

#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Market and Competition Analysis [S1DSwB1>ARiK]

Course

Field of study Year/Semester

**Data Science in Business** 2/3

Profile of study Area of study (specialization)

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other 0

15

**Tutorials** Projects/seminars

15

Number of credit points

3.00

Coordinators Lecturers

dr inż. Katarzyna Ragin-Skorecka katarzyna.ragin-skorecka@put.poznan.pl

#### **Prerequisites**

The prerequisites for the Market and Competition Analysis course include basic knowledge of marketing, analytical thinking, and the ability to interpret market data. Students should be familiar with basic statistical tools and demonstrate the ability to work with spreadsheets such as MS Excel.

### Course objective

The aim of the subject Market and Competition Analysis is to equip students with the ability to assess the attractiveness of the market and the competitive position of the company. The subject develops competences in the analysis of the structure of the industry, customer segmentation, evaluation of competitors' strategies and shaping the pricing policy. The knowledge acquired will allow for decisionmaking in a dynamic market environment.

#### Course-related learning outcomes

#### Knowledge:

Collaborates in project teams on the optimization of production systems, integrating knowledge of management and engineering [DSB1 K02].

Considers economic, technological, and environmental aspects in the production management process,

making informed operational decisions [DSB1 K05].

#### Skills:

Characterizes the market structure and key factors affecting the competitiveness of companies and their strategic position [DSB1 W09].

Describes methods of market analysis, customer segmentation, and assessment of competitive position, considering big data techniques and portfolio methods [DSB1\_W01].

Explains the application of benchmarking, price analysis, and portfolio methods in assessing a company's market position [DSB1\_W04].

#### Social competences:

Analyzes the market and competition structure, identifying key market forces and industry dynamics based on available data [DSB1\_U01].

Conducts customer segmentation using data analysis methods and information exploration techniques [DSB1\_U03].

Creates strategic group maps and evaluates competitive strategies of companies based on market data [DSB1\_U05].

Applies benchmarking and price analysis to assess market position and formulate strategic recommendations [DSB1 U07].

Interprets market and competition analysis results to support decision-making processes in business strategy [DSB1 U10].

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Formative assessment: attendance and activity during classes, results of solving cognitive tasks, participation in the discussion. Summative assessment: result of the written test.

Exercises: Formative assessment: attendance and activity during classes, results of solving individual tasks, participation in the discussion. Summative assessment: presentation on the group forum.

## Programme content

Lecture: Basic issues of market and competition analysis and their importance in business strategy. Factors influencing market structure and competitiveness of entities. Methods of assessing market attractiveness and competitive position. Customer segmentation and analysis of buyer behavior. Techniques for identifying strategic groups and assessing competition strategy. Using benchmarking and price analysis in assessing market position.

Exercises: Analysis of market structure and competition based on available data. Identification of key factors influencing sector attractiveness. Customer segmentation using analytical tools. Construction of maps of strategic groups. Application of comparative methods in assessing competitors' activities. Price analysis as an element of market strategy and its practical application.

#### Course topics

Lecture: Introduction to market and competition analysis - importance and application in business strategy. Market structure and its key determinants. Identification of factors shaping competitiveness. Assessment of market forces and industry dynamics. Portfolio methods in market potential analysis. Customer segmentation with big data - segmentation criteria and techniques. Strategic group map as a tool for visualizing market position. Benchmarking as a method for assessing competition and identifying best practices. Analysis of pricing policy against the competition - pricing strategies and their impact on market position.

Exercises: Analysis of the structure of competition in a selected market. Identification and assessment of market forces in practice. Construction of a strategic group map based on market data. Customer segmentation using available information sources and analytical tools. Practical application of portfolio methods to assess the attractiveness of the sector. Benchmarking of competition based on available reports and data. Price analysis against the competition - interpretation of data and formulation of strategic recommendations.

# **Teaching methods**

Lecture - a problem-based or conversational lecture, supported by discussion.

Exercises - auditory exercises including solving cognitive tasks, case analysis, discussion and implementation of a group project.

# **Bibliography**

#### Basic:

- 1. Zhang, H., Zang, Z., Zhu, H., Uddin, M. I., & Amin, M. A. (2022). Big data-assisted social media analytics for business model for business decision making system competitive analysis. Information Processing & Management, 59(1), 102762.
- 2. Huang, G., Liang, Y., & Zhao, Z. (2023). Understanding market competition between transportation network companies using big data. Transportation Research Part A: Policy and Practice, 178, 103861.

#### Additional:

1. Chung, H., & Kim, J. B. (2024). Product market competition and audit fees: new evidence. Managerial Auditing Journal, 39(6), 648-667.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	32	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	43	2,00