



Lodz University  
of Technology

# Study programme

|                        |                                         |
|------------------------|-----------------------------------------|
| <b>Faculty:</b>        | Faculty of Organization and Management  |
| <b>Major:</b>          | Master of Business Studies (in English) |
| <b>Level of study:</b> | second-cycle programme (magister)       |
| <b>Form of study:</b>  | full-time studies                       |
| <b>Academic year:</b>  | 2026/27                                 |

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## Basic information

|                                                                                                                                                                  |                                         |
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| Name of the field of study:                                                                                                                                      | Master of Business Studies (in English) |
| Level of study:                                                                                                                                                  | second-cycle programme (magister)       |
| Study profile:                                                                                                                                                   | general academic                        |
| Form of studies:                                                                                                                                                 | full-time studies                       |
| Duration of studies (number of semesters):                                                                                                                       | 4                                       |
| The number of ECTS points required to complete studies:                                                                                                          | 120                                     |
| Total number of hours of classes:                                                                                                                                | 1500                                    |
| The number of ECTS points a student obtains as part of classes conducted with the direct participation of academic teachers or other persons conducting classes: | 60                                      |
| Professional title awarded to graduates:                                                                                                                         | magister                                |
| ISCED code:                                                                                                                                                      | 0413                                    |
| Language of study:                                                                                                                                               | English                                 |

### Assigning the course to the disciplines to which the learning outcomes relate

| Discipline                     | Percentage share |
|--------------------------------|------------------|
| Management science and quality | 100%             |

## Learning outcomes (in relation to the PQF)

| No. | Learning outcome code | Learning Outcome Content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Reference to the universal characteristics of the first level of PRK | Reference to the second-level characteristics of the PRK, taking into account the second-level characteristics enabling the acquisition of engineering competences |
|-----|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | 2MBS1                 | Explains and assesses in depth key issues and contemporary theories in the field of management and quality sciences.                                                                                                                                                                                                                                                                                                                                                                                                                             | P7U_W                                                                | P7S_WG                                                                                                                                                             |
| 2   | 2MBS2                 | Identify and analyse the dilemmas of modern civilisation, explaining the economic, legal, ethical and other conditions governing the functioning of organisations, including basic concepts and principles in the field of industrial property protection and copyright, as well as the basic principles of creating and developing various forms of entrepreneurship.                                                                                                                                                                           | P7U_W                                                                | P7S_WK                                                                                                                                                             |
| 3   | 2MBS3                 | Identify, analyse and evaluate advanced management issues and trends in a local and international context, particularly those related to digital transformation, artificial intelligence, innovation and sustainable development, relating them to the strategies, processes and business models of organisations.                                                                                                                                                                                                                               | P7U_W                                                                | P7S_WG                                                                                                                                                             |
| 4   | 2MBS4                 | Formulate and solve problems in the field of management and quality sciences in a creative, entrepreneurial and innovative manner by applying selected management concepts, using appropriate sources of scientific information, performing critical analysis and synthesis, applying modern research and analytical methods and tools, and presenting original conclusions and solutions, communicating using specialist terminology and applying appropriate methods and tools, including advanced information and communication technologies. | P7U_U                                                                | P7S_UW, P7S_UK                                                                                                                                                     |
| 5   | 2MBS5                 | Prepare in-depth written assignments in English summarising their theoretical and empirical research and completed projects.                                                                                                                                                                                                                                                                                                                                                                                                                     | P7U_U                                                                | P7S_UK                                                                                                                                                             |
| 6   | 2MBS6                 | Communicates in a foreign language, including specialist language, at level B2+ of the Common European Framework of Reference for Languages.                                                                                                                                                                                                                                                                                                                                                                                                     | P7U_U                                                                | P7S_UK                                                                                                                                                             |
| 7   | 2MBS7                 | Manages teams, planning and organising individual and team work, and cooperates with others in teamwork, including in an international environment, taking cultural differences into account.                                                                                                                                                                                                                                                                                                                                                    | P7U_U                                                                | P7S_UK, P7S_UO, P7S_UU                                                                                                                                             |
| 8   | 2MBS8                 | Within the scope of the discipline studied, the student is able to think creatively, critically analyse and evaluate the theories and propositions presented, especially in the context of the usefulness and relevance of the evidence used.                                                                                                                                                                                                                                                                                                    | P7U_U                                                                | P7S_UU                                                                                                                                                             |
| 9   | 2MBS9                 | Is able to demonstrate competences beyond the scope of their field of study that are important for building the awareness of a citizen of a knowledge-based society.                                                                                                                                                                                                                                                                                                                                                                             | P7U_U                                                                | P7S_UU                                                                                                                                                             |

