

**SPECIALITY AREAS AND SPECIALITY LECTURES – number of teaching hours, full-time studies:  
30 hours of lecture, 30 hours of class (x 3)**

**I. Project Management**

- IT Quality and Metrics in IT Projects
- Methods and Tools of Project Management
- Advanced IT Project Management

**II. Management Decision Support Systems**

- CRM System
- Business Intelligence on SAS platform
- Advanced Methods of Managerial Decision Making

**III. IT Systems Implementation**

- CRM Systems
- Implementation of Enterprise Management Support Systems
- Advanced Project Management

**IV. E-commerce**

- CRM Systems
- Online Marketing
- Advanced Technologies in Internet Trade

**V. Business Process Analysis**

- Business Intelligence on SAS platform
- Implementations of Enterprise Management Support Systems
- The Use of MS Excel in Business Analysis

**IT Quality and Metrics in IT Projects**

The aim of the course is to familiarize students with the issues of quality and measurements in IT projects. On completion of the course the student should be able to construct metrics for processes and products of IT projects, thus meeting standards of the IEEE group.

## **Methods and Tools of IT Projects**

The goal of the course is to acquaint students with chosen project management methodologies and selected IT tools used to support various aspects of project management: PRINCE2, Scrum, MoR risk management methodology, Monte Carlo method. Microsoft Project Server - resource and task management; project communication management.

## **Advanced Project Management**

The course will focus on presenting advanced issues related to project management and the place of a project in a company's operations. The goal of the course is to help students understand different ways of organizing work and the conditions associated with the choice of given methods. Scrum methodology workshops. Examples of topics covered: introduction to ITIL; communication planning in a project team - projects implemented in traditional environments, Project Management Office in a company - organization, responsibility, principles of operation. Control of progress, change and requirements management in projects conducted with classical and agile methodology.

## **CRM Systems**

The aim of the course is to provide theoretical and practical knowledge on the use of CRM (Customer Relationship Management) information systems in managing customer relationships, understanding the role of a CRM system in an enterprise' business strategy. In addition, providing knowledge about business process modeling, familiarizing with methods and tools used in business process modeling. Analysis and modeling of business processes allowing the creation and use of CRM.

## **Business Intelligence on SAS platform**

Developing knowledge and skills concerning theory and practice of working with Business Intelligence tools on the example of the SAS platform. Presentation of SAS tools and techniques. Designing multi-dimensional OLAP structures in SAS. The basics of data processing and reporting in Enterprise Guide. The use of information maps in SAS. Work with SAS Web Report Studio. SAS 4GL language.

### **Advanced Methods of Managerial Decision Making**

Conveying information about the concepts, types, construction and use of advanced models and decision support techniques. The goal of the course is to develop skills needed for model building and use of IT tools (optimization packages, statistical-econometrics) in solutions supporting decision making.

### **Implementations of Enterprise Management Support Systems**

The aim of the course is to provide theoretical and practical knowledge regarding the implementation of IT systems in an organization. Understanding the essence and role of a management support system in business organization activities, including the integration and optimization of business processes. Pre-implementation analysis. Implementation of the IT management system. Structure of the implementation project. Implementation methodologies. System configuration and testing. Implementation model of the IT management system. Contracting - best practices concerning IT contracts, business negotiations with IT system suppliers.

### **Online Marketing**

The goal of the course is to familiarize students with issues related to online marketing. Students learn about the most important tools and strategies of online marketing. After completing the course, the participant will have practical knowledge on preparation and implementation of an online marketing strategy, SEO (Search Engine Optimization), SEM (Search Engine Marketing), WSO (WebSite Optimization ), use of social media in marketing (Facebook, Google+, Instagram, Twitter, Pinterest and others), online analytics tools - Google Analytics. Google AdWords - Google Online Ads, e-commerce platforms, basic legal aspects of e-commerce, viral marketing and online marketing research.

### **Advanced Technologies in Internet Trade**

The course aims to familiarize students with advanced issues related to the use of the Internet (in particular commercial activities) with security (HTTPS protocol), design and implementation of interfaces for web applications and issues related to e-commerce. Other topics covered: development, testing and production environments; online

payment service; using JavaScript in creating user interfaces; usability testing and page evaluation.

### **The Use of MS Excel in Business Analysis**

The aim of the course is to introduce, discuss and gain practical skills in using MS Excel spreadsheet in business analyses. The classes will cover issues regarding the use of MS Excel software in the following areas:

- performing advanced calculations, analyses, summaries and data presentations,
- using the Solver optimization solution
- using macros to automate repetitive tasks performed in Excel.