NAME OF THE COURSE	Introduction to Computing					
Code	PMIA10	Year of study				
Course teacher	prof.dr. sc. Andrina Granić izv. prof.dr. sc. Saša Mladenović	Credits (ECTS)	5,0			
Associate teachers	Ines Gracin	Type of instruction (number of hours)	L	S	E	F
			30		30	
Status of the course	mandatory	Percentage of application of e-learning				

COURSE DESCRIPTION	
Course objectives	The course offers an insight to a number of other computer science courses to be thought during the study programme, addressing the computer science field as a research as well as an application field. Additionally, the course aims to introduce main mathematical fundamentals necessary for understanding basic principles of digital computer operation. The course provides acquisition of fundamental knowledge related to the history of computing, computer architecture, operating systems, database systems, computer networks, computer graphics and artificial intelligence. Labs provide achievement of basic knowledge and concepts related to numerical notation, logic circuits, text editing, spreadsheets and databases.
Course enrolment requirements and entry competences required for the course	No formal prerequisites.
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Describe the history of computing. Define and name the main fields of computer science. Describe the fundamental terminology and concepts from computer architecture, operating systems, database systems, computer networks, architecture of Internet applications, computer graphics and artificial intelligence. Apply applications for text editing, spreadsheet programs, and database management systems for problem solving. Identify and argument limits of certain fields of computer science.
Course content broken down in detail by weekly class schedule (syllabus)	Lectures: Algorithms; History of computing Main principles of computer technology Numerical notation and representation of data Data storage and data compression First exam Computer architecture and simulation od logic circuits Operating systems Networking and the Internet Internet protocols and security Database systems Computer graphics Artificial intelligence Second exam Exercises: Introduction Numerical notation Logic circuits

	Problem solving Word processor Spreadsheets Database Problem solving						
Format of instruction							
Student responsibilities	Active participation in all activities: lectures, lab activities, consultations; individual work in homework and the assigned project; exam						

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Name	Ects	Name	Ects	Name	Ects
	Class attendance	2	Research		Experimental work	
	Oral exam	0.5	Report		Homework assignments	
	Seminar essay		Essay			
	Tests	1	Practical training	1		
	Written exam	0.5	Project			

Grading and evaluating student work in class and at the final exam	Class attendance (10%) Individual project (10%) Final/Oral Exam (80%)

Required literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
	Computer Science: An Overview, Brookshear, J. Glenn Brylow, Dennis, prijevod, ISBN 9789537398514	20	

Optional literature (at the time of submission of study programme proposal)	all course material is available on-line, including related articles
Quality assurance methods that ensure the acquisition of exit competences	student discussion, anonymous student evaluation questionnaire, student success rate, self-assessment
Other (as the proposer wishes to add)	