Basic information about the subject (independent of the cycle)

Module name	**Data Visualisation**
Erasmus code	
ISCED code	
Language of instruction	English
Website	https://www.umcs.pl/pl/addres-book-employee,1777,pl.html
Prerequisites	Statistics (basic course)
ECTS points hour equivalents	**Contact hours (work with an academic teacher) 15** **Total number of hours with an academic teacher 15** **Number of ECTS points with an academic teacher 2** **Non-contact hours (students' own work) 15** **Total number of non-contact hours 15** **Number of ECTS points for non-contact hours 1** **Total number of ECTS points for the module 3**
Educational outcomes verification methods	Project, assigments, discussion
Description	The module covers the knowledge in the area of data visualisation. The subject is taught on introductory level. The primary goal is to provide to the students knowledge and skills to choose and prepare proper data visualisation in form of graphs and infographics. Classes integrate lectures and practical assignments into one curriculum. Basic knowledge and skills in statistics is required, no serious math is used, graphical skills are welcome.
Reading list	1. Claus O. Wilke, Fundamentals of Data Visualization, O'Reilly Media, Inc., grudzień 2018. 2. Jacques Bertin, Semiology of Graphics: Diagrams, Networks, Esri Press, 2010
Educational outcomes	**KNOWLEDGE** 1. Knowledge about visualization types 2. Knowledge about graphs construction 3. Knowledge about infographics design **SKILLS** 1. Ability to choose proper visualisation type 2. Ability to design proper graphs 3. Ability to design simple infographics **ATTITUDES** 1. Critical thinking 2. Conforming aesthetics rules
Practice	-

Information about classes in the cycle

Website	https://www.umcs.pl/pl/addres-book-employee,1777,pl.html

Educational outcomes verification methods	Written exam, assigments, discussion
Comments	-
Reading list	1. Claus O. Wilke, Fundamentals of Data Visualization, O'Reilly Media, Inc., grudzień 2018. 2. Jacques Bertin, Semiology of Graphics: Diagrams, Networks, Esri Press, 2010
Educational outcomes	**KNOWLEDGE** 1. Knowledge about visualization types 2. Knowledge about graphs construction 3. Knowledge about infographics design **SKILLS** 1. Ability to choose proper visualisation type 2. Ability to design proper graphs 3. Ability to design simple infographics **ATTITUDES** 3. Critical thinking 4. Conforming aesthetics rules
A list of topics	1. From data to visualization. Basic rules and tools 2. Visualisation of numbers and indicators 3. Visualisation of structures and other quantitative data 4. Spatial data visualization 5. Visualisation of textual data 6. Infographics – design principles and tools 7. Infographics – practice of visual communication
Teaching methods	Informative lecture with examples, assignments, discussion, problem solving
Assessment methods	Attendance, activity during class, projects