

Computing – 5 semester

Lp.	Subject	Description	Semester	ECTS credits	Number of hours for the form of education						Form of passing	
					Lecture	Exercise	Practical classes	ZK	PS	PZ	Exam	Credit
1.	Virtual reality	Expanding knowledge about virtual reality. Getting to know the possibilities offered by modern virtual reality glasses. Acquiring the ability to configure virtual reality devices	5	4	15	15	30					x
2.	Microprocessors and microcomputers	Presentation of information regarding the structure and operation of microprocessors and microcomputers. Learning about theoretical and practical problems of programming microprocessors and microcomputers. Developing the ability to effectively program microprocessors and microcomputers.	5	5	15	15	30				x	x
3.	Wireless telecommunications networks	Understanding the basic problems of wireless telecommunications networks. Obtaining the ability to use mechanisms for configuring basic parameters of wireless network. Security in local wireless networks.	5	3	15	-	30					x
4.	Geographic information systems	Acquiring basic knowledge about geographic information systems. Acquiring practical skills in geographical data acquisition, processing and analysis	5	3	15	-	30					x

5.	Web applications	Learning JavaScript and PHP.	5	3	15	45	-					x
6.	Software engineering II	Learning the principles and methods of software development in a systematic way. Learning the principles of team management. Design templates. OO Programming	5	3	30	15	-					x
7.	Computer networks	Engineering methods of designing, configuring and maintaining computer networks.	5	3	30	-	30				x	x
8.	Datbase systems II	Familiarizing students with modern database technologies, presenting practical and theoretical aspects of modern database systems. Development of skills related to modeling of IT systems; preparing a relational database schema for given entity-relationship model and implementation in the technology chosen by student. No-SQL Database management systems.	5	3	30	15	-				x	x
9.	Artificial intelligence	Students will learn the methodology of creating programs in the declarative paradigm. Students will acquire the ability to use an automatic problem-solving approach planning. Students will learn how to reason based on a knowledge base containing forward inference based rules and mechanisms.	5	3	30	-	30					x
10.	Computer graphics	Using basic concepts of computer graphics. Creating 3D graphics. Creating 3D animations	5	4	15	30	15					x

11.	Reprogrammable Systems	Presentation of information regarding the structure and operation of reprogrammable systems. Understanding theoretical and practical issues related to programming reprogrammable systems. Developing skills for effective programming of reprogrammable systems.	5	5	15	30	15				x	x
	Total:			39 ECTS								