

UNIVERSITY of INFORMATION TECHNOLOGY and MANAGEMENT in Rzeszow, POLAND

## FACULTY OF MANAGEMENT

of the University of Information Technology and Management based in Rzeszów

ORGANIZATIONAL STRUCTURE | DESCRIPTIONS OF FIELDS OF STUDY | SCIENTIFIC RESEARCH | PUBLICATIONS | QUARTERLY e-Finanse | INTERNATIONAL SCIENTIFIC CONFERENCES | TEACHING AND RESEARCH LABORATORIES | ACCREDITED INNOVATION CENTER

# FACULTY OF MANAGEMENT

of the University of Information Technology and Management based in Rzeszów, December 2019

### SCIENTIFIC CATEGORY IN PARAMETRIC EVALUATION OF THE MINISTRY OF SCIENCE AND HIGHER EDUCATION for the years 2013-2016

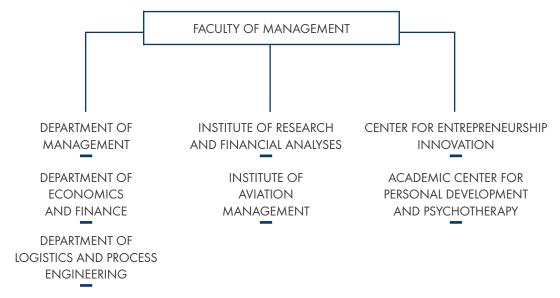
Organizational units subordinated from 1/10/2019 to the Faculty of Management until 30/09/2019 operated under the Faculty of Administration and Social Sciences, which during the last categorization obtained **category B**.

### Main scientific disciplines at the Faculty of Management:

- Management and quality sciences
- Economics and finance

### ORGANIZATIONAL STRUCTURE OF THE FACULTY OF MANAGEMENT (since 1.10.2019)

Within the structure of the Faculty of Management there are distinguished research and teaching units (departments), scientific units (institutes) and service centers.



### FIELDS OF STUDY CONDUCTED WITHIN THE FACULTY OF MANAGEMENT

### FIRST-CYCLE STUDIES

Computer science – full-time and extramural studies Economics – full-time studies in English Logistics – full-time and extramural studies Psychology in Management – full-time and extramural studies Management – full-time and extramural studies Management – full-time studies in English

### SECOND-CYCLE STUDIES

Management – full-time and extramural studies Management – full-time studies in English



# DESCRIPTIONS OF FIELDS OF STUDY

## LOGISTICS

The Logistics education program focuses on the implementation of content related to logical, systemic, process and common sense thinking. It allows you to become familiar with the methods, systems and technologies used in the area of logistic functions.

The studies enable the acquisition of theoretical and practical knowledge in the field of the latest logistics solutions used in various areas of life.

The main aims of education in the field of Logistics:

- Transfer of comprehensive knowledge in the field of management and quality sciences

   (e.g. production and service management, supply chains management, quality management) and field
   knowledge (including knowledge on systems engineering and system analysis, transport economics,
   logistics infrastructure, simulation process) enabling proper understanding of the principles governing
   modern logistics, understanding and interpretation of phenomena and processes of the TSL sector and
   shaping a critical understanding of the theory of knowledge regarding these phenomena and processes;
- Preparation for undertaking entrepreneurial activities towards creating own business entities as well as performing specialist tasks in various positions in business entities;
- Shaping attitudes of responsibility, openness, an innovative approach to problem solving and understanding the need to constantly improve your qualifications.

The graduate in Logistics will be prepared to work in positions with logistic functions, such as: transport traffic organization manager in transport companies, lean manager responsible for balancing production capacities in companies and in the design and organization of production processes, quality, standardization and process control engineer, traffic-maintenance engineer, employee of organizational units of companies dealing with logistics, supply, distribution and trade, employee of forwarding companies, in the organization of forwarding processes (controlling, scheduling, accounting, flow planning), IT systems engineer in warehouse centers, warehouse manager, telematics systems engineer, employee of advisory units and other organizations where logistic, economic, technical, IT knowledge as well as organizational skills and logical thinking are required.

## In the field of Logistics the following specialties are offered:

First-cycle engineering studies in the field of Logistics last 7 semesters and end with obtaining the title of engineer.

### **TRANSPORT AND FORWARDING**

Thanks to specialization subjects, the Graduate will be familiarized with the possibilities of optimal use of available transport infrastructure, transport traffic and operation of transport equipment. They will acquire organizational skills that allow them to manage logistics in transport and production companies, as well as manage logistics activities in large international companies that implement supply, production or distribution processes.

### INFORMATION TECHNOLOGY IN LOGISTICS SYSTEMS

Thanks to specialization subjects, the Graduate will be familiarized with the possibilities of using modern information technologies in logistics processes. They will acquire skills of operating computer programs that allow solving various logistic problems, designing and implementing network security systems, using expert systems and applications supporting the efficient operation of warehouses. It will develop practical skills in operating integrated management systems (SAP), simulation software, corporate communication systems and information flow (Cisco WebEx) and computerized production flows (Flow Management).

