Course ID: HOAI08	**Course name: SENSOR TECHNOLOGIES**		
Cycle: SECOND	**Year: FIRST**	**Semester: I**	**ECTS credits: 6**
Course status: ELECTIVE		**Total course hours: 60** Lectures: 45 Laboratory: 15	
Teaching participants:	**Teachers and associates with expertise in the field to which the subject belongs**		
Prerequisite for enrollment:	-		
Course aims:	Introducing students to the basics of sensor technologies in order to develop and practically apply different types of sensors and biosensors		
Thematic course units:	1. Basics of sensor technology. 2. Introduction into sensor electronics. 3. Definitions of sensor performance. 4. Instrumental constraints and criteria. 5. Sensor signal processing. 6. Biosensors and bioreceptor molecules. 7. Chemical sensors and application. 8. Nano sensors		
Learning outcomes:	*Knowledge*: Acquisition of knowledge on the basics of sensor technologies used in the development of chemical sensors and biosensors. *Skills:* Mastering different technologies for sensor production. *Competences*: Understanding of sensor technologies in the development and practical application of chemical sensors and biosensors.		
Teaching methodology:	Method of oral presentation, method of practical work.		
Assessment methods and grading system[1]:	Grading criteria Criteria — Maximal score — Required score		

[1] The grading structure for each subject is determined by the Council of the organizational unit before the beginning of the academic year in which the subject is taught as per Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton

	1. Class attendance	5	2
	2. Class activities	5	3
	3. Midterms	45	25
	4. Final exam	45	25
	Total	100	55
	Scores and grading		
	Score	Grade (B&H)	Grade (ECTS)
	< 55	5	F, FX
	55–64	6	E
	65–74	7	D
	75–84	8	C
	85–94	9	B
	95–100	10	A
Literature[2]:	Mandatory literature: 1. Harsanyi G. Sensors in Biomedical Applications: Fundamentals, Technology and Applications. Boca Raton: CRC Press; 2000. Supplementary literature: 1. Webster TJ. Nanotechnology Enabled In Situ Sensors for Monitoring Health. New York: Springer-Verlag; 2011. 2. Wilson JS, editor. Sensor Technology Handbook. USA, UK: Elsevier; 2005.		

[2] The Senate of the higher education institution, as an institution, or the Council of the organizational unit of the higher education institution, as a public institution, determines by a special decision, which is published on its website before the beginning of the academic year obligatory, mandatory and recommended textbooks and manuals, as well as other recommended literature based on which exams are prepared and taken as per Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton