

Level: bachelor				
Course title: Research methods (I380)				
Status: elective				
ECTS: 7.5				
Requirements: none				
Learning objectives Presentation and development of concepts, organizational structure and deliverables using the quantitative and qualitative methods. It is expected that the students will deeply understand ways of organizing, planning, implementing and leading technical research projects.				
Learning outcomes <i>Minimal:</i> Students will have the ability of communication and formulating the goals within the scope of a research project; ability to prepare, plan and track technical research project; to demonstrate the knowledge of critical evaluation and analysis of the project. <i>Optimal:</i> Student will have the ability to select the appropriate research method while collecting data as well as knowledge and experience in procedures for structuring, collecting and processing of data that are needed in technological environment.				
Syllabus <i>Theoretical instruction</i> Theoretical approaches to the project – managing the project and management of the quality, communication skills, including presentation skills, literature and patents review, and writing of technical reports. Theoretical fundamentals of research methods, problem analysis and solving techniques, problem structuring methods, qualitative methods of system analysis and evaluation of performances, quantitative methods for collecting and analysis of data, experimental design, analysis of performances, plagiarism, references and health / security issues of research. <i>Practical instruction</i> Exercising of covered skills and methods on case studies using some of the software tool for project management.				
Weekly teaching load				Other:
Lectures: 3	Exercises: 2	Other forms of teaching:	Student research:	