<table>
<tr><td colspan="2">NAME OF THE COURSE</td><td colspan="5">Decision support systems</td></tr>
<tr><td>Code</td><td>EUB402</td><td>Year of study</td><td colspan="4">2</td></tr>
<tr><td>Course teacher</td><td>Associate professor Marko Hell, PhD
Associate professor Daniela Garbin Praničević, PhD</td><td>Credits (ECTS)</td><td colspan="4">5</td></tr>
<tr><td rowspan="2">Associate teachers</td><td rowspan="2">Associate professor Marko Hell, PhD
Associate professor Daniela Garbin Praničević, PhD</td><td rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>E</td><td>F</td></tr>
<tr><td>26</td><td></td><td>26</td><td></td></tr>
<tr><td>Status of the course</td><td>Obligatory</td><td>Percentage of application of e-learning</td><td colspan="4">40%</td></tr>
<tr><td colspan="7">COURSE DESCRIPTION</td></tr>
<tr><td>Course objectives</td><td colspan="6">Adopting competencies and skills to evaluate the importance and use of IT in the decision-making process</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="6"></td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">Assess the importance of a decision support system in the context of the business system

1. Identify the role of information system in business decision making
2. Perform business analysis based on historical data
3. Critically evaluate business simulation scenarios</td></tr>
<tr><td>Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6"><table>
<tr><td>Review of the importance of the subject. Information flows in organizational systems. Genetic Definition of the Information System.</td><td>2</td><td>Task 1: Creating BPMN Business Process Models (Private Processes) according to guidelines.</td><td>2</td></tr>
<tr><td>Discussion based on students' comments on forum. Importance of IS for the organizational system and for decision-making. Stakeholders.</td><td>2</td><td>Task 2: BPMN Business Process Model (Public Diagram), according to guidelines.</td><td>2</td></tr>
<tr><td>Discussion based on students' comments on forum. Process view and business technology in the context of decision making, Fundamentals of the concept of modeling the decision - making process</td><td>2</td><td>Task 3: Working in team to analyze process from chosen business system.</td><td>2</td></tr>
<tr><td>Discussion based on students' comments on forum. Formalization of business technology, sequence diagram, BPMN maturity model.</td><td>2</td><td>Task 4: Working in teams for process modelling of chosen business system.</td><td>2</td></tr>
<tr><td>Discussion based on students' comments on forum. Business information systems. Functional Information Subsystems</td><td>2</td><td>Task 5: Excel: basic functions according to examples in multimedia materials.</td><td>2</td></tr>
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	Discussion based on students' comments on forum. Information system models, decision-making and information systems.	2	Task 6: Excel: Advanced numerical data work according to examples in multimedia materials.	2
	Discussion based on students' comments on forum. The basics of business intelligence. Application of business intelligence.	2	Task 7: Excel -automatizes the work and edits the input and output documents according to examples provided in multimedia materials.	2
	Discussion based on students' comments on forum. Role of business intelligence in business. BI technology and tools.	2	Task 8: Excel – using functions for creating interactive sales document according to examples provided in multimedia materials.	2
	Discussion based on students' comments on forum. Multi-dimensional data structure and the data mining	2	Task 9: Excel – using functions for data and Pivot tables, according to examples provided in multimedia materials.	2
	Discussion based on students' comments on forum. Basic features of mining tools. From data to information, OLAP system functionality	2	Task 10: Excel – Using functions to work with text and logical functions according to examples in multimedia format.	2
	Discussion based on students' comments on forum. Modeling the dynamics of business systems; System approach	2	Task 11: Developing simple simulation model in Powersim, according to examples provided in multimedia format.	2
	Discussion based on students' comments on forum. System Dynamics Methodology, Behavior patterns of business systems.	2	Task 12: Developing the model with time series.	2
	Discussion based on students' comments on forum. Final conclusions	2	Task 13: Connecting model with Excel and work with multidimensional variables.	2

Format of instruction	x lectures ☐ seminars and workshops x exercises ☐ *on line* in entirety x partial e-learning ☐ field work	x independent assignments x multimedia ☐ laboratory ☐ work with mentor x participating in forum discussions x self-evaluation tests
Student responsibilities		

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is*	Class attendance	1,7 ECTS	Research	1,3 ECTS	Practical training	
	Experimental work		Report		Discussion	1 ECTS
	Essay		Seminar essay		(Other)	
	Tests		Oral exam	1 ECTS	(Other)	

equal to the ECTS value of the course)	Written exam		Project		(Other)	

Grading and evaluating student work in class and at the final exam	The course mode can be described as a continuous student follow-up method. Student accumulates points during the semester through different types of teaching activities. Minimum of 41% of points for each learning outcome and successfully solved self-evaluation tests are prerequisites for taking the oral as well as participating in at least 50% of all class meetings (25% for the part-time students). The oral exam verifies the authentication of student work done remotely as well as provides opportunity to gain a higher grade. Grades are earned according to the following: more than a total of 51% of grade points sufficient; more than a total of 65% of points score good; more than a total of 80% of points score very good; more than 95% of the points score excellent trough		
Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Learning Materials on Moodle system		Moodle.efst.hr
Optional literature (at the time of submission of study programme proposal)	Thomsen, E. : OLAP Solutions – Building Multidimenzional Infromation Systems, Wiley, New York, 2002. Brumec J., Brumec S.: Modeliranje poslovnih procesa, Zagreb, 2016 Peter Ekman, Peter Dahlin i Christina Keller (2022): Management and Information Technology after Digital Transformation, Routledge		
Quality assurance methods that ensure the acquisition of exit competences	• Monitoring attendance and performance of other student obligations (teacher) • Supervision of teaching • Analysis of the success of studies in all subject studies • Student Survey on the Quality of Teachers and Teaching for Each Subject Study (UNIST, Center for Quality Improvement) • The exam conducted by the course teacher examines all the learning outcomes of the subject. Periodic examination of the content of the exam is carried out on the basis of which the appropriateness of the method of checking the learning outcomes		
Other (as the proposer wishes to add)			