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Lodz University of Technology



Lodz University of Technology Faculty of Organization and Management

#### Dear Reader

Your choice of the Faculty of Organization and Management at Lodz University of Technology means that you have opted for one of the best universities in Poland. Our Faculty will give you the opportunity to study at the highest European level.

The Faculty of Organization and Management, one of the first management faculties at technical universities in Poland, has been part of Lodz University of Technology since 1991.

The cooperation of the Faculty with industry includes scientific and research collaboration, organization of student internships and work placements, as well as shaping the profile of graduates in response to the needs of the labour market. For many years, the Faculty has also been cooperating with Klub 500-Łódź, which brings together representatives of Lodz business.



## **Faculty in NUMBERS** Currently, the Faculty educates 品目451<sub>students</sub> students The Faculty staff includes We have **16163** graduates academic teachers including 23 profesors The Faculty functions and associate professors 48 doktors, masters 14 over In the years 1998 – 2021 a doctoral degrees economic sciences 106 people There are 71% women research clubs men **29%** and student organizations at the Faculty



## Leading research trends at the Faculty of Organization and Management



#### Organization from a relational perspective

The identified research gaps inspired the Faculty's scientists to conduct research on the organization from the relational perspective, in the area of cooperation with both internal and external stakeholders. Inter-organizational relations are analyzed, e.g., from a strategic perspective. The research covers, in particular, the relational strategy of enterprises in the context of strategic choices made, such as: the choice of mechanisms of creating and appropriating value, the choice of relationship partners, the choice of the method of cooperation expressed by the nature of cooperation and / or coopetition, as well as the choice of the method of shaping the strategy (intentionality vs. emergence).

The research identified key attributes of the relational strategy and the effects of its implementation. The next topics discussed at the Faculty are the role of the company's relational capital in counteracting crisis phenomena, the network of relations between enterprises in the perspective of shaping the value of the enterprise and the network of relations occurring on the capital market, within which the process of fluctuating enterprise value and risk transmission is shaped.

The research also covers cooperation undertaken in the area of marketing, where relations most often concern product shaping, distribution system and promotional activities. They comprise, among others, processes of co-creating products and other elements of the marketing offer together with consumers, including those of an intangible nature. Limiting the market activity of modern final buyers to purchasing behavior - characterized by the classically understood supplier-recipient relationship - does not meet their expectations. This leads to a specific transformation of marketing orientation, which consists in replacing the paradigm of value creation with a paradigm of its co-creation together with buyers as prosumers within the framework of partnership and mutually beneficial relations.





Leading research trends at the Faculty of Organization and Managemen

#### Social, economic and financial environment of the organization

In a globalized economy, there are many dimensions in relation to which the relationship between the environment and the organization is studied. Within this area, research is carried out, focusing mainly on the analysis of the social and economic-financial environment. Quantitative methods of data analysis and forecasting are widely used in research on pension systems, welfare state models, intergenerational relations, labor markets, financial markets and energy markets.

Many of the studies conducted are of a macro-scale nature, and the results obtained are related to the organization level. In this way, changes occurring in the dynamic environment of the organization on the scale of the national economy and on a global scale are identified. A retro- and prospective analysis is made of the impact of these changes on the functioning of contemporary organizations.

Research on pension systems, labor markets and intergenerational relations provides results that are important for the prospects for shaping labor supply at the level of the economy, and thus for human resources and their management at the organizational level. On the other hand, quantitative research and computer techniques of text data processing are used in research on relations between enterprises and financial market participants. In this way, communication practices are identified, the process of their formation, and the effects of their application are assessed.

The impact of regulatory changes and supervision over the financial market on the functioning of enterprises is also analyzed. An important research topic is also electricity market analyzes conducted with the use of artificial neural networks. The demand for energy and its prices are modeled - the basic factors influencing the business decisions of companies in this sector. In addition, artificial neural networks are used in the field of management accounting in the study of forecasting the life cycle cost of a product.





#### Management in the context of sustainable development

Worsening environmental and social problems are becoming an increasingly urgent challenge for today's organizations. These problems largely result from the existing management models. An increasing number of organizations consciously accept this responsibility and try to implement management strategies that respond to the postulates of sustainable development. This change requires the involvement of all market participants, taking into account the entire life cycle of the product and the accompanying processes: design, production, logistics and disposal.

