

COURSE DESCRIPTION CARD

Course name	Quality of experience modelling in multimedia environment				
Course type	optional	Course code	SDPB0042	ECTS credits	1
Forms and number of hours	lectures: 10 h	Scientific discipline	information and communication technologies		
Course objectives	To familiarize students with the advanced methods of quality of experience modelling in multimedia systems				
Course content	1. Introduction to the methods for assessment of quality of experience (QoE) 2. Psychometric methods 3. Subjective methods for assessment of speech and audio quality 4. Subjective methods for assessment of picture quality 5. Objective methods for assessment of speech and audio quality 6. Objective methods for assessment of picture quality 7. Research trends in assessment of quality of experience				
Teaching methods	Lectures, including discussions with the students and their short presentations based on the assigned sources of information; case study				
Assessment method	Exam (multiple-choice test)				
Symbol of learning outcome	Learning outcomes		Reference to the learning outcomes for the field of study for the 8 th level of Polish Qualification Framework (PRK)	Methods of assessing the learning outcomes	
SD_W1	Knows and understands the theory, general aspects as well as selected topics, at a level enabling the revision of the existing paradigms, related to the quality of experience modelling in multimedia environment.		SD_W1	Exam	
SD_W2	Knows and understands major development trends related to the quality of experience modelling in multimedia environment.		SD_W1	Exam	

Student workload (in hours)	
Lecture	10
Consultations	1
The unassisted student work	10
Implementation of project tasks and preparation for and participation in exams/tests	4
Exam	1
Total	26
ECTS credits	1

Basic references	<ol style="list-style-type: none"> 1. S. Möller and A. Raake (Eds), Quality of Experience: Advanced Concepts, Applications and Methods, Springer, London (2014). 2. S. Bech and N. Zacharov, Perceptual Audio Evaluation - Theory, Method and Application, Wiley & Sons, San Francisco (2006). 3. Proceedings of the International Workshop on Quality of Multimedia Experience, QoMEX, IEEE, 2019-2020.
Supplementary references	<ol style="list-style-type: none"> 1. ITU-R Rec. BS.1534-2, "Method for the Subjective Assessment of Intermediate Quality Level of Coding Systems," International Telecommunications Union. Geneva, Switzerland (2014). 2. ITU-T Rec. P.913, "Methods for the subjective assessment of video quality, audio quality and audiovisual quality of Internet video and distribution quality television in any environment," International Telecommunications Union, Geneva, Switzerland (2014).
Author of the programme	dr hab. inż. Sławomir Zieliński
Date of issuing the programme	25.03.2021