

Study program: Electrical and Computing Engineering – Module: Computer and Software Engineering, Information Technology				
Type and level of studies: Master studies (second level of studies)				
Course unit: Human - Computer Interaction				
Teacher in charge: Đorđe Damnjanović				
Language of instruction: English				
ECTS: 6				
Prerequisites: -				
Semester: Winter				
Course unit objective Gaining skills at planning, designing, prototyping and evaluating effective and usable graphical computer interfaces.				
Learning outcomes of Course unit Upon successful completion of this course, students should be able to: - Define task analysis grid of user interface. - Implement prototype of defined user interface and perform usability testing of created prototype. - Evaluate user interface. - Describe and apply core theories, models and methodologies from the field of HCI.				
Course unit contents <i>Theoretical classes</i> This course provides an introduction to and overview of the field of human-computer interaction (HCI). The course focuses on the HCI design process and covers the underlying scientific principles, HCI design methodology, and the user-interface technology used to implement HCI. Topics include human cognition, HCI theories, user observation, intelligent and adaptable user interface, graphical user interface components, and accessibility. <i>Practical classes</i> Laboratory and computer sessions, web discussions via forum and e-mail, case study. Learning and using different software for prototyping, usability testing and evaluation of user interface.				
Literature [1] Andrews K., Human-Computer Interaction, Course Notes, Graz University of Technology, 2019. [2] Shneiderman, B., Plaisant, C., Cohen, M., Jacobs, S., Elmqvist, N., Diakopou, N., Designing the User Interface: Strategies for Effective Human-Computer Interaction (6th Edition), Pearson, 2017. [3] Gothelf, J., Seiden, J., Lean UX, Applying Lean Principles to Improve User Experience, O'Reilly Media, 2013. [4] Gerard J. K., Human-Computer Interaction, Fundamentals and Practice, CRC Press, Taylor & Francis Group, 2015. [5] Rubin J., Chisnell D., Spool J., Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests, Wiley; 2 edition, May 2008.				
Number of active teaching hours				Other classes
Lectures: 2	Practice: 2	Other forms of classes: Mentoring system	Independent work: Case study	
Teaching methods: consultations, student-designed projects are an integral part of the course, reading the current HCI research literature is also required.				
Examination methods (maximum 100 points)				
Exam prerequisites	No. of points:	Final exam		No. of points:
Student's activity during lectures	10	Oral examination		
Practical classes		Written examination		30
Seminars/homework				
Project	60			