### **INTERNATIONAL LOGISTICS**

Thanks to specialization subjects, the Graduate will be familiarized with the possibilities of using modern logistics solutions supporting global forwarding and transport processes. They will acquire skills and competences allowing proper design and implementation of logistics strategies in international terms. They will develop practical skills in the organization of supply, production, distribution and legal and economic systems shaping global logistics processes.

The strategic partner of the field of Logistics is OMEGA Pilzno ITiS Godawski & Godawski Sp. z o.o.

## **PSYCHOLOGY IN MANAGEMENT**

Observation of trends prevailing on the labour market, growing interest in education in management psychology (business psychology) and development of entrepreneurship, justify education in the field of Psychology in management.

### The concept and objectives of education are based on the following assumptions:

- Interdisciplinarity, enabling the acquisition of comprehensive knowledge about the mechanisms of the organization's functioning, improvement of human capital management systems, as well as shaping products and services from the perspective of consumers' knowledge and needs;
- Equipping with knowledge in such fields of psychology and management as: personality psychology, psychology of emotional and cognitive processes, social psychology, decision making psychology, intercultural psychology, team management, marketing, international management;
- Transfer of knowledge regarding making decisions related to various functional areas of the organization and specific areas of its activity, including: human resources management, customer relationship management, marketing management, use of IT solutions in the management process;
- Transfer of ethical principles and standards that should be observed in professional work;
- Shaping entrepreneurial attitudes, oriented on the ability to seek market opportunities and to implement their own business projects;
- Shaping attitudes of responsibility, openness, readiness to cooperate, an innovative approach to problem solving and understanding of the need to constantly improve their qualifications;
- Acquisition of social skills and competences enabling performing professional activities in consulting companies, advertising agencies and public relations, as well as HR departments and marketing communication departments of enterprises and organizations;
- Preparation for undertaking practical professional activities, as well as performing specialized tasks in various positions in enterprises, entities, institutions and organizations;
- Preparation for undertaking second-cycle studies in fields related to both human resources management and marketing communication;

The graduate in Psychology in management will be equipped with interdisciplinary knowledge in the field of social sciences as well as management and quality sciences. They will acquire skills, among others in the area of employee recruitment and selection processes, preparation of incentive programs, developing staff potential, shaping career path and employee evaluation, as well as planning and preparation of marketing strategies, creating the image of the employer in the environment and implementing activities related to corporate social responsibility. The above-mentioned concepts are achieved owing to lectures, classes, laboratory and design classes, as well as competence workshops and internships.

### The graduate in Psychology in management will be prepared for work in:

- economic institutions and organizations;
- economic administration institutions and organizations;
- agencies and consulting companies;
- marketing and sales departments;
- PR departments and creative sections;
- as an independent entrepreneur;
- as an employee of a personnel section;
- as a specialist in recruitment and selection, professional adaptation, training and development;
- competence and talent management;
- as a specialist in marketing research and market analysis;
- as a business advisor in the area of marketing and shaping customer relationships.

## In the field of Psychology in management the following specialties are offered:

First-cycle studies in Psychology in management last 6 semesters and end with obtaining a bachelor's degree.

### HUMAN RESOURCES MANAGEMENT

The concept of specialization education takes into account the demand of the labour market for specialists from the human resources industry. As part of the specialization, students acquire theoretical knowledge and practical skills regarding the preparation and supervision of effective personnel policy, including: preparation of job descriptions and competence profiles, application of recruitment methods and employee selection, analysis and evaluation of training needs.

Issues implemented in the specialty program also include the creation of effective incentive systems and building creative employee teams, as well as building strategies for effective prevention of burnout and stress reduction.

### **PSYCHOLOGY OF CONSUMER BEHAVIOUR**

The concept of specialization education takes into account dynamic changes in the area of market research, consumer behaviour and other related fields of marketing. As part of the specialization, students acquire theoretical knowledge and practical skills in researching consumer behaviour on the products and services market, including conducting quantitative and qualitative marketing research, market research using neurophysiological measurements, as well as evaluation and interpretation of psychological mechanisms that drive consumer decisions.

Issues implemented in the specialty also include the creation of marketing strategies, as well as professional preparation and conducting research on the conscious and unconscious motives of consumer decisions.

The strategic partner of Psychology in management are: the UITM Career Office, the UITM HR Consulting Office, the Academic Center for Personal Development and Psychotherapy.

## MANAGEMENT

The demand for management specialists is constantly growing. In Poland, this profession gained importance especially in the 90s, when systemic and economic changes took place. After several years of market saturation with specialists in this area, enterprises are again looking for employees with specific competences and substantive preparation.