| No. | Learning outcome code | Learning Outcome Content                                                                                                                                                                                                                                                                                                                               | Reference to the universal characteristics of the first level of PRK | Reference to the second-level characteristics of the PRK, taking into account the second-level characteristics enabling the acquisition of engineering competences |
|-----|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10  | 2MBS10                | Critically assess their own knowledge, skills and competences, are aware of their cognitive limitations and the need for continuous improvement and updating of knowledge, and demonstrate a willingness to engage in lifelong learning, seek expert advice and develop new competences in line with changing cognitive, social and market challenges. | P7U_K                                                                | P7S_KK, P7S_KO                                                                                                                                                     |
| 11  | 2MBS11                | Consciously develop and create their own competences through an entrepreneurial attitude, and initiate and promote pro-social and market-oriented projects.                                                                                                                                                                                            | P7U_K                                                                | P7S_KR                                                                                                                                                             |
| 12  | 2MBS12                | Prepared to take on challenges at the intersection of different cultures and communities with an understanding and respect for their diversity.                                                                                                                                                                                                        | P7U_K                                                                | P7S_KO                                                                                                                                                             |

## Matrix of course modules in relation to learning outcomes and curriculum content

| No. | Course name                               | Program content                                                                                                                                                                                                                                                                                        | 2MBS1 | 2MBS2 | 2MBS3 | 2MBS4 | 2MBS5 | 2MBS6 | 2MBS7 | 2MBS8 | 2MBS9 | 2MBS10 | 2MBS11 | 2MBS12 |
|-----|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| 1   | Strategic Management                      | Strategy formulation, implementation and evaluation, analysis of the external environment and organisational resources, sources of competitive advantage, strategic decision-making and strategy execution, performance management, case studies.                                                      | x     |       | x     |       |       |       |       |       | x     |        |        |        |
| 2   | Economics and Economic Policy             | Analysis of macroeconomic data (GDP, inflation, growth), business cycle and sustainable development, fiscal and monetary policy, international economy, economic models, interpretation of economic problems based on data.                                                                            |       | x     |       |       |       |       |       | x     |       |        |        |        |
| 3   | Corporate Finance                         | Advanced corporate finance management, cost of capital and capital structure, company valuation, investment project evaluation, financial analysis tools, strategic financial decision-making.                                                                                                         | x     |       |       |       |       |       |       | x     | x     |        |        |        |
| 4   | Digital Tools for Managers                | Selection and use of digital tools (including AI) in management functions, ERP/CRM/HRM systems, collaboration and project management tools, data analytics and automation, configuration of selected solutions, impact of technology on business models, organisation and information security.        |       | x     | x     | x     |       |       |       | x     |       |        |        |        |
| 5   | Operations Research                       | Decision support methods in management, mathematical modelling of decision problems, linear, network and dynamic programming, game theory, practical applications.                                                                                                                                     |       |       | x     | x     |       |       |       | x     |       |        |        |        |
| 6   | English for Science Communication         | English for scientific communication, popularisation of science and technology, specialist vocabulary and structures, presenting scientific content in the field of study.                                                                                                                             |       |       |       |       | x     | x     |       |       |       |        |        |        |
| 7   | Human Factor: Culture, Values and Society | Culture, values and society in a business context, contemporary global challenges, functioning in a multicultural environment, value conflicts and choices in difficult situations, dispute resolution, reflection on the social, political and cultural environment of business.                      |       | x     |       |       |       |       | x     |       |       |        |        | x      |
| 8   | Managerial Accounting                     | Managerial accounting as a system of financial and non-financial information, budgeting and cost control, performance and profitability assessment, monitoring strategic and operational objectives, support for short- and long-term decisions (including pricing, make-or-buy, resource allocation). |       |       |       | x     |       |       |       | x     | x     |        |        |        |
| 9   | Civil and Business Law                    | Fundamentals of civil and business law for managerial decisions, legal entities and acts, obligations, liability and securities, business contracts, disputes, enforcement and insolvency, elements of competition and intellectual property, case analysis and drafting legal letters and clauses.    |       | x     |       |       |       |       |       |       |       |        |        | x      |
| 10  | Digital Transformation Management         | Planning, implementation and scaling of digital transformation aligned with strategy, process mapping and change management, data, automation and AI, selection of operating models and digital competencies, measuring outcomes (KPI, OKR, ROI/TVI), risk analysis and transformation roadmap design. | x     |       | x     | x     |       |       |       |       | x     |        |        |        |

