

COURSE DESCRIPTION CARD

NOTE: If the course includes lectures and classes, the Course Description Card applies to both types of instruction.

1. Course title: Data analysis for e-commerce
in Polish / in English

2. Course code:
Number of ECTS credits: 2
Course completion mode: Credit
Course commenced / Year
2020/2021

3. Major: E-commerce

4. Department of major coordinator: Department of Market and Consumption

5. Name of course instructor: Paweł Lorek PhD.
Lecture ... Classes... Lab classes ...
Examiner ...

6. Department of course instructor: Department of Business Informatics

7. Number of contact hours with students:

| Type of instruction | Full-time study | Part-time study |
|--------------------------|-----------------|-----------------|
| lectures | 4 | |
| classes | | |
| foreign language classes | | |
| lab classes | | |
| seminars | | |
| e-learning | 11 | |
| other | | |
| Total hours | | |
| examination (hours) | | |

8. Course timeframe - no. of semesters: 1

Course commencement / Year: 2

Course commencement / Semester: 3

9. Level of tertiary education: Master

10. Course status
 Compulsory for the major...
 Compulsory for the specialization ...
 X Elective ...

11. Course prerequisites
Compulsory: None
Recommended: None

12. Course objectives:

1. Presentation of data sets specifications in e-commerce.
2. Providing information necessary for the proper organization of the data set and the selection of adequate methods of analysis.
3. Developing skills to conduct data analysis and interpret the results.

13. Teaching and learning methods:**A. Direct student-instructor contact:**

| No. | Teaching methods | Description | Number of hours | |
|-------|------------------|---|-----------------|-----------------|
| | | | Full-time study | Part-time study |
| 1. | E-learning | Presentations showing examples of data analysis | 15 | |
| 2. | | | | |
| 3. | | | | |
| ... | | | | |
| Total | | | AS:15 | AN: |

B. Self-study:

| No. | Learning methods | Description | Number of hours | |
|-------|----------------------------------|--|-----------------|-----------------|
| | | | Full-time study | Part-time study |
| 1. | Individual work with computer | Doing individual analytical tasks | 25 | |
| 2. | Analysis of e-learning materials | Familiarization with data analysis methods | 10 | |
| 3. | | | | |
| ... | | | | |
| Total | | | BS:35 | BN: |

Total AS+BS = 50
 Examination (E) = 0
 Total AS+BS+E = 50

Total AN+BN =
 Examination (E) =
 Total AN+BN+E =

14. Key words:**15. Course content:**

1. Specificity of data sets in e-commerce.
2. Initial data processing. Identification of erroneous and outlier elements.
3. Customer segmentation using cluster analysis.
4. Study of associations using graph analysis
5. Classification methods
6. Data visualization techniques

16. Course learning outcomes as related to the learning outcomes of the major and methods for assessing student attainment

| Intended learning outcomes of the major / Symbols | Intended learning outcomes of the course | Methods for assessing student learning outcomes | Documentation |
|---|---|---|---|
| <u>Knowledge</u> | | | |
| ECe2_W02 | Student knows the research methods and description tools, including mathematics and statistics, and IT tools for collecting, analyzing and presenting data on e-commerce and social media | Doing individual analytical tasks | Record of problem solve in electronic form. |

| <u>Skills</u> | | | |
|---------------------------|---|-----------------------------------|---|
| ECe2_U05 | Student is able to communicate with the business environment using specialized terminology in the field of e-commerce and social media. | Doing individual analytical tasks | Record of problem solve in electronic form. |
| <u>Social competences</u> | | | |
| ECe2_K03 | Student understands the importance of knowledge in solving cognitive and practical problems, correctly prioritizes the priorities for the implementation of the task specified independently and / or by third parties. | Doing individual analytical tasks | Record of problem solve in electronic form. |

17. Method for determining the final course grade:

| No. | Methods for awarding credits and course completion requirements | Description | Percentage of the final course grade* |
|-----|---|-----------------------------------|---------------------------------------|
| 1. | Report on completed tasks | Doing individual analytical tasks | 100% |
| 2. | | | |
| 3. | | | |

* If students are required to obtain both a class grade and an exam grade, the class grade constitutes at least 30% of the final course grade.

18. Reading list

Mandatory readings:

Provost F., Fawcett T., Analiza danych w biznesie, Helion, Gliwice, 2015

Suggested readings:

Segaran T., Nowe usługi 2.0., Helion, Gliwice, 2014

Schutt, R, O'Neil C. Badanie danych. Helion, Gliwice, 2015

19. Language of instruction: english

20. Course instructors' recommendations: