

Study program: Civil Engineering			
Course: Quality Management and Value Engineering			
Professor: PhD Ljiljana N. Andelković			
Status of course: elective			
ECTS credits: 4			
Pre-requisites: none			
Aims of the course: The main aim of the course is: <ul style="list-style-type: none"> - getting students acquainted with the basics of the quality management system for building projects; - getting students familiar with the possibilities of application and the ultimate range of different quality systems; - training students to understand the basics of value engineering. 			
Learning outcomes: After successfully finishing the course, a student is capable of: <ul style="list-style-type: none"> - familiar with legal acts, rules and procedures that regulate the planning, design and construction of buildings; - capable of managing the construction process in accordance with the legislation; - capable of keeping the necessary documentation during the construction process of a building; - able to participate in the process of obtaining a usage permit; - capable of participating in the process of contracting the construction work. 			
Syllabus: <u>Theoretical part</u> Relation with other scientific areas and objects. Definition of quality. Quality of the construction project. Quality management systems - historical development. Detection systems. Inspection. Quality control. Detection systems for construction projects. Costs of quality. Quality tools and techniques. ISO standards. Prevention systems for construction projects. Quality management at different stages of project realization. Process-oriented management methods. The term "values". The concept of methodology. FAST diagrams. QFD methodology. JOB PLAN. Methodology of application of value engineering in construction projects. <u>Practical part</u> Quality management: application of quality tools, practical examples. Elaborate. Colloquium. Valuable Engineering: Study - Computational Examples of Value Engineering. Colloquium.			
Literature: <ol style="list-style-type: none"> 1. Sears, K., Sears, A., Clough R., Asford, J.L. (2008): <i>Construction Project Management: A Practical Guide to Field Construction Management</i>, Wiley. 2. Asford, J.L. (2007): <i>Management of Quality in Construction</i>, Taylor&Francis. 3. Kelly, J., Male S., Graham, D. (2002): <i>Value Management of Construction Projects</i>, Wiley-Blackwell. 4. Ćirović, G., Lazić-Vojinović, S.: <i>Upravljanje kvalitetom u građevinarstvu</i>, Visoka građevinsko-geodetska škola, Beograd, 2007. 5. Lazić-Vojinović S, <i>Upravljanje kvalitetom u građevinarstvu</i>, VGGŠ, 2009. 			
Number of active classes			Other forms of teaching:
Lectures: 2	Practical classes: 0	Laboratory classes: 0	
Teaching methods: Interactive classes incl. solving practical examples.			
Grading system (maximum 100 points), grading scale from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.			
Pre-commitments	points	Final exam	points
activity during lectures	5	written exam	-
colloquium(s)	50	oral exam	30
seminar paper(s)	15		
Sum	70	Sum	30