

<b>Study program / course: Mechanical Engineering</b>				
<b>Type and level of study: Master academic studies</b>				
<b>Course: Solar Engineering</b>				
<b>Lecturers: Bojić Lj. Milorad</b>				
<b>Status of course: Elective for module M<sub>4</sub>, III semester</b>				
<b>Number of ECTS: 6</b>				
<b>Precondition: None</b>				
<b>The objective of course:</b> Education objective is to introduce student with characteristics, design, and analyses of operation of devices and installations for Solar energy.				
<b>The outcome of course</b> Based on obtained knowledge, students will be qualified to design and analyze operation of devices and installations for Solar energy.				
<b>Syllabus</b> Solar energy. Plate and air Solar collectors. Solar plants. Accumulation of Solar energy. Passive use of Solar energy. Solar concentrators. Solar pools. Solar dryers and distillatory. Photo-electricity. Solar engines and Solar power plants. Heat pumps aided by Solar energy. Economy of work with Solar energy. Industrial production of Solar plate collectors. During their exercises in computer room, students design an installation of solar collector. On two field and one laboratory exercise, students are introduced to devices for solar energy use and measure thermal characteristics of these devices.				
<b>Recommended reading</b> 1. Bojic, M., Solar Engineering (in Serbian), Mechanical Engineering faculty at Kragujevac, 2008. 2. UNESCO Office in Venice Regional Bureau for Science in Europe (ROSTE), Solar thermal engineering, European Network on Education and Training in Renewable Energy Sources (EURONETRES), 2008. 3. Messenger, R., Venture, J., Photovoltaic Systems Engineering, CRC PRESS, Boca Raton, 2004.				
The number of hours of active teaching:				
Theory: 3	Practical classes: 1.4	Other forms of teaching: 0.6	Research study: 0	Other classes: 1
<b>Methods of teaching</b>				
<b>Evaluation of knowledge</b>				
<b>Pre-final exam obligations</b>	<b>Points</b>	<b>Final exam</b>	<b>points</b>	
Activities during the classes:	<b>5</b>	Final exam	<b>30</b>	
Activities during practical classes:	<b>5</b>			
Colloquiums(s) :	<b>30</b>			
Project(s) :	<b>30</b>			