| No. | Course name                                     | Program content                                                                                                                                                                                                                                                                                                                                                                                      | 2MBS1 | 2MBS2 | 2MBS3 | 2MBS4 | 2MBS5 | 2MBS6 | 2MBS7 | 2MBS8 | 2MBS9 | 2MBS10 | 2MBS11 | 2MBS12 |
|-----|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| 11  | Research Design in Management                   | Research design in management, formulation of research problems, objectives, questions and hypotheses, selection of qualitative and quantitative methods, basic analytical approaches and research ethics, preparation of a methodologically sound research proposal.                                                                                                                                |       |       |       | x     | x     |       |       | x     |       |        |        |        |
| 12  | Leadership                                      | Leadership as a process of influencing individuals and teams, leadership theories and styles, leadership competencies, ethical leadership, communication and decision-making, motivation, trust building and change management.                                                                                                                                                                      |       | x     | x     |       |       |       | x     |       |       |        |        | x      |
| 13  | Cross-Cultural Management                       | Management in multicultural environments, cultural differences and their impact on employee behaviour and organisational processes, cultural models, communication, leadership, negotiation and teamwork, collaboration in international teams, management of cultural conflicts.                                                                                                                    |       | x     | x     |       |       |       | x     |       |       |        |        | x      |
| 14  | Circular Economy and Sustainable Value Chains   | Circular economy and sustainable value chains, design of solutions reducing resource use, emissions and waste across the product life cycle, eco-design, repair and remanufacturing, material flow mapping, LCA and environmental footprints, purchasing and logistics strategies, reverse logistics, ESG, regulatory risks and recommendations combining cost efficiency with responsibility.       | x     | x     | x     |       |       |       |       |       |       |        |        |        |
| 15  | Sustainable Management and Business Performance | Integration of ESG and sustainability with performance management, performance measurement systems (KPI, OKR, BSC) including non-financial indicators, cost-benefit analysis of environmental initiatives, risk and compliance management in reporting and the value chain, Lean and continuous improvement, impact of operational decisions on reputation, human capital and financial performance. | x     | x     | x     |       |       |       |       |       |       |        |        |        |
| 16  | Management Information Systems Development      | Analysis of organisational information needs, design of systems supporting planning, control and decision-making, process and data modelling (including KPIs), information architecture and data source integration, MIS/BI tools, system requirements, management report prototypes, evaluation of cost, usability and business value.                                                              |       | x     | x     | x     |       |       |       | x     |       |        |        |        |
| 17  | Strategic HR                                    | The essence and role of strategic HR, HR strategy, workforce planning, talent and competency acquisition and development, performance management, compensation strategies, HR in organisational change, HR analytics in strategic decision-making.                                                                                                                                                   | x     |       | x     | x     |       |       | x     |       |       |        |        |        |
| 18  | Project and Program Management                  | Planning, execution and control of projects and programmes, Agile and Waterfall methodologies, portfolio management and initiative prioritisation, budget and resource allocation aligned with strategy and KPIs, analytical and decision-making competencies, activity optimisation and project risk management.                                                                                    |       |       |       |       |       |       | x     |       | x     |        | x      | x      |
| 19  | B2B Marketing                                   | Specificity of B2B marketing, organisations as buyers and business customer decision-making processes, product, pricing and distribution decisions, marketing communication (PR, trade fairs, digital channels), current B2B trends, new media and sustainability.                                                                                                                                   | x     | x     | x     |       |       |       |       | x     |       |        |        |        |

| No. | Course name                                | Program content                                                                                                                                                                                                                                                                                                                                                                                         | 2MBS1 | 2MBS2 | 2MBS3 | 2MBS4 | 2MBS5 | 2MBS6 | 2MBS7 | 2MBS8 | 2MBS9 | 2MBS10 | 2MBS11 | 2MBS12 |
|-----|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| 20  | Applications of AI in Business             | Identification, evaluation and implementation of AI use cases creating organisational value, applications of predictive analytics and generative models in business functions, feasibility assessment (data readiness, metrics, risk, costs-benefits), collaboration with technical teams, interpretation of model outputs, ethics, privacy, security and regulation, AI roadmap and change management. |       | x     | x     | x     |       |       |       | x     |       |        |        |        |
| 21  | Cybersecurity and Business Resilience      | Cybersecurity and business performance, major digital threats and their effects, cyber risk management and security governance, data protection and regulatory compliance, incident management and crisis communication, business continuity and disaster recovery (BC/DR), operational resilience and supplier/cloud risk, metrics, reporting and investment prioritisation.                           |       | x     | x     | x     |       |       |       | x     |       |        |        |        |
| 22  | Business Model Development                 | Typology and design of business models, innovation and the Business Model Canvas, sources of value creation and capture, business models based on technological innovation, technology transfer and forms of commercialisation, intellectual property management and protection, licensing and research commercialisation strategies, risk management and decision-making in innovative ventures.       | x     | x     | x     |       |       |       |       |       |       |        | x      |        |
| 23  | Economic of Business Models and Innovation | Economics of innovation and technological entrepreneurship, analysis of business model profitability and effectiveness, costs and benefits of innovation, economic aspects of intellectual property protection and valuation, revenue models and innovation financing, scaling business models, strategic decisions under risk, regulation and innovation commercialisation.                            | x     | x     | x     |       |       |       |       |       |       |        | x      |        |
| 24  | Diploma Seminar                            | Master's thesis preparation: research problem, theoretical framework, thesis structure and research methodology, presentation of the thesis concept, discussion and feedback, development of research presentation skills, critical reflection and participation in academic discussion.                                                                                                                |       |       |       |       | x     | x     |       | x     |       | x      |        |        |
| 25  | Diploma Thesis                             | Preparation of the master's thesis: solving a business problem with a mandatory research component, preparation of a report, presentation of results and defence.                                                                                                                                                                                                                                       |       |       |       | x     | x     |       |       | x     |       | x      |        |        |
| 26  | Internship                                 | Practical application of management knowledge in an organisation, learning management methods, techniques and tools, diagnosing and solving organisational problems, analysing processes and environmental impact, performing operational and project tasks, developing communication, negotiation, persuasion and teamwork skills. Internship last a minimum of 4 weeks.                               |       |       |       |       |       |       | x     |       |       | x      | x      | x      |
| 27  | Capstone Elective                          | Programme capstone in the form of a team consulting project, solving complex business problems using management, finance, strategy and data analysis, work on real organisational challenges or case-based learning (CBL), development of analytical, consulting and communication competencies.                                                                                                        |       |       |       | x     |       |       | x     |       | x     |        | x      |        |



