

### COURSE DESCRIPTION CARD

<b>Course name</b>	<b>Quality of experience modelling in multimedia environment</b>				
<b>Course type</b>	<b>optional</b>	<b>Course code</b>	<b>SDPB0042</b>	<b>ECTS credits</b>	<b>1</b>
<b>Forms and number of hours</b>	<b>lectures: 10 h</b>	<b>Scientific discipline</b>	<b>information and communication technologies</b>		
<b>Course objectives</b>	To familiarize students with the advanced methods of quality of experience modelling in multimedia systems				
<b>Course content</b>	<ol style="list-style-type: none"> <li>1. Introduction to the methods for assessment of quality of experience (QoE)</li> <li>2. Psychometric methods</li> <li>3. Subjective methods for assessment of speech and audio quality</li> <li>4. Subjective methods for assessment of picture quality</li> <li>5. Objective methods for assessment of speech and audio quality</li> <li>6. Objective methods for assessment of picture quality</li> <li>7. Research trends in assessment of quality of experience</li> </ol>				
<b>Teaching methods</b>	Lectures, including discussions with the students and their short presentations based on the assigned sources of information; case study				
<b>Assessment method</b>	Exam (multiple-choice test)				
<b>Symbol of learning outcome</b>	<b>Learning outcomes</b>		<b>Reference to the learning outcomes for the field of study for the 8<sup>th</sup> level of Polish Qualification Framework (PRK)</b>	<b>Methods of assessing the learning outcomes</b>	
<b>SD_W1</b>	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	
<b>SD_W2</b>	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
<b>Total</b>	<b>26</b>
<b>ECTS credits</b>	<b>1</b>

<b>Basic references</b>	<ol style="list-style-type: none"> <li>1. S. Möller and A. Raake (Eds), Quality of Experience: Advanced Concepts, Applications and Methods, Springer, London (2014).</li> <li>2. S. Bech and N. Zacharov, Perceptual Audio Evaluation - Theory, Method and Application, Wiley &amp; Sons, San Francisco (2006).</li> <li>3. Proceedings of the International Workshop on Quality of Multimedia Experience, QoMEx, IEEE, 2019-2020.</li> </ol>
<b>Supplementary references</b>	<ol style="list-style-type: none"> <li>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).</li> <li>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).</li> </ol>
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<b>Date of issuing the programme</b>	25.03.2021