

<b>Course title:</b> Research methods (ID012)		
<b>Lecturer(s):</b> Zoran D. Budimac		
<b>Status:</b> (obligatory/elective): Obligatory		
<b>ECTS:</b> 7		
<b>Requirements:</b> None		
<b>Learning objectives</b> Presentation and development of concepts, organizational structure and deliverables of a research project, using quantitative and qualitative methods and their combinations. An attention is paid to the ways of adequate (written and oral) presentations of deliverables. It is also expected an understanding and appreciation of different ways of organization, planning and execution of technical research projects.		
<b>Learning outcome</b> Successful student will be able to: <ul style="list-style-type: none"> <li>- Formulate plan and lead research project</li> <li>- Choose and evaluate an appropriate research method</li> <li>- Present adequately results of research project</li> <li>- Demonstrate experience in processes and methods for structuring, collecting and processing data in technological environment.</li> </ul>		
<b>Syllabus</b> <i>Theory</i> Studying and classification of research methods. Overview of fundamental skills and knowledge in: communication and presentation, literature review, technical reports... Analysis of problems and evaluation of performances. Applied statistical methods. Research project management. <i>Practice</i> Using software tools in application of chosen statistical methods		
<b>Recommended literature</b> 1. CLELAND & KING Project management handbook 2nd edition, van Nostrand Reinhold. 2. LAMERS & ARNOLD, Report writing for science, technology and management, Wageningen Agricultural University, 1990. 3. MONTGOMERY DOUGLAS C, introduction to statistical quality control 2nd edition, John Wiley and Sons. 4. STRAKER DAVID, A toolbook for quality improvement and problem solving, Prentice Hall, 1995 5. BHOTE KELIR, World class quality, American Management Association		
<b>Weekly teaching load</b>	Lectures: 3	Student research: 0
<b>Teaching methodology</b> During lectures classical teaching methods using projector are used. Students individually work on specific assignments, take part in thematic workshops, and discuss results with other students and lecturer.		
<b>Grading method (maximal number of points 100)</b>		
Exam is passed by a) solving assignments that represent exam entry criterion (50 points) and b) by oral exam / presentation (50 points).		