NAME OF THE COURSE SMART CITY MANAGEMENT									
Code	EUBDO		Year of study 2						
Course teacher	Associate professor Silvia Golem, PhD Associate professor Maja Ćukušić, PhD Associate professor Mario Jadrić, PhD		Credits (EC	TS)	5				
Associate teachers	Ivana Ninčević, mag. oec. Experts: Marko Bartulić, Nikola Letilović, univ. spec. oec., Tomislav Alujević Grgas, univ. spec. oec.		Type of inst (number of		L 26	S	E 26	F	
Status of the course	Elective	9	Percentage application	of of e-learning	40%				
		COURSE	E DESCRIPT	ION					
Course objectives	 Get a complete insight into the concepts, approaches, standards, methods, tools and technologies needed to manage smart cities effectively. Develop students' ability to implement, optimise and manage e-services for citizens and businesses in the urban surrounding. 								
Course enrolment requirements and entry competencies required for the course	There are no prerequisites for enrollment. All graduate students of Business studies can enrol in this elective course.								
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	 Course learning outcomes: To critically evaluate the status and potential for the development and management of smart cities in the country and the world. Specific expected learning outcomes of the course: Re-examine the concept of smart city and fundamental challenges/problems for urban development. (topics 1-3) Determine the role and functions of various technologies used to support smart city services and the way they are horizontally connected and managed. (topics 4-6) Evaluate the effects of the implementation of individual technologies and services by designing and optimising analytical, process and simulation models to support strategic decision making. (topics 7-9) Create a plan that will, through a focus on one of the six standard smart city domains, highlight the potential of using technologies to develop a city in the direction of being smart and sustainable. (topics 10-13) 								
		Exercises							
Course content broken down in detail by weekly class schedule (syllabus)		Lectures Topic	Hour	S	Торіс			Hours	
	presei lecture	e introduction, ntation of topics and ers. The job profile o City Manager.		Presentat purpose a practical a assignme outcomes	nd struc issignme nt. Learr	ture of ents and		2	

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	Topic 1. Basic concepts and perspectives of urban development.	2	Assignment . Initiatives for the development of EU cities (focus on Digital Cities Challenge). Caste study.	2
	Topic 2. Different concepts of urban development.	2	Assignment . Digital transformation of local governments. Case study.	2
	Topic 3. The importance and role of the smart city concept.	2	Assignment. Citizen engagement in decision making in smart cities. Case study.	2
	Topic 4. Smart cities support technologies (sensors, IoT, RFID, UAV).	2	Assignment . E-participation. Analysis and development of usage models for different tools.	2
	Topic 5. Importance of standardisation and interoperability of solutions for smart city development.	2	Assignment . Co-creation in smart cities. Working with co-creation kits.	2
	Topic 6. Big data and dashboards in cities.	2	Assignment. Creating a dashboard in Tableau.	2
	Test			
	Topic 7. Predictive Analytics for Managing Smart Cities.	2	Assignment . Creating an analytical model in Rapid Miner.	2
	Topic 8. Process mining and service optimisation in cities. Topic 9. Simulation modelling of smart services in cities.	2	Assignment. Creating process maps in Disco software. Assignment. Creating a Discrete Simulation Model in the Arena.	2
	Topic 10. Guest lecturer (city official) - selected topic from one of the six standard smart city domains.	2	Assignment. Case study with the expert.	2
	Topic 11. Guest lecturer (city official) - selected topic from one of the six standard smart city domains.	2	Assignment . Case study with the expert.	2
	Topic 12. Guest lecturer (city official) - selected topic from one of the six standard smart city domains.	2	Assignment . Case study with the expert.	2
	Topic 13. Guest lecturer (city official) - selected topic from	2	Assignment. Case study with the expert. Presentation of the final assignment.	2

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	one of the six	smart						
	city domains.							
	Test							
	x lectures			xi	ndependent	assignments		
	I X Seminars and Workshops				x independent assignments x multimedia			
Format of instruction								
					work with m	ork with mentor		
	x partial e-learning					r)		
		equirement for taking the test: 4 out of 7 assignments completed for the first test,						
Chudont	and 4 out of 6 f	-			rassignmer	its completed to	n the fi	si lesi,
Student responsibilities				nlete	d final assic	nment, as well	as nart	icinating
				•	-		•	loipating
	in at least 50% of all class meetings (25% for the part-time students).							
Screening student	attendance	ECTS	Research			Practical trainir	ng	
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proportion of ECTS	work		Report			. ,		
credits for each	Essay		Seminar essay	Seminar		Final assignme (Other)	^{nt} 1 E	CTS
activity so that the total number of					Workshop			
ECTS credits is	Tests	2 ECTS	Oral exam	h		attendance	0,3	ECTS
equal to the ECTS						(Other)	,	,
value of the course)	Written exam		Project		(Other)	· · ·		
		of contin	-			, ,		of point
	As a method of continuous student progress evaluation, the model of point							
	accumulation is chosen as it enables the collecting of points through different activities. The goal is that every student collects a sufficient number of points to get							
	a grade for their work during the semester.							
	The total of 100 points can be collected through following activities: 2 theory tests							
Grading and	(each 18 points), 13 practical assignments during Exercises (every 3 points), final							
evaluating student	assignment preparation (25 points). Bonus points can be collected by preparing							
work in class and at	critical reviews of theoretical topics and by solving additional tasks.							
the final exam	The written exam can be waived by students who get 66 points and more. Written							
	and oral exam can be waived by students who get 71 points and more. In the case of exam exemption, the score is based on the total number of points where every five							
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	 (https://www.routledge.com/Creating-Smart-Cities-1st-Edition/Coletta-Evans- Heaphy-Kitchin/p/book/9780815396253) 3. Scientific and professional papers authored by researchers in the project UIP- 2017-05-7625 https://www.bib.irb.hr/pretraga/?operators=and 6586 text project- id 	
Quality assurance methods that ensure the acquisition of exit competences	 Monitoring attendance and performance of other student obligations (teacher) Teaching Supervision (Vice-dean for Teaching) Analysis of the success of studies in all subject studies (Vice-dean for Teaching) Student Survey on the Quality of Teachers and Teaching for Each Subject Study (UNIST, Center for Quality Improvement) The exam conducted by the subject teacher examines all learning outcomes of the subject. Periodic examination of the content of the exam is conducted on the basis of which the appropriateness of the method of checking the learning outcomes (Vice-dean for Teaching) 	
Other (as the proposer wishes to add)	Within the project funded by the Croatian Science Foundation (no. UIP-2017- 7625: User-oriented process (re)design and information systems modelling based smart city services), a series of activities are planned to engage different stakehold in research and teaching activities at the doctoral and graduate level. Among othe curricular activities are planned relating to the topic of the project (such as sumr and winter schools, elective courses, mentoring graduate thesis). Through the course, students will be able to achieve predicted learning outcomes relevant for the graduate theses, which they prepare under the mentorship of project researchers. Mandatory and supplementary literature for students is purchased with project fun papers that qualify the course lecturers were prepared within the framework of project, and project partners participate as guest lecturers.	