## ECTS - subjects

| No. | Course name                                     | ECTS | Subjects in the field of humanities and social sciences | Elective subjects | Profile items | Classes in a foreign language |
|-----|-------------------------------------------------|------|---------------------------------------------------------|-------------------|---------------|-------------------------------|
| 1   | Strategic Management                            | 5    |                                                         |                   | 5             | 5                             |
| 2   | Economics and Economic Policy                   | 5    |                                                         |                   | 5             | 5                             |
| 3   | Corporate Finance                               | 5    |                                                         |                   | 5             | 5                             |
| 4   | Digital Tools for Managers                      | 4    |                                                         |                   |               | 4                             |
| 5   | Operations Research                             | 4    |                                                         |                   | 4             | 4                             |
| 6   | English for Science Communication               | 2    |                                                         |                   |               | 2                             |
| 7   | Human Factor: Culture, Values and Society       | 5    | 5                                                       |                   | 5             | 5                             |
| 8   | Managerial Accounting                           | 5    |                                                         |                   | 5             | 5                             |
| 9   | Civil and Business Law                          | 5    |                                                         |                   |               | 5                             |
| 10  | Digital Transformation Management               | 5    |                                                         |                   | 5             | 5                             |
| 11  | Research Design in Management                   | 5    |                                                         |                   | 5             | 5                             |
| 12  | Leadership                                      | 5    |                                                         | 5                 | 5             | 5                             |
| 13  | Cross-Cultural Management                       | 5    |                                                         | 5                 | 5             | 5                             |
| 14  | Circular Economy and Sustainable Value Chains   | 5    |                                                         | 5                 | 5             | 5                             |
| 15  | Sustainable Management and Business Performance | 5    |                                                         | 5                 | 5             | 5                             |
| 16  | Management Information Systems Development      | 5    |                                                         |                   |               | 5                             |
| 17  | Strategic HR                                    | 5    |                                                         |                   | 5             | 5                             |
| 18  | Project and Program Management                  | 5    |                                                         |                   | 5             | 5                             |
| 19  | B2B Marketing                                   | 5    |                                                         |                   | 5             | 5                             |
| 20  | Applications of AI in Business                  | 5    |                                                         | 5                 |               | 5                             |
| 21  | Cybersecurity and Business Resilience           | 5    |                                                         | 5                 |               | 5                             |

| No. | Course name                                | ECTS | Subjects in the field of humanities and social sciences | Elective subjects | Profile items | Classes in a foreign language |
|-----|--------------------------------------------|------|---------------------------------------------------------|-------------------|---------------|-------------------------------|
| 22  | Business Model Development                 | 5    |                                                         | 5                 | 5             | 5                             |
| 23  | Economic of Business Models and Innovation | 5    |                                                         | 5                 | 5             | 5                             |
| 24  | Diploma Seminar                            | 3    |                                                         |                   |               | 3                             |
| 25  | Diploma Thesis                             | 20   |                                                         | 20                |               | 20                            |
| 26  | Internship                                 | 4    |                                                         |                   |               | 4                             |
| 27  | Capstone Elective                          | 3    |                                                         |                   |               | 3                             |

# ECTS indicators

| Name                                                                                                                                                                                                                            | Value           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| The total number of ECTS credits that a student must obtain through elective courses (amounting to no less than 30% of the total ECTS credits required to obtain the qualification corresponding to the given level of study)   | 40/120 (33.33%) |
| The total number of ECTS credits to be earned by a student through courses in the fields of humanities or social sciences                                                                                                       | 5               |
| The total number of ECTS credits that a student must obtain from courses related to research conducted at the university, amounting to more than 50% of the total ECTS credits required to graduate from a given level of study | 69/120 (57.5%)  |

## Methods of verifying and assessing learning outcomes

The verification of learning outcomes on the Master of Business Studies program is based on a variety of assessment methods, tailored to the categories of outcomes: knowledge, skills and social competences. The choice of assessment tools depends on the specific nature of the module and the format of the classes, and is described in detail in the course description (syllabus) for each module. Achievement of the required learning outcomes is assessed using, amongst other things:

written work (exams, tests, reports, essays, projects, posters, dissertations),  
oral presentations (presentations, papers, oral tests),  
practical and project-based tasks carried out individually and in groups,  
observation and assessment of participation during classes,  
self-assessment and peer assessment, particularly within team projects.