The Faculty staff, being aware of the above-mentioned challenges and the related research gaps, intensified their research activities in this area. The conducted research concerns the issues of sustainable production and consumption and the strategy of implementing circular economy models, taking into account the specificity of selected industries, particularly important for Lodz and the region. Contemporary guality management requires an objective assessment of the environmental impact and ensuring the safety of products and processes in the entire value chain. Effective communication in this regard with a wide range of stakeholders becomes indispensable. In design and quality assessment, the "Design for Excellence" approach becomes a key element and analysis using such methods as: LCA (Life Cycle Assessment) or LCC (Life Cycle Costing). Environmental labeling is becoming an increasingly important communication tool. An important goal of the research is to look for solutions that allow to take into account the human factor, safety aspects and the impact on the natural environment through the use of the above-mentioned methods and tools in management.

Due to the key role of the above-mentioned issues in contemporary city management, the employees of the Department also take up the issues of the essence and conditions of implementation and implementation of the "smart city" brand strategy, taking into account the attitudes of various stakeholder groups towards the smart city brand, taking into account the concept of sustainable development.





## **Leading research trends** at the Faculty of Organization and Management TUL



### Technology in managing an organization

Enterprises operating in the 21st century function in the demanding conditions of the Industry 4.0 era. SMART WORLD is the interpenetration of two realities real and virtual. Due to this state of affairs, the era imposes on organizations specific priorities and challenges in the scope of necessary changes. Organization from a relational perspective

In the past, organizations were viewed as compilations of tasks, products, employees, profit centers and processes. Today they are more and more often perceived as intelligent systems designed to manage broadly understood knowledge and technologies based on it. Researchers in this area notice the specificity of the times, hence their research focuses on the problems of using various types of technologies to improve management processes in the Industry 4.0 era. They analyze both solutions relevant to SMEs and larger organizations in micro, meso, and macro contexts. Researchers are also trying to prepare support in this area for various industries and sectors from the perspective of key areas for the contemporary market.

The main issues of the area are the management of new technologies in selected industries (textile, medical, automotive, energy, food, high-tech sector, etc.) and the problems of using modern applications and technological solutions in modern economic organizations (including marketing innovations in in the field of social media marketing, advertising in search engines, IT technologies, technical solutions supporting logistics, warehouse management, production, management, cooperation of enterprises, etc.).

The research focuses in particular on the aspects of innovation, especially systems, methods, strategies and tools to support inventiveness and open innovation in the development of Polish and European enterprises. Important issues for researchers in this area are also the problems of creating, functioning and development of intelligent organizations, in particular the management of their safety, (eco) logistics and the socially responsible building of competitive advantage.



### Scientific achievements

Professor Agnieszka Zakrzewska-Bielawska, Ph.D., D.Sc. received the individual award of the Committee on Organizational and Management Sciences of the Polish Academy of Sciences in the 13th Competition for Scientific Works in the field of Management Sciences, created in 2016-2018, in the category: oneauthor monographs for the monograph entitled "Strategies for the development of enterprises. New look".

Professor Filip Chybalski, Ph.D DA received the award of the Committee of the Sciences on Labor and Social Policy of the Polish Academy of Sciences in the competition for the best publications in the field of labor, social policy and human resource management, published in 2018, for the monograph entitled "Retirement age from an economic perspective. A theoretical and empirical study", Agnieszka Zakrzewska-Bielawska



Professor Agnieszka Baruk, Ph.D DA was awarded in the final of the competition for the best article at the 10th Scientific Conference in the series Organization Development Management organized by the Management Department of Lodz University of Technology.

More at: woiz.p.lodz.pl/nauka/osiagniecianaukowe/



#### Management Engineering

First-cycle engineering studies with a practical profile, full-time

#### Why is it worth it:

- Active interaction with the business environment: six-month internships in the best companies in the region.
- The program includes activities using modern form sand teaching methods: Design Thinking, Problem Based Learning, Case-Teaching, elearning as well lectures / classes in foreign languages
- In addition to gaining scientific knowledge, you will shape and develop soft skills, i.e. interpersonal skills, such as communication skills, ability to work in a group, creativity, logical thinking, or coping with stress.



