

1.	Field of study	Music in Multimedia
2.	Faculty	Faculty of Fine Arts and Educational Science
3.	Academic year of entry	2025/2026 (winter term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	practical
6.	Mode of study	full-time

7.	General information about the module		
Module name		Gesture capture	
Module code		W6-DigiCrea-MM-GC	
Number of the ECTS credits		2	
Language of instruction		English	
Purpose and description of the content of education		<p>Opisy</p> <p>Opis: Moduł „Gesture capture” wprowadza studentów w tematykę przechwytywania i analizy ludzkich gestów w kontekście interakcji z komputerami oraz systemami wirtualnej i rozszerzonej rzeczywistości. Uczestnicy zapoznają się z różnymi metodami rejestrowania gestów, takimi jak technologia optyczna, czujniki ruchu oraz systemy śledzenia 3D. Podczas zajęć studenci będą mieli okazję nauczyć się, jak przetwarzać dane z tych technologii oraz wykorzystywać je w aplikacjach interaktywnych. Kurs obejmuje również zagadnienia związane z rozpoznawaniem gestów i ich zastosowaniem w projektowaniu gier komputerowych, filmów animowanych oraz systemów VR/AR. W ramach zajęć uczestnicy będą realizować ćwiczenia praktyczne, które pozwolą im zdobyć umiejętności w zakresie integracji technologii rejestracji gestów w różnych środowiskach interaktywnych. Moduł ma na celu rozwój kompetencji związanych z nowoczesnymi metodami tworzenia interfejsów użytkownika i wprowadzania innowacji w dziedzinie interakcji człowiek-komputer.</p> <p>Opis (angielski): The "Gesture Capture" module introduces students to capturing and analyzing human gestures in the context of human-computer interaction and virtual/augmented reality systems. Participants will learn about various gesture capture techniques, including optical technology, motion sensors, and 3D tracking systems. Throughout the course, students will explore processing and using data from these technologies in interactive applications. The course also covers gesture recognition and its applications in designing video games, animated films, and VR/AR systems. Practical exercises will provide students hands-on experience integrating gesture capture technology into various interactive environments. This module aims to develop skills related to modern methods of creating user interfaces and introducing innovations in human-computer interaction.</p>	
List of modules that must be completed before starting this module (if necessary)		not applicable	

8.	Learning outcomes of the module			
Code	Description	Learning outcomes of the programme	Level of competenc (scale 1-5)	
S2-GC_1	The student knows various gesture capture technologies, such as motion sensors, optical technology, and 3D tracking systems, used in interactions with computers and VR/AR systems.	W6-MM-S2-W01 W6-MM-S2-W05	3 4	
S2-GC_2	The student can process and implement data from gesture capture technologies in interactive applications, such as video games and VR/AR systems.	W6-MM-S2-U03 W6-MM-S2-U04	3 5	

S2-GC_3	The student can collaborate in a group, sharing knowledge and skills to integrate gesture technologies into interactive and creative projects.	W6-MM-S2-K03	3
		W6-MM-S2-K06	5
		W6-MM-S2-K07	4

9. Methods of conducting classes		
Code	Category	Name (description)
a03	Lecture methods / expository methods	Description <i>a description of objects, phenomena, processes or people; it involves specifying the structure and characteristic features of the object, phenomenon, or process being described; it is usually accompanied by a demonstration of the described object or by its models, drawings, tables, charts, etc.; a description may take the form of an explanation, classification, justification or comparison</i>
b03	Problem-solving methods	Activating method – educational games <i>learning content in the guise of a rule- and/or principle-based game; conducted in a deliberately arranged situation based on the description of relevant facts and processes; learners compete with one another within the framework of rules laid down by the academic teacher; varieties include simulation games – involving a simulation of real situations; decision games – based on the decision-making process and the recognition of the consequences of the decisions made (e.g., a decision tree); psychological games – increasing the emotional-volitional component of the participants' attitudes</i>
b09	Problem-solving methods	Activating method – flipped classroom <i>anticipatory learning; work in class is based on previously studied material indicated by the person teaching the course; preparation outside the classroom serves the purpose of getting familiar with the issues whose knowledge is necessary for participating in the in-class discussion and the training in the related practical skills; the activity is based on the work of students under the guidance of the person teaching the course</i>
c06	Demonstration methods	Demonstration-imitation <i>a presentation of a model way of performing specific activities accompanied by a commentary; it aims at triggering imitation activities in an individual or in a group of participants observing the activities of the person teaching the course until the right habit is formed through regular exercise; the demonstration-imitation method is combined with a physical practice of activities/behaviours</i>

10. Forms of teaching					
Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
C_GC	practical classes	18	course work	S2-GC_1, S2-GC_2, S2-GC_3	a03, b03, b09, c06

11. The student's work, apart from participation in classes, includes in particular:			
Code	Category	Name (description)	Is it part of the BUNA?
a01	Preparation for classes	Search for materials and review activities necessary for class participation <i>reviewing literature, documentation, tools and materials as well as the specifics of the syllabus and the range of activities indicated in it as required for full participation in classes</i>	No
a03	Preparation for classes	Developing practical skills <i>activities involving the repetition, refinement and consolidation of practical skills, including those developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)</i>	Yes
a04	Preparation for classes	Consulting materials complementary to those indicated in the syllabus	Yes

		<i>agreeing on materials complementary to those indicated in the syllabus, supporting the implementation of tasks resulting from or necessary for class participation</i>	
c03	Preparation for verification of learning outcomes	Implementation of an individual or group assignment necessary for course/phase/ examination completion <i>a set of activities aimed at performing an assigned task, to be executed out of class, as an obligatory phase/element of the verification of the learning outcomes assigned to the course</i>	Yes

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: <https://usosweb.us.edu.pl>.