The MBS program emphasizes active learning methods (problem-based, project-based, research-based and case studies), which facilitates reliable assessment of learning outcomes at higher cognitive levels and in conditions resembling real-world organizational settings. Assessment may take the form of:

formative (ongoing, repeated during classes, e.g. feedback, correction of working methods),  
summative (final, in the form of an assessment of learning outcomes upon completion of the module).

Assessment methods are used both during classes held at the university and in interaction with the business environment (e.g. study visits, projects based on organizational challenges, preparation of a dissertation). In accordance with the MBS program's objectives, the dissertation, final project and, where provided for in a given module, practical activities also play a significant role in the assessment of learning outcomes, which strengthens the link between the assessment of outcomes and the requirements of professional work.

An additional tool for assessing learning outcomes throughout the entire course of study is the competency-based examination, which is conducted during the final semester as part of a seminar. It is based on the analysis of a case study and assesses knowledge and skills, particularly at the higher levels of Bloom's taxonomy. Upon passing all modules and the competency exam, the student is entitled to defend their dissertation, and the dissertation examination constitutes the final stage of verifying learning outcomes ( , taking into account the assessment of the preparation process, reviews and the conduct of the examination).

## Professional internships

The Master of Business Studies program includes a professional placement as a module supporting the achievement and assessment of learning outcomes in the workplace (in particular outcomes in the area of social skills and competences), consistent with the principle of project-based learning and engagement with real-world organizations.

The work placement lasts for no less than 4 weeks and comprises at least 75 contact hours. Students must obtain 4 ECTS credits as part of the work placement. The placement is carried out in organizations within the socio-economic environment, in particular in:

enterprises (manufacturing, service and commercial), including technology and consultancy firms,  
public institutions and organizations supporting economic development,  
organizations implementing solutions in the areas of digital transformation, process management, project management,  
finance/controlling, quality and organizational improvement.

The placement may be carried out on a full-time, hybrid or remote basis, provided that the nature of the tasks enables the achievement of the intended learning outcomes and appropriate academic supervision is ensured. The student chooses the placement location (or accepts the University's proposal), and the placement is approved by the placement supervisor to ensure that the scope of tasks aligns with the program's learning objectives. The placement takes place under the supervision of a workplace supervisor (from the organization) and a university supervisor, who support the completion of tasks and monitor progress. The student maintains internship records (e.g. a logbook/record of tasks and working hours) and prepares an internship report describing the tasks completed, skills acquired and conclusions for future development. Passing the placement is conditional upon confirmation of the required number of hours completed, a positive assessment from the company supervisor, and acceptance of the report by the university supervisor (supplemented, if necessary, by a presentation or a summary interview).

# Characteristics of the course

## Graduate profile

Graduates of the Master of Business Studies (MBS) program possess advanced and in-depth knowledge of management and quality sciences, as well as supporting disciplines, enabling them to independently analyze, interpret and solve complex problems encountered in modern organizations. They are prepared to operate in an organizational environment characterized by high volatility, decision-making uncertainty, pressure for efficiency, digital transformation and the growing importance of sustainable development.

The graduate profile is shaped by the interdisciplinary, business-technology nature of the program and the international learning environment. Graduates view an organization as a complex socio-technical system integrating business processes, data, information and communication technologies, and economic, legal and social conditions. They understand the mechanisms underlying the development of organizational strategies and business models, change management, project management, process management and innovation management, as well as the relationships between managerial decisions and their economic, organizational, social and environmental consequences.

During the course of their studies, graduates achieve in-depth learning outcomes in terms of knowledge, covering in particular issues relating to the management of organizations and their key functional areas, business economics and finance, as well as financial and management accounting, operations research, decision analysis and methods of supporting managerial decisions, the design and development of information systems supporting management, business process management, e-business strategy and market activities, including B2B and international contexts, as well as project management, change management and innovation portfolio management. Graduates are also familiar with the legal framework governing the functioning of organizations, particularly in the areas of civil, commercial and labor law, and understand the principles of business ethics, responsible management and sustainable development.

Graduates are able to conduct in-depth analysis of data and organizational phenomena and formulate recommendations for management and other key stakeholders using quantitative and qualitative methods, including advanced business analytics. They are able to identify, diagnose and solve complex management problems under conditions of uncertainty, time pressure and a changing environment, design, compare and justify alternative organizational, technological and process solutions, taking into account strategic, financial, legal and organizational consequences, as well as manage projects, processes and complex development and innovation initiatives. Graduates utilize digital tools and data- and AI-driven solutions to streamline processes and support decision-making; they are able to lead teams, recognize the potential and limitations of team members, and foster a collaborative environment; they conduct negotiations and communicate effectively with stakeholders in a national and , including in English, as well as critically evaluating information, formulating action plans and making managerial decisions in a responsible and reasoned manner.

Graduates are prepared to fulfil specialist, managerial and coordinating roles responsibly, to collaborate in interdisciplinary and project teams, and to build relationships with internal and external stakeholders. They make decisions taking into account ethical principles, social responsibility and long-term consequences for the organization and its environment; they operate in conditions of dynamic technological and organizational change thanks to their high adaptability and commitment to lifelong learning, and is able to combine business, technological and social perspectives in the analysis and resolution of organizational problems.

A key strength of the MBS program is that the educational process is based on active teaching methods, in particular project-based learning and problem-based learning, work on case studies and projects based on real-world organizations, and the possibility of personalizing the study path through the selection of optional modules. The assessment of learning outcomes also takes place in practice, including through a dissertation, a final project and work placements, which enhances graduates' readiness to undertake complex professional tasks.

Graduates of the Master of Business Studies program are prepared for expert and managerial roles in, for example, enterprises, consultancy firms and public institutions, particularly in the areas of business and strategic analysis, project management, process management, innovation, and organizational and digital transformation. They may also develop their own ventures and continue their education in doctoral programs.

## The relationship between the field of study and the university's strategy

The Master of Business Studies program demonstrates a high degree of alignment with the strategy of Lodz University of Technology, whose guiding principle is cooperation and the development of the University across eleven complementary areas, including EDUCATION, STUDENTS, INTERNATIONALISATION, INNOVATION, SUSTAINABILITY, IMPACT, SCIENCE, LEADERSHIP. At the same time, the modernization of the program meets the formal requirement to ensure the program's alignment with the University's mission and

strategy in the process of program design and improvement.

In the EDUCATION area, the MBS program implements the strategic objective of developing modern education that prepares graduates for the rapidly changing needs of the socio-economic environment. The program utilizes active teaching methods (in particular project-based learning and problem-based learning, case studies and projects based on real-world organizational challenges), which enhances the practical assessment of learning outcomes and the development of analytical, decision-making and collaborative skills.

In the STUDENTS and TALENTS areas, the program supports the development of key competences for the labor market: in-depth analysis of data and organizational phenomena, formulating managerial recommendations, working in project teams, and a commitment to lifelong learning. This is consistent with the University's aim to create a student-friendly learning environment and provide systematic support for students in building their competencies and engagement.

A key element of aligning the MBS program with the strategy is its international and interdisciplinary nature (the INTERNATIONALISATION area), reflected in preparing graduates for effective communication and collaboration in a multicultural environment, including in English. In this way, the program strengthens the University's reputation and recognition through the internationalization of education.

The MBS program directly supports the strategy's priorities in the areas of INNOVATION and IMPACT, developing competencies in innovation, project and change management, process design, and the use of digital tools, data and AI-based solutions in organizational management. From the University's perspective, this strengthens the synergy between academic and business collaboration and the impact on the socio-economic environment by educating staff capable of implementing solutions with high application potential.

In line with the SUSTAINABILITY area, MBS fosters attitudes of responsible management and decision-making that take into account social and environmental consequences as well as the principles of business ethics, which corresponds to the University's strategic development direction in the spirit of sustainable development.

Finally, the program reinforces strategic objectives in the areas of LEADERSHIP and SCIENCE through the development of managerial competencies (leadership, collaboration, negotiation, communication with stakeholders) and a general academic education that supports critical analysis of information and an evidence-based approach to solving complex organizational problems.

In summary, the MBS program constitutes a coherent element in the implementation of the Strategy of the Lodz University of Technology: it strengthens modern, international education, the development of students' talents and competences, innovation and impact on the environment, and sustainable development within the logic of cooperation as the overarching value organizing the University's activities.

## **Educational objectives and employment and continuing education opportunities**

The aim of the Master of Business Studies program is to prepare graduates to independently analyze, interpret and solve complex management problems in an environment characterized by high volatility, pressure to deliver results, digital transformation and the growing importance of sustainable development. These objectives are achieved by developing the following areas, in line with the learning outcomes:

In-depth managerial, economic and financial knowledge from an international perspective, covering, amongst other things, business strategies and models, corporate finance, financial and management accounting, operations research, decision analysis, process management, e-business and market activities (including B2B).

Awareness of legal, ethical and ESG considerations (civil, commercial and labor law; responsible management and sustainable development) and an understanding of the consequences of business decisions for the organization and its stakeholders.

Advanced analytical and decision-making skills: sourcing and selecting information, critical analysis and synthesis of data, formulating managerial recommendations, and designing and justifying alternative solutions (strategic, process-related and technological) under conditions of uncertainty.

Competences in the area of digitalization of management: the use of digital tools and data- and AI-driven solutions to streamline processes and support decision-making, as well as an understanding of the role of information systems in management.

Social and leadership competences: working in interdisciplinary and project teams, negotiation, communication with stakeholders in an international environment (including in English), ethics and responsibility, and a commitment to lifelong learning.

The achievement of these objectives is linked to the program's modular structure: from modules covering managerial and economic fundamentals and analytical tools, through modules on digital transformation, research and the design of organizational solutions, to the degree pathway and project-based and practical elements. An additional distinguishing feature of MBS is that the program is based on active teaching methods (project-based learning, problem-based learning, case studies and projects set within real organizations) and offers the possibility of personalization through elective modules.

MBS graduates are prepared to work in expert and managerial roles within enterprises, consultancy firms and public institutions – particularly in the areas of business and strategic analysis, project management, process management, innovation, and organizational and digital transformation.

In practice, this means readiness to take on roles such as: business/strategy analyst, management consultant, project/program manager, process manager/owner, digital transformation specialist/manager, decision analyst/controlling specialist, strategic HR specialist, B2B/market development manager, and innovation initiative coordinator. The MBS program, thanks to its general academic profile and its research and dissertation components, provides a foundation for:

Continuing your education in doctoral programs (in management and quality sciences or related disciplines).

Further development through postgraduate studies and certifications (e.g. project management, business/data analytics, controlling, process management, HR, innovation, ESG), in line with individual career paths.

Developing one's own ventures (entrepreneurial attitudes, responsible management and the ability to build implementation solutions).

## **Description of the process and outcome of consultations on the proposed study program with the socio-economic environment**

The draft Master of Business Studies program was subject to consultation with the socio-economic environment to confirm the relevance of the learning outcomes, program content and teaching methods to the current needs of the labor market, in accordance with the approach adopted at the Lodz University of Technology, which requires taking into account the opinions of external stakeholders and analyzing the alignment of learning outcomes with the needs of the labor market.

The consultations were conducted with the participation of the Business Council operating at the Faculty of Organization and Management of the Lodz University of Technology, which serves as a permanent forum for dialogue between the University and the business community. The subject of the consultation was the overall structure of the MBS program, covering, among other things, the focus of learning outcomes and the graduate profile, as well as the proposed teaching methods (in particular project work and case studies) and methods of verifying acquired competences.

Following the consultation, the Business Council recommended maintaining and strengthening those elements of the program that best reflect the realities of how organizations operate in the Łódź region and nationwide, namely the increasing volatility of the environment, pressure to improve efficiency, accelerated digitalization, and growing regulatory and social demands in the area of responsible management. The following areas were deemed particularly important for developing graduates' competencies: advanced analysis and synthesis of information for managerial decision-making and complex problem-solving, using data, analytical methods and a project-based approach; change, project and risk management in a turbulent business environment; digital and transformational skills supporting process modernization, operational excellence and business competitiveness; responsible management taking into account the stakeholders' perspective (ethical and social aspects).

The Business Council also highlighted the growing importance of 'soft' skills as a prerequisite for the effective implementation of management tools and strategies, in particular: managerial communication, leadership and teamwork, negotiation and relationship management, as well as resilience and agency in times of change. Ultimately, the MBS program was approved by the Business Council of the Faculty of Economics and Management at the University of Łódź. The conclusions from the consultation confirmed the validity of the program's objectives, particularly regarding the graduate's competency profile and the selection of teaching methods, which allow for the reliable verification of competencies in practice. At the same time, the Council's recommendations are consistent with the target profile of an MBS graduate, which includes, amongst other things: the ability to diagnose and solve complex problems under conditions of uncertainty and time pressure,

the use of digital tools and solutions based on data and AI,

communication and negotiation in an international environment, collaboration in project teams, and responsible decision-making.

At the same time, the Business Council recommended the consistent development of teaching methods based on project work, case studies and problem-based learning, which will constitute one of the program's key distinguishing features.

## **Description of competencies expected from a candidate applying for admission to studies**

Candidates applying for admission to the second-cycle Master of Business Studies (MBS) are expected to possess the competences acquired during their first-cycle studies, particularly in the social, economic, related or technical sciences, enabling them to undertake studies with a general academic profile in an interdisciplinary, business-technology and international environment.

Applicants should understand the basic mechanisms of how organizations and markets function and possess structured knowledge and skills in areas forming the foundation for the content covered in the MBS program, including, amongst others, organizational management and key functional areas, business economics and finance, and elements of accounting, as well as the fundamentals of



analytics and decision-support methods.

Furthermore, candidates are expected to be prepared to develop the competencies necessary to undertake classes in an active format (project-based learning, problem-based learning, case studies, projects set within real organizations), in particular:

analytical skills: working with data and information, critically evaluating sources, formulating conclusions and recommendations (including those based on quantitative and qualitative methods);

project and organizational skills: planning activities, problem-solving, working with management support tools, and readiness for teamwork on project tasks;

basic digital literacy: confident use of IT tools supporting analysis and work organization, and openness to developing competences in the area of digitalization of management and working with data-driven solutions (including AI);

social skills: effective communication, accountability for assigned tasks, collaboration within interdisciplinary teams, and a willingness to learn and develop in the face of organizational and technological change.

Knowledge of English at a level enabling the use of industry and academic literature, as well as active participation in classes and project work carried out in an international environment, is also recommended.

### **The unit organizing education**

Faculty of Organization and Management/CKM

## Education program

### Semester 1

| Course                                    | Number of hours                       | ECTS points | Form of verification | Obligatory |
|-------------------------------------------|---------------------------------------|-------------|----------------------|------------|
| Strategic Management                      | Tutorials: 30<br>Lecture: 15          | 5           | Exam                 | Obligatory |
| Economics and Economic Policy             | Tutorials: 30<br>Lecture: 15          | 5           | Exam                 | Obligatory |
| Corporate Finance                         | Tutorials: 45<br>Lecture: 15          | 5           | Graded assignment    | Obligatory |
| Digital Tools for Managers                | Laboratory classes: 30<br>Lecture: 15 | 4           | Graded assignment    | Obligatory |
| Operations Research                       | Laboratory classes: 30<br>Lecture: 15 | 4           | Graded assignment    | Obligatory |
| English for Science Communication         | Tutorials: 45                         | 2           | Graded assignment    | Obligatory |
| Human Factor: Culture, Values and Society | Tutorials: 30<br>Lecture: 15          | 5           | Graded assignment    | Obligatory |
| <b>Sum</b>                                | <b>330</b>                            | <b>30</b>   |                      |            |

### Semester 2

| Course                            | Number of hours              | ECTS points | Form of verification | Obligatory |
|-----------------------------------|------------------------------|-------------|----------------------|------------|
| Managerial Accounting             | Tutorials: 45<br>Lecture: 30 | 5           | Exam                 | Obligatory |
| Civil and Business Law            | Tutorials: 30<br>Lecture: 30 | 5           | Exam                 | Obligatory |
| Digital Transformation Management | Tutorials: 30<br>Lecture: 15 | 5           | Graded assignment    | Obligatory |

| Course                                          | Number of hours              | ECTS points | Form of verification | Obligatory       |
|-------------------------------------------------|------------------------------|-------------|----------------------|------------------|
| Research Design in Management                   | Tutorials: 30<br>Lecture: 15 | 5           | Graded assignment    | Obligatory       |
| Elective Course 1                               |                              | 5           | Graded assignment    | Obligatory group |
| Leadership                                      | Tutorials: 30<br>Lecture: 15 | 5           | Graded assignment    | Optional         |
| Cross-Cultural Management                       | Tutorials: 30<br>Lecture: 15 | 5           | Graded assignment    | Optional         |
| Elective Course 2                               |                              | 5           | Graded assignment    | Obligatory group |
| Circular Economy and Sustainable Value Chains   | Tutorials: 30<br>Lecture: 15 | 5           | Graded assignment    | Optional         |
| Sustainable Management and Business Performance | Tutorials: 30<br>Lecture: 15 | 5           | Graded assignment    | Optional         |
| <b>Sum</b>                                      | <b>315</b>                   | <b>30</b>   |                      |                  |

## Semester 3

| Course                                     | Number of hours                       | ECTS points | Form of verification | Obligatory       |
|--------------------------------------------|---------------------------------------|-------------|----------------------|------------------|
| Management Information Systems Development | Laboratory classes: 30<br>Lecture: 15 | 5           | Graded assignment    | Obligatory       |
| Strategic HR                               | Tutorials: 45<br>Lecture: 15          | 5           | Exam                 | Obligatory       |
| Project and Program Management             | Tutorials: 45<br>Lecture: 15          | 5           | Exam                 | Obligatory       |
| B2B Marketing                              | Tutorials: 45<br>Lecture: 15          | 5           | Graded assignment    | Obligatory       |
| Elective Course 3                          |                                       | 5           | Graded assignment    | Obligatory group |
| Applications of AI in Business             | Laboratory classes: 30<br>Lecture: 15 | 5           | Graded assignment    | Optional         |

| Course                                     | Number of hours                       | ECTS points | Form of verification | Obligatory       |
|--------------------------------------------|---------------------------------------|-------------|----------------------|------------------|
| Cybersecurity and Business Resilience      | Laboratory classes: 30<br>Lecture: 15 | 5           | Graded assignment    | Optional         |
| Elective Course 4                          |                                       | 5           | Graded assignment    | Obligatory group |
| Business Model Development                 | Tutorials: 30<br>Lecture: 15          | 5           | Graded assignment    | Optional         |
| Economic of Business Models and Innovation | Tutorials: 30<br>Lecture: 15          | 5           | Graded assignment    | Optional         |
| <b>Sum</b>                                 | <b>315</b>                            | <b>30</b>   |                      |                  |

## Semester 4

| Course            | Number of hours   | ECTS points | Form of verification     | Obligatory                               |
|-------------------|-------------------|-------------|--------------------------|------------------------------------------|
| Diploma Seminar   | Seminar: 30       | 3           | Graded assignment + exam | Obligatory                               |
| Diploma Thesis    | Diploma Thesis: 0 | 20          | Graded assignment        | Obligatory<br>subjects to<br>choose from |
| Internship        | Internship: 0     | 4           | Graded assignment        | Obligatory                               |
| Capstone Elective | Project work: 60  | 3           | Graded assignment        | Obligatory                               |
| <b>Sum</b>        | <b>90</b>         | <b>30</b>   |                          |                                          |