#### **Entitlement**

KOI FGIIA

#### **Business Information Systems**

## **Prerequisites**

B1 level of English language. Economics, Marketing, MS Excel (Basic level)

#### Main aim

Acquire competencies in the use of information and communication systems in business management.

## Summary

The module is structured into Business Analytics (BA), Computerized Business Management (CBM) and Business Informatics (BI).

BA analyses big data and business analytics processes and software. Students will be able to apply the acquired knowledge in practice by analysing real freely available data. Using MS Power BI tool, MS Access, they will analyse data from various sources (sales, customers, online e-shops and social network visitors (Google Analytics, Facebook pages, etc.), develop business insights and use them in real activities.

CBM analyses computer hardware and software used in business, information systems used in business: Business management, CRM, transport and logistics. In this part of the module, students will also analyse the concept, models, assumptions and errors of e-business development.

While studying BI students will use MS Excel to learn to summarize results using information and statistical analysis tools, solve financial problems using spreadsheet financial functions, analyse and evaluate business data and forecast marketing decisions, present solutions using data graphical visualization tools.

# **Learning Outcomes**

- 1. Choose the optimal way to trading using ICT.
- 2. Analyse the current trade methods and explore the possibilities of starting an e-business.
- 3. Apply a variety of business analytics tools required for managerial decision making. Understand data storage and warehousing technologies, be able to design and model business processes and find business insights.
- 4. Use computerized business management systems to manage the transport and logistics processes.
- 5. Forecast business decisions by computer means.
- 6. Evaluate the benefits and diversity of CRM systems and will be able to choose the optimal option to meet business needs.

- 7. Analyse and summarize business information using information analysis tools.
- 8. Evaluate the obtained business data and present them using computer tools for statistical analysis and data visualization.
- 9. Design business analytics systems, create a data warehouse structure useful for the company from different data sources, understand the need for business analytics for successful business operations.
- 10. Anticipate the need for hardware and software and the possibilities of their use in business.
- 11. Identify and describe financial situations.
- 12. Design and perform automated accounting of material resources.

## **Syllabus**

- 1. BUSINESS ANALYTICS (BA)
- 1.1. The most popular trading patterns, understanding of Business Information Systems. Explain why analytics are important in today's business environment.
- 1.2. Business Intelligence. Date Warehouse. OLAP cubes and other methods used in business intelligence. Databases, MS Access workbench will be used to support database modelling and database/data warehouse implementation.
- 1.3. Business Analytics. The analysis of the business information in the business information systems using ICT. Analysis and reports, process management, data warehouse. The usage of the results of the main business processes for the company's performance analysis.
- 2. COMPUTERIZED BUSINESS MANAGEMENT (CBM)
- 2.1. The hardware and software of the computerised business management CBM. An introduction to CBM in an organization.
- 2.2. E-business concept. E-business models. The essence of e-commerce, assumptions, errors and limiting factors.
- 2.3. Overview, classification and use of business management systems in business management.
- 2.4. Customer Relations Management (CRM) in business management systems.
- 2.5. Transport and logistics business management systems.
- 3. BUSINESS INFORMATICS (BI)
- 3.1. Computerized tools for business information analysis, summary of results, preparation of reports and summaries.
- 3.2. Ms Excel for Finance.
- 3.3. Statistical analysis software.
- 3.4. Forecasting software.
- 3.5. Data visualization.

## **Evaluation procedure of knowledge and abilities**

Examination