in the last two weeks of the semester (about 10% of the final grade)

<sup>\*</sup> C = test taken in the last two weeks of the semester (about 30% of the final grade)

\* E = exam taken during the exam period (at least 50% of the final grade)