Faculty of Civil Engineering / INFRASTRUCTURES / MODELING IN HYDROTECHNICS

Course:	MODELING IN HYDROTECHNICS			
Course ID	**Course status**	**Semester**	**ECTS credits**	**Lessons** (Lessons+Exercises+Laboratory)
11952	Mandatory	2	5	1+0+3
Programs	INFRASTRUCTURES			
Prerequisites				
Aims	Gaining basic knowledge in designing and performing the hydrotechnical aspect.			
Learning outcomes				
Lecturer / Teaching assistant	Dr Goran Sekulić			
Methodology	Lectures, exerc., Consultations, homework, etc..			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	Basics facts about software BCE-ON to simulate the hydrological processes in nature.			
I week exercises	Basics facts about software BCE-ON to simulate the hydrological processes in nature.			
II week lectures	Basics facts about software BCE-ON to simulate the hydrological processes in nature.			
II week exercises	Basics facts about software BCE-ON to simulate the hydrological processes in nature.			
III week lectures	Basics facts about software BCE-ON to simulate the hydrological processes in nature.			
III week exercises	Basics facts about software BCE-ON to simulate the hydrological processes in nature.			
IV week lectures	The basics of the software to determine the probability of a random hydrological size (distribution function) MATSTAT-DISTRIBUTION.			
IV week exercises	The basics of the software to determine the probability of a random hydrological size (distribution function) MATSTAT-DISTRIBUTION.			
V week lectures	The basics of the software to determine the probability of a random hydrological size (distribution function) MATSTAT-DISTRIBUTION.			
V week exercises	The basics of the software to determine the probability of a random hydrological size (distribution function) MATSTAT-DISTRIBUTION.			
VI week lectures	COLLOQUIUM I			
VI week exercises	COLLOQUIUM I			
VII week lectures	Free week			
VII week exercises	Free week			
VIII week lectures	The basic of software to simulate the water supply networks (EPANET, WESNET)			
VIII week exercises	The basic of software to simulate the water supply networks (EPANET, WESNET)			
IX week lectures	The basic of software to simulate the water supply networks (EPANET, WESNET)			
IX week exercises	The basic of software to simulate the water supply networks (EPANET, WESNET)			
X week lectures	The basic of software to simulate sewer networks (EPASWMM, SEWER)			
X week exercises	The basic of software to simulate sewer networks (EPASWMM, SEWER)			
XI week lectures	The basic of software to simulate sewer networks (EPASWMM, SEWER)			
XI week exercises	The basic of software to simulate sewer networks (EPASWMM, SEWER)			
XII week lectures	The basic of software to optimize hydropower tunnels and designing HPP			
XII week exercises	The basic of software to optimize hydropower tunnels and designing HPP			
XIII week lectures	The basic of software to simulate flow in open watercourses and canals (HEC-RAS, REKA)			
XIII week exercises	The basic of software to simulate flow in open watercourses and canals (HEC-RAS, REKA)			
XIV week lectures	The basic of software to simulate flow in open watercourses and canals (HEC-RAS, REKA)			
XIV week exercises	The basic of software to simulate flow in open watercourses and canals (HEC-RAS, REKA)			

XV week lectures	COLLOQUIUM II
XV week exercises	COLLOQUIUM II
Student workload	Week 4.5 credits x 40/30 = 6 hours. Total hours for the course 4.5x30 = 135 hours

Per week	Per semester
5 credits x 40/30=6 hours and 40 minuts 1 sat(a) theoretical classes 3 sat(a) practical classes 0 excercises **2 hour(s) i 40 minuts** of independent work, including consultations	Classes and final exam: **6 hour(s) i 40 minuts x 16 =106 hour(s) i 40 minuts** Necessary preparation before the beginning of the semester (administration, registration, certification): **6 hour(s) i 40 minuts x 2 =13 hour(s) i 20 minuts** Total workload for the subject: **5 x 30=150 hour(s)** Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) **30 hour(s) i 0 minuts** Workload structure: **106 hour(s) i 40 minuts (cources), 13 hour(s) i 20 minuts (preparation), 30 hour(s) i 0 minuts (additional work)**
Student obligations	
Consultations	
Literature	
Examination methods	Knowledge checking is carried out continuously throughout the semester and the final exam. The minimum level of knowledge during the semester for pass rate is 51 points. The maximum possible number of points is 100 / semester.
Special remarks	
Comment	Additional information can be obtained at the present teachers, assistants, head of the study program with Dean for Academic Affairs.

Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points