

COURSE		MODELLING OF GEOINFORMATION		
LECTURER		Assist. Prof.Džanina Omičević Ph.D.		
STUDY	STATUS	SEMESTER	NUMBER OF LESSONS L+E	ECTS
B – G	Compulsory	3	2+2	5
OBJECTIVES				
<ul style="list-style-type: none"> □ Design of geoinformation data models using formal modelling languages □ UML modelling □ Introduction and understanding of relevant international standards 				
LEARNING OUTCOMES				
<ul style="list-style-type: none"> □ understand GIS data models, principles that these models are based on and their limitations; □ have knowledge of geometric and topology concepts □ have knowledge of modelling concepts □ Design of geoinformation data models using formal modelling languages UML modelling □ Introduction and understanding of relevant international standards 				
COURSE CONTENT				
<ul style="list-style-type: none"> □ Introduction. Strategic design, system analysis, system design, building, using and exploitation. Concept modelling. Concept scheme. Concept formalism. □ Nature and model purpose. Formal specification. □ Unified Modelling Language – UML. Class diagram. Relations: association, generalization, realisation, dependation, integrity conditions. Use Case diagrams: sequence and coloboration. Activity diagram. □ International standards in model domain. Geoinformation standards. OGC specifications. 				
RECOMMENDED LITERATURE				
<ol style="list-style-type: none"> 1. Đonko Dž., Omanović S. (2009): Objektno orjentirana analiza i dizajn primjenom jezika UML, ETF, Sarajevo. 2. RambaughJ., JacobsonI., BoochG. (1999): The Unified Modeling Language, Addison-Wesley. 3. Fowler M. (2004): UML ukratko (kratak vodič kroz standardni jezik za modelovanje objekata, Addison-Wesley/ Mikro knjiga – prevod. 4. Naiburg, Eric J., Maksimchuk, Robert A. (2002): UML za projektovanje baze podataka, Addison-Wesley/ CET Beograd – prevod. 5. ISO 19107:2003 Geographic information – Spatial schema. 				
<p>Examination: During the classes the exam is taken from three parts. Each section is scored as follows: practical part - 10 points, partial exams - 40 points, a total of 50 points. a) If a student realizes 55% points during the teaching of both partial exams score his form in accordance with the scale prescribed by the Law on Higher Education. b) Students who did not pass the exam during the classes, take the written exam integrated, result form the points achieved during the classes + points accomplished at the integral test. The rating is determined in the same way as under a) Cancelling exams: Students who have passed the exam, but are not satisfied with the results could void the exam and pass the final exam.</p>				