Studies in the field of Management are directed to a wide range of people who want to gain knowledge in the field of management and complementary sciences, as well as specific, practical skills. Graduates in Management studies are equipped with real knowledge and practical skills. They are prepared for work in economic institutions and organizations as well as economic administration at operational level positions. They are ready to manage human teams, projects and activities in companies from various industries, as well as ready for implementation innovative solutions in companies and undertaking activities as an independent entrepreneur. The distinguishing features of the field of Management are strong practical orientation of education, internationalization of studies, excellent material base and proprietary, innovative education programs.

The mission of education in the field of Management is teaching in accordance with the curriculum adapted to the needs of the changing economic and social environment. The diverse offer of specialties in this field of study responds to the needs of the labour market, enabling both interdisciplinary and specialized education. Classes are conducted by renowned lecturers from recognized academic centers from around the world as well as specialists (practitioners) with extensive professional experience. Students of the Faculty have the opportunity to undergo internships (including paid internships) in recognized economic environment institutions such as Deutsche Lufthansa S.A., BorgWarner Poland Sp. z o.o., Deloitte or Santander Bank Polska S.A.

The concept of education in the field of Management assumes that the education process conducted in the field of education will ensure the high competence of graduates. The extensive use of active teaching methods (e.g. decision games, case studies, so-called situational methods) in the study program (both first and second cycles) makes the educational process more practical, provides conditions for the development of students' competence and creativity. What's more, a large part of classes (in particular specialty subjects) are conducted by practitioners in specially prepared laboratories. The specialties offered correspond to the current needs of the labour market and are consistent with the basic goals of university education, i.e. providing students with specialist knowledge and developing their skills of functioning in work environment.

# **The first-cycle studies** in the field of Management last 6 semesters and end with obtaining a bachelor's degree. Education in the field of study has been conducted since the academic year 2015/16.

All subjects in the first-cycle studies in the field of Management are divided into two blocks: **the main one**, compulsory for all, as well as **optional** (major and specialization), under which students have the opportunity to choose subjects and specialties.

A separate education path has been offered in the field of Management, implemented since the first semester – Finance and accounting in management.

## The following specialties are offered in the field of Management of the first-cycle studies:

### **RUNNING A BUSINESS**

The aim of the specialty is to provide students with knowledge and to develop skills that will allow them to run their own business. Graduates in the specialization will acquire knowledge and skills in the planning and organization of both individual and team work. They will be able to manage a human team in various situations and notice the opportunities and threats associated with the implementation of a specific project. They will have the skills to communicate and negotiate and, what is more, they will be able to combine the strategy of human resources management with the strategy of enterprise development. Graduates in the specialization will learn the legal basis for doing business and how to raise funds for it.

### **COMPANY MANAGEMENT**

The aim of education in this specialty is to prepare students for effective company management. Graduates will have comprehensive management knowledge and skills to effectively manage resources and processes in the enterprise. Graduates of the specialization will learn how to solve the problems of modern enterprises and how to create and implement company strategies. Graduates of the specialty equipped with knowledge and practical skills will be prepared for work in public and private organizations and enterprises as consultants, advisers, specialists as well as middle-level managers, brand managers and project coordinators. They will also be prepared to make business decisions in the sphere of organization, marketing, finance and investment.

### **TOURIST BUSINESS**

The aim of education in this specialty is to provide students with knowledge about the functioning of the tourism industry, its needs and development directions. Students learn about modern and innovative aspects of tourism, sales rules and rules for running their own business in this industry. Graduates in this specialty will be able to apply the acquired knowledge and developed skills in hotels, guesthouses, restaurants, sanatoriums, travel agencies, tourist organizations, tourist agencies, event agencies, airlines, but also to start their own business in tourism.

#### FINANCE AND ACCOUNTING IN MANAGEMENT

The aim of education in the specialty is to equip graduates with specialist knowledge and skills related to making the right financial decisions in the organization, resulting in an increase in its value. This specialization will allow students to learn about financial issues from the point of view of the organization's practice, hence accounting-related items occupy an important place in the structure of specialization. Graduates of the specialization will analyses. They will gain knowledge in the field of enterprise valuation and management, as well as how to use financial information to make management decisions. The practical education profile in the field of Management, allows students to develop managerial, business and digital competences closely related to various areas of professional / economic activity specific to the field. In the course of studies, students acquire skills that allow, among other things, solving problems related to organization management, making operational and strategic decisions, taking actions necessary to independently start a business, organizing and planning activities on an organizational and regional scale, using advanced information and communication techniques (ICT) to generate solutions of problems as well as forecasting and modelling of complex processes in the organization.

The practical character of the studies is strengthened by the system of internships, which will be implemented in manufacturing and service enterprises as well as in public institutions, such as provincial offices, city and commune offices. In addition, within the field of Management, first-cycle studies, specialization Finance and accounting in management, there are dual studies in which some of the learning outcomes are implemented in the enterprise.

**The second-cycle studies** in the field of Management last 4 semesters and are conducted in full-time and extramural modes. In the course of studies, there are implemented the following subjects: contemporary organization and management concepts, operational management, strategic management II, decision-making theories, competition and consumer protection, managerial economics, human resources management in contemporary organizations.

The graduate of second-cycle studies in the field of Management has specialist theoretical and practical knowledge in the field of management and quality sciences regarding the essence, regularity and problems of enterprises, as well as ways to solve them effectively and efficiently. The graduate has specialized knowledge necessary for efficient management of enterprise resources. They are able to use the acquired knowledge in practice, among others, to assess management phenomena and processes, assess the environmental impact of these phenomena, and prepare and make management and strategic decisions. The second-cycle studies prepare the graduate for managerial and expert functions. Along with the acquired knowledge and skills, They can work in public and private organizations and enterprises as a manager, company director, board member, department manager, advisor and consultant. The graduate also has the knowledge and skills to run their own business.

The student has the option of choosing subjects according to their own interests complementing the block of basic and major subjects (Flexible Study System – FSS).

## In the field of Management of the second-cycle studies the following specialties are offered:

### **ENTERPRISE AND PUBLIC INSTITUTION MANAGEMENT**

The aim of education in the specialty is to prepare graduates to manage a company and a public institution, including solving problems, even the most complex and unusual ones that appear in this area. Students will gain practical skills in enterprise value management, quality management and internal audit, production process management, innovation management and employee competence management. They will be able to take the necessary actions to start their own business. They will acquire the ability to select and use appropriate methods and tools in operational and strategic decision making processes as well as forecasting and modelling complex social processes using advanced methods and tools in the discipline of management science. They will efficiently use normative systems (economic, financial, legal and other), as well as the resultant rules to solve problems related to enterprise management.

#### FINANCE AND ACCOUNTING IN MANAGEMENT

The aim of education in the specialty is to equip graduates with specialist knowledge in the field of finance and accounting, the functioning of financial institutions and banks as well as the ability to analyze economic phenomena

and the economic and financial situation of business entities. Graduates in the specialization will acquire practical skills related to the preparation of financial statements and conducting financial analyses. They will also learn how to use financial information to make decisions, and will also master the issues of valuation and enterprise value management. Graduates in the specialization will be prepared for work in financial and non-financial institutions as, for example, accountant, tax advisor, auditor, controller, specialist in management accounting.

#### LOGISTICS AND PRODUCTION MANAGEMENT

Graduates in the specialization will acquire primarily skills related to common sense management of the company, including: elimination of costs generating losses, identification and monitoring of processes (process mapping), quality planning and auditing as well as recognition of moments of creating added value. Graduates in the specialization will learn how to standardize production work, monitor and control the quality of production, as well as how to organize production processes and improve them through low-cost optimization techniques. The specialty program puts emphasis primarily on workshops and classes aimed at acquiring practical skills. Thanks to the acquired knowledge and skills, graduates in the specialty will be prepared for work in the departments of: production planning, design of production systems, as manager supervising and managing the processes of value creation of employee or candidate for work in manufacturing enterprises using modern kaizen and lean methods, quality manager, production organization manager or advisor, kaizen or/and lean consultant or implementationist. The specialization program is prepared under the substantive auspices of the KAIZEN Institute Polska.

### MANAGEMENT SYSTEMS - SAP

Graduates in the specialization will become familiar with the concept of integrated management systems and their practical use based on SAP software. Graduates in the specialty are taught, among others how to build electronic document and data exchange systems, make the right choice of integrated IT systems for an enterprise (ERP systems), plan and manage IT projects, and integrate independent IT systems. The specialty includes the following subjects: integrated IT systems in project management, integrated IT systems in finance, integrated IT systems in strategic management, personnel management, customer service and logistics.

#### **BUSINESS ANALYTICS FOR MANAGERS**

Graduates in the specialization will acquire, above all, skills in applying the most popular program environments in key areas of business analytics – descriptive, prescriptive and predictive analytics. Modelling, analysis and re-engineering of business processes is a very important area of business analytics included in the specialty program. Graduates in the specialty will be prepared for the effective use of business analytics tools in typical activities carried out by the management, at each organizational level – operational, tactical and strategic – both from the perspective of creating information and knowledge based on data, as well as optimal organization of tasks within business processes and planning of corrective actions. Completion of the specialization will allow its graduates to be employed in units supporting the decision-making process in analytical and decision-making positions. The acquired skills are also an excellent basis for making decisions related to running your own business.

#### HUMAN RESOURCES MANAGEMENT

The aim of education in the specialty is to equip graduates with specialist knowledge in the field of economic, legal and psychological aspects of human resources management. Graduates in the specialty will learn how to build and create effective teams in a modern enterprise. They will gain professional skills necessary for working in the position of a manager / leader. Thanks to the acquired knowledge and skills, graduates in the specialization can take up a job as a consultant in the field of human resources management, senior and middle level manager. They will also acquire skills that will allow them to deal with the recruitment and selection of employees, competence management, employee evaluation and development, training management, project management and management of the company's remuneration system.

Strategic partners in the field of Management are: Deloitte, Nowy Styl Sp. z o.o., BorgWarner Poland Sp. z o.o., Institute of Financial Research and Analyzes UITM. **The first-cycle studies** in the English language in the field of Management last 6 semesters and end with obtaining a bachelor's degree. Education in the field of study has been conducted since the academic year 2018/2019.

## There are offered the following paths of education and specialties:

### **AVIATION MANAGEMENT**

Within the specialty, all subjects are conducted in the English language. Specialization classes are conducted by international specialists from the aviation industry. In the course of education, students improve practical skills enabling activities in the field of broadly understood economic activity in the aviation industry. Thanks to this, they learn to solve basic economic problems of enterprises, organizations and aviation institutions, and also learn the possibilities of using IT tools.

Under the agreement signed with one of the largest air carriers in Europe – LUFTHANSA, students are educated under the guidance of international experts from the aviation industry. During their studies, students may participate in IATA (International Air Transport Association) trainings, which will prepare them for obtaining a certificate (IATA Ground Operations Management or IATA Cargo Introductory Course). Certificates issued by IATA are the most recognizable documents in the world which confirm the competence of employees of the air transport market.

### **GENERAL AVIATION MANAGEMENT**

General Aviation is an elite international education path at first-cycle studies. Within the specialty, all subjects are conducted in the English language. Specialization classes are conducted by international specialists from the aviation industry. During their studies, students may obtain a certificate issued by the Aviation Research Corporation of Vancouver, Canada. Its acquisition confirms the intermediate competence in using the ARCPort program, which is an airport simulator. Over 80 international airports use this software on a daily basis.

Under the contract signed with one of the largest air carriers in Europe – LUFTHANSA, we involve international experts from the aviation industry in the education process.

### **INTERNATIONAL MANAGEMENT**

Studies in the specialization of international management are based on standards that take into account the changing structure of the global economy and the rules of functioning of international enterprises. The specialization in international management allows you to acquire and improve the skills of effectively using tools to effectively manage a modern company. In the study program there are, among others, strategic management, subjects related to financial management, international marketing and business communication.

**The English-language second-cycle studies** in Management last for 4 semesters and end with obtaining a master's degree. Education in the field of study has been conducted since the 2018/2019 academic year.

## There are offered the following paths of education and specialties:

### INTERNATIONAL MANAGEMENT

Studies in the English language in the specialization of international management take into account the changing structure of the global economy and thus provide the basis for understanding the principles of international enterprises.

The specialization in international management allows you to acquire and improve the skills of effectively using tools to effectively manage a modern company. Graduates of these studies may be employed as specialists in the fields of marketing, commerce, advertising and promotion on the Internet, contacts in business transactions. They can also be independent entrepreneurs running a business on the Internet.

### LOGISTICS IN TRANSPORT

Classes are conducted by experienced specialists, which reflects the specificity of the logistics industry. All offered modules are practical and their selection is the result of market analysis. In addition, the opportunity to learn in an intercultural environment allows students to achieve a high level of English and find work in logistics companies around the world. Graduates can find employment as employees of organizational units dealing with logistics, sea transport, distribution and trade, lean managers responsible for balancing production capacity in enterprises and for design and organization of production processes, as well as consultants in the fields of logistics.

### FINANCE AND ACCOUNTING IN MANAGEMENT - NEW FROM 2020/2021

The aim of education in the specialty is to equip graduates with specialist knowledge and skills related to making the right financial decisions in the organization, resulting in an increase in its value. This specialization will allow you to learn about finance in the context of the organization's practice, hence accounting-related items occupy an important place in its structure. Graduates in the specialization will acquire practical skills related to the preparation of financial statements and conducting financial analyses. They will gain knowledge in the field of enterprise valuation and enterprise value management, as well as learn how to use financial information to make management decisions.

# SCIENTIFIC RESEARCH

## SCIENTIFIC AND RESEARCH PROJECTS FINANCED FROM EXTERNAL SOURCES

### BE Aware Student (BEAST)

Project consortium: University of Information Technology and Management in Rzeszów (Poland), Universita Degli Studi di Modena e Reggio Emilia (Italy) and Polytechnics Institute of Portalegre (Portugal)

Project Manager: dr Joanna Świętoniowska jswietoniowska@wsiz.rzeszow.pl

The aim of the project is to modernize the university's offer by developing, testing and implementing an innovative course/subject in the field of IT, "business model – I am IT specialist with passion" that shapes the ability to generate personal business models and the ability to use innovative ideas in shaping a professional career.

Period of implementation: 1.09.2018–31.12.2020 Financing: Erasmus+ within the framework of action 2 Strategic Partnerships in Higher Education

### Adaptation and Evaluation D.Y.L. Methodology to Individualized Career Planning in Higher Education Institutions

Project consortium: University of Information Technology and Management in Rzeszów (Poland), Universita Degli Studi di Modena e Reggio Emilia (Italy) and Polytechnics Institute of Portalegre (Portugal), Université de Nice – Sophia Antipolis (France)

Project Manager: dr Tomasz Skica tskica@wsiz.rzeszow.pl

The aim of the project is to establish international cooperation in order to adapt the Business Model You (BMY) and Design Your Life (DYL) approaches to the needs of individualization and creation of education paths and career planning as well as to develop a methodology for the process, techniques and methods of individualization of education and professional career paths for universities in this area.

The main target groups will be scientists working on the project, university management, students and employees of career offices or personnel departments.

Period of implementation: 1.10.2019-30.09.2021

Financing: NAWA International Academic Partnerships

### Inspiring Digital Entrepreneurship and Awareness (IDEA)

Project prepared in cooperation with IBAF employees and international partners under the Erasmus Strategic Project. The project team is made up of partners from Croatia, Italy, Belgium, Slovakia, Romania and Spain. The aim of IDEA is to map and gather information on the dynamics of digital entrepreneurship in the countries involved in the project. IDEA assumes increasing digital skills and entrepreneurship by developing and testing a set of innovative materials and resources. The project will increase the awareness of higher education institutions and educational authorities about the potential of digital competences and entrepreneurial skills as well as their role as factors of business success.

Period of implementation: 1.11.2019–31.10.2021 Financing: Erasmus – Strategic Partnerships

### The method of continuous monitoring of educational mismatch on the labour market at a detailed level

Project Manager: dr Robert Pater rpater@wsiz.rzeszow.pl

The main aim of the project was to improve the effectiveness of cooperation between science and education and the business environment by developing a method of continually assessing the educational mismatch between labour supply and demand for work at a detailed level, i.e. a mismatch regarding the field of education, qualifications and competences, and examining their causes.

The main result of the project is the development and access to a method of continuous monitoring of the detailed adjustment of the education sector to the requirements of the labour market on the example of Poland. The project results also include: a detailed assessment of educational mismatches on the labour market and conclusions for education policy and the labour market.

Period of implementation: 28.06.2017-27.05.2019 Financing: Program Dialog MNiSW (0127/DLG/2017/10)

## The relationship between the development of the financial sector and economic growth – a regional approach

Project Manager: dr Agata Gemzik-Salwach agemzik@wsiz.rzeszow.pl

The aim of the study was to determine the relationship between the development of the financial sector and economic growth in a regional perspective. The focus was on the regional approach, because the research conducted so far on the impact of the growing financial sector on economic growth focused on showing these relationships for entire economies, ignoring the regional aspect. Meanwhile, the results of the analyses at the regional level may differ completely from the results of the analyses at the national level.

The obtained research results imparted knowledge about Polish regions in which the further development of the financial sector is still beneficial and those in which it is already sufficient.

Period of implementation: 08.12.2017-07.12.2018 Financing: Program Miniatura NCN (2017/01/X/HS4/01500)

## SCIENTIFIC RESEARCH FINANCED FROM THE SUBSIDY OF THE MINISTRY OF SCIENCE AND HIGHER EDUCATION

### Subject: Instrumentalization and effectiveness of local government entrepreneurship support policies in the economic and financial systems of Poland and Latvia Project Manager: **dr Tomasz Skica**

The aim of the project is to examine local government entrepreneurship support policies in Poland and Latvia, compare the characteristics describing them and assess their effectiveness. The study will allow development of proposals for measures to improve the effectiveness of policies designed and implemented by LGUs, including their transposition between the economic and legal orders of the two countries studied.

Period of implementation: 2019-2021

## Subject: Shaping a competitive position on the Polish air transport market on the example of the Lufthansa carrier

Project Manager: mgr Olesia lefremova

The main aim of the research is to determine ways to evaluate the competitive position of the company on the air services market in terms of competitors on the example of the Lufthansa airline. As part of empirical research, a CAWI (Computer-Aided Web Interviewing) survey will be conducted based on an online research panel, whose aim will be to determine, from the clients' perspective, factors affecting the competitive position of the airline on the Polish air transport market, with particular emphasis on the Lufthansa carrier. The factors that determine the choice of airline by passengers, propensity to recommend, consumer preferences, opinions and attitudes of passengers will be examined.

Period of implementation: 2019-2020

### Subject: Analysis of financial statements of business entities (Desk Research) using Text Mining techniques

### Project Manager: mgr Ulyana Dzyuma-Zaremba

The aim of research is to verify whether the information contained in the report on operations, which is an integral part of the financial statements, has significant information qualities in terms of forecasting bankruptcy. The audit will cover entities registered in the Rzeszów District Court whose financial statements are not subject to audit by a certified auditor.

The research group will be economic entities registered in the District Court in Rzeszów, which in the years 2017-2018 have been declared bankrupt or have been subject to restructuring proceedings. Period of implementation: **2019-2020** 

## Subject: Application of the simulation method to optimize design and process improvement in the logistics supply chain

Project Manager: dr Grzegorz Wróbel

The aim of the project is to analyze the scope of tasks, problems and decisions in logistics processes, whose implementation, solution and undertaking requires optimization and reduction of risk using a simulation method. Period of implementation: **2018–2020** 

# PUBLICATIONS



The results of the research are published by employees of the Faculty of Management in journals indexed in international databases.

## LIST OF SELECTED PUBLICATIONS OF THE FACULTY OF MANAGEMENT EMPLOYEES IN 2017–2019:

Antczak, Elżbieta; Gałecka-Burdziak, Ewa; Pater, Robert. What affects efficiency in labour market matching at different territorial aggregation levels in Poland?. BULLETIN OF ECONOMIC RESEARCH, 2019, 71.2: 160-179. ISSN 0307-3378

Gemzik-Salwach, Agata; Braja, Mirosława. Competitiveness of high-tech sectors in the European Union: A comparative study. Journal of International Studies, 2019, 12.2: 213-227. ISSN 2071-8330

Lewandowska, Anna; Pater, Robert; Cywiński, Łukasz. Determinants of business innovation in the Regional Innovation System context. Policy implications for a less developed region. Studia Regionalne i Lokalne, 2019, 1(75): 5-27. ISSN 1509-4995

Skica, Tomasz; Mroczek, Teresa; Leśniowska-Gontarz, Małgorzata. The impact of selected factors on new business formation in the private healthcare sector. International Entrepreneurship and Management Journal, 2019, 15.1: 307-320. ISSN 1554-7191

Antczak, Elżbieta; Gałecka-Burdziak, Ewa; Pater, Robert. Unemployment and vacancy flows in spatial labour market matching at the regional level. The case of a transition country. Journal of Applied Economics, 2018, 21.1: 25-43. ISSN 1514-0326

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# INTERNET FINANCIAL QUARTERLY e-Finanse

The Internet Financial Quarterly "e-Finanse" (in short "e-Finanse") has been published in "on-line" form (www.e-finanse.com) since 2005 roku by the University of Information Technology and Management based in Rzeszów (en.uitm.edu.eu). "e-Finanse" has been published in the form of "Open Access" since the beginning of their activity, which makes the quarterly's formula modern and goes with the times.

The topics of the articles contained in the journal are comprehensive and cover issues ranging from corporate and public finance to insurance and banking, and to the legal aspects of financial management of business entities. Since the end of 2010, the quarterly has been published only in English.

The journal's international character is manifested in the Program Council, who bring together representatives not only of the Polish world of science, but also of the foreign one. In addition, the same principle is reflected in the selection of reviewers. Taking care of improving the quality of the published quarterly, the editors strive for constant expansion of the Program Council.

The quarterly "e-Finanse" is indexed in major international magazine repositories, including: The Central European Journal of Social Sciences and Humanities (CEJSH), EconLit, RePEc, Index Copernicus, ProQuest, Ulrichsweb and EBSCO. Aiming at the main goal of the high quality of the published magazine, the above list is still expanded with new items. In addition, starting from 2016, "e-Finance" signed a contract with the De Gruyter Open publishing house (now Sciendo) – a leading publisher of scientific publications in many important scientific fields that are available in the open access format. Thanks to establishing cooperation, "e-Finances" is currently indexed in nearly 150 repositories, which allows increasing the readership of the quarterly abroad and increasing the "quotability" of articles.

# INTERNATIONAL SCIENTIFIC CONFERENCES

## International Scientific Conference "Finansjalizacja" organized cyclically every two years from 2015.

The need to carry out the task arose from observing the growing importance of the financial sector in economies, which is referred to by scientists as financialization. This problem in Poland is still relatively poorly recognized, but it is intensively discussed in the United States, Japan and Western European countries.

The conference is by definition an interdisciplinary event whose purpose is to combine various scientific environments to disseminate Polish and foreign research results devoted to the subject of financialization and to indicate new directions of interdisciplinary research in the area of financialization. It is primarily addressed to Polish and foreign scientists, but also to practitioners and representatives of the business world and various institutions responsible for conducting socio-economic policy.

The conference organized in 2015 received funding from the National Bank of Poland for economic education, and the 2017 and 2019 editions – from the Ministry of Science and Higher Education allocated to the dissemination of science and from the National Bank of Poland for economic education.

### International Science Exploration Events (ISEE)

A series of meetings of scientists to disseminate the latest research results and conduct discussions on their results. It is a modernized formula of the event entitled "Seminars at Economists", which were organized since 2014 by a team of academic staff of the Institute of Financial Research and Analysis at the University of Information Technology and Management based in Rzeszów. So far 19 Seminars with Economists have been organized. On November 14-15, 2019, with the support of the Ministry of Science and Higher Education, the Institute organized an international scientific seminar entitled International Science Exploration Event (ISEE) 2019: Supporting entrepreneurship by local authorities in Poland, Slovak Republic and Estonia. Representatives of academic centers from Poland as well as from abroad took part in the event, including representatives from Great Britain, Germany, Italy, Bosnia and Herzegovina, Croatia, Estonia, Slovakia and Russia. The event refers to the presentation of the issue of supporting economic initiatives by local government and assumes the dissemination of research results on this topic internationally. The justification for the presentation on the transnational forum of the indicated research topics provided the effects of the implementation of the scientific and research project titled "Supporting entrepreneurship by the local government at the municipal level", financed by the National Science Center on the basis of decision DEC-2013/11 / B / HS4 / 01022. Moreover, the legitimacy and purposefulness of work undertaken on the dissemination of knowledge in the studied topic also results from the experience of domestic and foreign cooperation and exchange of views on this topic with representatives of research centers located home and abroad.

### Entrepreneurship and Development from Regional Perspective. Exchange of Academic Experiences among Erasmus+ Programme Countries

On 7-8 March 2019, the University hosted representatives of nearly 16 leading European research centers at a two-day international scientific seminar entitled Entrepreneurship and Development from Regional Perspective. Exchange of Academic Experiences among Erasmus + Program Countries. " The seminar was carried out on the initiative of the Institute for Financial Research and Analysis (IBAF) in cooperation with the Recruitment and International Cooperation Section of the UITM. The seminar was the result of international scientific cooperation of the employees of the Institute of Financial Research and Analysis established among others thanks to trips under the Erasmus + Program to recognized European research centers dealing with entrepreneurship issues (including Hungary, Latvia, Lithuania, Estonia and Slovakia). The first day was initiated by workshops devoted to the internationalization of scientific journals, as well as their indexation, among others, in Web of Science and Scopus. In the seminar part representatives of, among others, Aston University (UK), University of Economics in Prague (Czech Republic), Stockholm School of Economics in Riga (Latvia), as well as University of Pécs (Hungary) and The Friedrish Schiller University Jena (Germany) presented their speeches. On the second day, the speakers included representatives of: School of Economics and Business in Sarajevo (Bosnia and Herzegovina), Silesian University in Opava (Czech Republic), Kazimieras Simonavicius University (Lithuania), Kings College London (UK), as well as the London School of Economics (UK), and University of Tartu (Estonia), and University of Dubrovnik (Croatia). During the second day of the seminar there was a workshop moderated by prof. T. Mickiewicz, and its aim was to initiate interdisciplinary and international scientific research resulting from the integration of scientific communities from Poland and abroad.

# TEACHING AND RESEARCH LABORATORIES



## LABORATORY OF ADAPTING ECONOMIC INNOVATION IN OBJECTIVE IT TECHNOLOGIES (FINANCIAL)

The Financial Laboratory is a specialized dealing room designed and equipped in an innovative way to enable the achievement of educational, scientific and research goals.

It is modeled on the best global solutions in the field of creating professional transaction rooms at universities that allow for both financial education in exceptional conditions and conducting even the most advanced scientific research. It enables conducting scientific research related to broadly understood finances with the use of automatic stock transactions (algorithms).

#### In particular, it enables research in areas such as:

- personal finance and household budget management;
- broadly understood financial and economic analysis;
- examining the behaviour of financial and capital markets;
- technical analysis on financial markets;
- fundamental analysis on the capital market;
- creating business models (used for simulation games);
- creating mathematical models for use in banking;
- examination of the volatility of financial instruments;
- behavioural finance study;
- programming automatic stock transactions (investment robots).

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## SIMULATION LABORATORY

Thanks to its innovation, the laboratory offers people who want to expand their skills and knowledge in the field of simulation a high-class software used in companies around the world.

These include, among others, the most popular analytical and simulation tool FlexSim in the logistics industry, which, together with the BricsCad software, gives almost unlimited possibilities in the field of 3D modelling of virtual reality. In addition, in the laboratory we can use the SAP program recognized as a leader on the market of integrated ERP class IT systems.

A notable trend in the world of science is the verification of research hypotheses using simulation methods. Some scientists are only supporting the visualization of ongoing activities in order to better understand them, but the current IT solutions located in the simulation laboratory enable us to obtain raw data on the basis of which we can easily verify the hypotheses of conducted research.

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# ACCREDITED INNOVATION CENTER

The Center for Innovation and Entrepreneurship of UITM has been an accredited innovation center since 2017, thanks to which it can be a contractor for paid pro-innovation services provided to entrepreneurs who apply for funding under the sub-measure 2.3.1 "Proinnovative IOB services for SMEs" of Operational Program Intelligent Development implemented by the Polish Agency for Enterprise Development.

### The scope of accredited innovative services includes:

- Innovation audit;
- Analysis of alternative development paths through the implementation of innovations;
- Specification and assessment of the selected development path related to the implementation of innovation;
- Preparation of a detailed financial model for an innovation being developed or implemented;
- Identification and mapping of key business processes related to the implementation of innovations, their modification and optimization;
- Assistance in developing functional / technical documentation necessary to implement the innovation;
- Developing a marketing strategy for a product or service that is the subject of an innovative technology implementation;
- Development of a detailed innovation implementation plan;
- Analysis of the risk of implementing innovations.

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