# Internships, cooperation with companies:

- ABB
- Amcor
- Corning
- Dell
- Infosys
- Lumileds



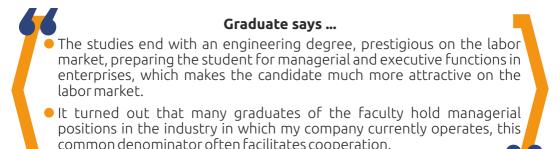


#### **Professional prospects:**

- operational, analytical and specialist positions at various management levels,
- due to the interdisciplinary nature of education, graduates easily start cooperation with constructors, technologists, economists, IT specialists and other specialists, they actively function in project teams, both in economic organizations and the public sector,
- working in research and development departments and in the implementation of projects in the field of development of new products and services,
- continuation of work in companies where internships were carried out and with which the Faculty (including the field of study) cooperates: ABB, Amcor, Corning, Dell, Infosys and Lumileds

## Fun fact

Amazon's website was originally called cadabra.com, but has been renamed amazon.com. Among other things, to emphasize the enormity of the project (the website was advertised as the largest bookstore in the world), and to be as high as possible in the alphabetical list of sites. A similar reason for choosing the name "Apple" was given by Steve Jobs - he wanted to be higher in the lists than Atari, for which he previously worked.



#### Further education options:



second-cycle studies



postgraduate studies



## **Logistics** First degree engineering studies with a general academic profile

**Logistics** is the profession of the future. No matter how automated production and transport are - logisticians will always be responsible for the effective organization of the flow of goods. In order to plan and then supervise the flow of raw materials and materials between companies, you need general and specialist skills. At the beginning, you will learn the basics of management and economics, commodity science, production management, finance and accounting, and law. Then, in the major subjects, you will study production and distribution logistics, inventory and supply chain management, designing logistic processes, transport economics, logistics infrastructure, as well as ecology. You will also learn how to use modern IT

systems in logistics. You will become. a competent engineer and manager.

#### Why is it worth it:

- Logistics is currently one of the key areas of development.
- You will obtain the qualifications necessary to make analyzes and make economic decisions regarding logistic processes in enterprises.
- You will gain logistic, IT, technical and economic knowledge as well as organizational skills.



Internships, cooperation with companies: Rossmann

- Rossina
- Dell
- BSH



## Logistics

#### Professional prospects:

- positions in the logistics departments of production, commercial and service enterprises, as well as in design and consulting units dealing with logistics,
- work in business units, logistic centers, forwarding and transport companies, where logistic, IT, technical and economic knowledge as well as organizational skills are required.

## Fun fact

The largest logistics complex in Europe is under construction in Lodz. Central European Logistics Hub is being built by Panattoni Europe and has already 250,000 sq m. Another 160 thousand, sq m is under construction.

"Bananas" is also a colloquial name for logistics corridors that are strategically important.

#### Further education options:



second-cycle studies



postgraduate studies



## Management First-cycle BA studies general-academic, full-time

#### Why is it worth it:

- You will gain knowledge about the functioning of the organization and the work of a modern manager in the conditions of the requirements of the competitive labor market of the Industry 4.0 era.
- You will develop knowledge in the field of shaping partnership cooperation, both in internal and inter-organizational relations.
- You will deepen your knowledge of the strategic approach to change and project management.
- You will develop the skills to recognize and solve problems of managing human, material, financial, information and relational resources in the organization, also in crisis situations.
- You will be prepared to solve problems in a creative and innovative way, using many teamwork methods.



# Internships, cooperation with companies:

- Amcor
- **BSH**
- Browin
- Corning
- Dell
  - Rossmann

#### Professional prospects:

- managerial positions at all levels of management in small and large enterprises, public administration units and non-profit organizations,
- creating and managing your own company,
- workplaces supporting coaching and mentoring as well as management consulting,
- own scientific development.

Fun fact

The Coca-Cola logo is recognized by 94% of the Earth's population

The Rubik's Cube is the best-selling item of all time. The iPhone is in second place.

Today, more people have a cell phone than a toilet.





second-degree studies



postgraduate studies





## Management

Second-cycle studies - Master's degree general-academic, full-time and part-time

By choosing a master's degree in management, you will gain skills in solving advanced economic, organizational, human resources, financial and social problems with the use of computer support. You will be prepared to use modern methods and techniques in the area of company management, you will also receive specialist theoretical and practical knowledge as well as the skills of critical analysis and evaluation of existing phenomena. You will be able to diagnose and solve problems occurring in economic practice by acquiring the ability to make tactical decisions.

## Further education options:



third-cycle studies



postgraduate studies





#### **Management and Production Engineering**

First degree engineering studies with a practical profile, full-time and part-time

#### Why is it worth it:

- You will combine theoretical knowledge with practical skills and competences desired on the labor market.
- You will learn modern methods and techniques of production management Lean Management, Agile, TOC, TPM, TQM, WCM and others.
- You will learn modern technical solutions, existing production systems and the transfer of technology and innovation.
- You will learn what the quality of products, processes and management systems is.
- You will become creative through active participation in projects carried out with the use of modern forms and methods of education.



## Internships, cooperation with companies:

- ABB
- Amcor
- Browin
- Corning
- Dell
- Infosys
- Lumileds

## Management and Production Engineering



#### Professional prospects:

- specialist and managerial positions related to production and service management, logistics, quality, occupational health and safety,
- work in companies using modern production methods, including Industry 4.0, LEAN, TQM, ISO, Agile, etc.
- ISO 9001 system auditor.

## Fun fact

Thomas Edison didn't just invent the light bulb. He held over 1,000 patents, founded the scientific journal Science, established the world's first scientific and technical research institute, Menlo Park, and founded many companies including General Electric. Among the numerous inventions of Edison there was also ... the electric chair.



- During my studies, I learned what it means to be an effective process engineer.
- Today I am a director in the company, thanks to the knowledge and competence gained and the support of academic teachers with whom I am in constant contact...
- I meet many graduates from my field of study who have achieved success and who manage processes like me.

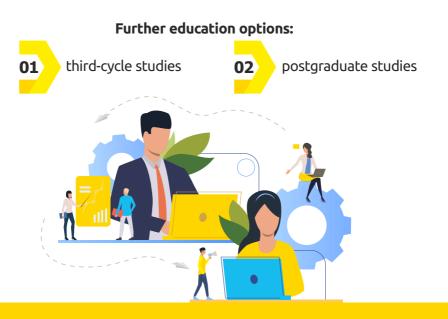




### **Management and Production Engineering**

Second-cycle studies - Master's degree general-academic, full-time and part-time

By taking the master's degree in Management and Production Engineering, you will be prepared to work in various production departments. You will be able to effectively manage production systems and supply chains in accordance with the spirit of Industry 4.0 or the circular economy. You will acquire competences necessary to participate in the implementation of research and development works, especially regarding process innovations. You will be prepared to analyze the various data sets used to evaluate manufacturing, logistics and quality processes. We will teach you to manage employee teams so that you can successfully run your own production, service or production and trade company.





## Studies conducted at the International Cooperation Centre



**Business and Technology** - first-cycle engineering studies with a practical profile conducted in English.



**Business Studies** - first-cycle bachelor's studies with a practical profile conducted in English.



**Gestion et Technologie** - first-cycle engineering studies with a practical profile conducted in French.



**Master of Business Studies** - second-cycle studies with a general academic profile conducted in English.



**Master of Operations Management** - second-cycle studies with a practical profile conducted in English.







Cooperation with the economic environment

The Faculty of Organization and Management together with the Klub 500 and the Voivodeship Office has been organizing the process since 2010.

Certification of Managers. The main goal of the Certification process is to care for the economic development of the Lodz region through the improvement of managerial staff, which are the most important factor of economic success. The purpose of certification is to recognize and appreciate the knowledge and competences of people managing enterprises and organizations, and to show them a possible further path of professional development, which is a response to the challenges posed by the concept of life-long learning (LLL).

**Klub 500-Lodz** is an autonomous, voluntary Association of Presidents and Directors of Companies and Institutions based in the Lodz Voivodeship.

Klub 500-Lodz Association has been cooperating with the Faculty for 15 years and is based in our buildings. The fruit of OUL cooperation is, among others, the annual competition for the 500-I odz Club Award for the author of the best master's thesis ΟD business issues in a given academic vear. It is also worth mentioning Members that Club activelv participate in events organized by the Faculty, such as seminars and conferences, and give opinions on study programs.



## Cooperation with the economic environment



The Faculty of Organization and Management at Lodz University of Technology also has a **Business Council**, which provides a platform for the exchange of information and experience between business practice and science. The members of the Business Council are Leaders of Economic Entities with a recognized reputation and economic position, mainly from the area of central Poland.

The presidium of the Council includes representatives of companies such as: Corning,

Hydro and Municipal Water Supply Company. The members include AWP Nordic Products, Browin, Delia, Dell, Lumileds, ŁSSE, Mirbud, Mitmar, Paradyż, Pietrucha, Rossmann, Veolia, Wielton.



## **Research Clubs and student organizations**

At the Faculty of Organization and Management, there are numerous Research Clubs in which students can develop their interests in management, marketing, logistics, health and safety, CSR, innovation and other areas of knowledge.



Students of the Faculty can develop their passions in numerous international student organizations, such as: BEST, Enactus or IAESTE.





