

Study program: Mechanical Engineering				
Type and level of studies: MSC				
Course unit: Engineering economy				
Teacher in charge: Snezana Nestic				
Language of instruction: English				
ECTS: 6				
Prerequisites: no				
Semester: <i>Summer semester</i>				
Course unit objective:				
The objective of the course is to familiarize students with theoretical and practical knowledge in the field of engineering economics and enables to independently design and analyze projects from an economic aspect.				
Learning outcomes of Course unit				
At the end of the course students are expected to be able to: understand theories of costs, investments, cash flows and engineering decisions; to independently analyze and anticipate solutions to problems in the field of engineering economics; use methods for assessing the economic effectiveness of projects.				
Course unit contents				
<i>Theoretical classes</i>				
The Principles of Engineering Economy. The Engineer's Role in Profit Creation. Cost Concepts Relevant to Decision Making and Design Economics. Cost-Estimation Techniques. The Time Value of Money. Evaluating a Single Project. Comparison and Selection among Alternatives. Developing Project Cash Flows. Depreciation and Income Taxes. Evaluating Projects with the Benefit–Cost Ratio Method. Project Risk and Uncertainty.				
<i>Practical classes</i>				
Calculating the exercise include the practical work of students to the solve problems in the field of engineering economics.				
Literature				
[1] Sullivan W., Wicks E., & Luxhoj J. (2006). <i>Engineering Economy</i> . Upper Saddle River, N.J.: Prentice Hall.				
[2] Park, C. (2004). <i>Fundamentals of engineering economics</i> . Upper Saddle River, NJ: Pearson/Prentice Hall				
Number of active teaching hours				Other classes 1
Lectures: 3	Practice: 2	Other forms of classes: mentoring system	Independent work: 0	
Teaching methods				
Teaching is comprised of lecturing by the use of modern teaching resources - video presentations and educational films and oral exercises. Evaluation of knowledge: tests and seminar.				
Examination methods (maximum 100 points)				
Exam prerequisites	No. of points:	Final exam	No. of points:	
Student's activity during lectures	-	oral examination	30	
practical classes/tests	30	written examination		
Seminar/homework	15		
Seminar presentation	25			
Grading system				
Grade	No. of points	Description		
10	91-100	Excellent		
9	81-90	Exceptionally good		
8	71-80	Very good		
7	61-70	Good		
6	51-60	Passing		
5	≤50	Failing		