



Lodz University
of Technology

Study programme

Faculty:	Faculty of Organization and Management
Major:	Management
Level of study:	second-cycle programme (magister)
Form of study:	full-time studies
Academic year:	2026/27

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Basic information

Name of the field of study:	Management
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:	polish

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	2ZAR1	They have an in-depth and structured knowledge of contemporary management concepts and paradigms, business models, and organisational development trends, particularly in the context of digitalisation and globalisation of the economy. They understand the importance of these concepts for shaping, designing, and implementing strategies in organisations.	P7U_W	P7S_WG
2	2ZAR2	They have an in-depth and structured knowledge of the mechanisms of organisational functioning and management processes in a dynamic environment, including economic, social, and technological determinants. They understand the interrelationships between these factors and their impact on organisational effectiveness.	P7U_W	P7S_WG, P7S_WK
3	2ZAR3	They have an in-depth and structured knowledge of organisational development strategies, mechanisms for creating value for stakeholders, and the principles of responsible and sustainable management (ESG). They understand and interpret the complex interdependencies linking business strategies, economic performance, and the social and environmental impact of organisations.	P7U_W	P7S_WG, P7S_WK
4	2ZAR4	They can identify and diagnose complex managerial problems under conditions of uncertainty and environmental volatility by integrating data from multiple sources and adopt appropriate analytical methods and decision-support tools. They formulate well-justified conclusions and strategic recommendations.	P7U_U	P7S_UW
5	2ZAR5	They can independently select and apply data, research methods, and business analytics tools in management and decision-making processes by integrating information from various sources. They critically interpret and evaluate analysis results, taking into account their limitations, decision-related risk, and the organisational and market context.	P7U_U, P7U_K	P7S_UW, P7S_KK
6	2ZAR6	They can plan, coordinate, and implement complex organisational changes, including digital transformation in a dynamic environment. They select and apply project management methods, taking into account risks, interdependencies between projects, and stakeholder needs.	P7U_U	P7S_UO
7	2ZAR7	They can communicate effectively with stakeholders in complex organisational situations, using specialised management terminology. They lead and moderate discussions, present and critically evaluate positions, justifying their own decisions and arguments. They use a foreign language at the B2+ level of the Common European Framework of Reference for Languages.	P7U_U	P7S_UK

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
8	2ZAR8	They are prepared to act responsibly and ethically within the organisation and in its relations with the external environment, including in the context of the use of data and technology. They resolve decision-making dilemmas, taking into account the social, environmental, and long-term consequences of their actions.	P7U_K	P7S_KO, P7S_KR
9	2ZAR9	They are prepared for effective cooperation and shared responsibility in teams, including those that are culturally and professionally diverse. They assume team roles, manage conflict situations, and foster an atmosphere conducive to achieving common goals.	P7U_K	P7S_KO
10	2ZAR10	They are prepared to independently and consciously plan the long-term development of their professional and academic competences, critically assess their knowledge and skills, and undertake activities aimed at continuous learning and improvement in conditions of dynamic change.	P7U_U, P7U_K	P7S_UU, P7S_KK, P7S_KR

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

No.	Course name	Program content	2ZAR1	2ZAR2	2ZAR3	2ZAR4	2ZAR5	2ZAR6	2ZAR7	2ZAR8	2ZAR9	2ZAR10
1	Concepts, Methods and Techniques of Management	Classical and contemporary management concepts, management methods, selected management techniques.	x			x						
2	Economic Fundamentals of Managerial Decision-Making	Economic determinants of decision-making in organizations; Key microeconomic and macroeconomic issues in management; Demand and supply analysis in the context of managerial decision-making; Cost categories and their decision-making relevance; Risk and uncertainty in management processes; Economic analysis tools for evaluating decision alternatives; Selection of optimal organizational strategies; Interpretation of market data; Forecasting the effects of decisions in a changing economic environment; Developing managers' analytical and strategic competencies			x			x		x		
3	Business Models	Designing, analyzing, and developing business models in different types of organizations; Business Model Canvas (Alexander Osterwalder) as a tool for describing and testing business models; Lean Startup approach; formulation and testing of business hypotheses; experimentation and learning based on market data; alternative business models; adaptation of business models to market, technological, and organizational changes; business model development scenarios; analysis of practical case studies.	x	x		x						
4	Project Team in Digital Organizations	Creating, managing, and improving digital organizations based on real-world examples; designing the digital transformation of management processes, work organization, and service delivery; developing the foundations of a digital work strategy, formulating recommendations, and preparing materials to support a pilot of digital transformation in the organization. Managing a project team in a digital organization, including: team structure, roles and responsibilities, project leadership; communication, motivation, conflict management, and decision-making in project teams; team work planning, progress monitoring, risk management; stakeholder collaboration; analysis of project execution and implementation of corrective actions for the project team in a digital organization.	x			x		x			x	x
5	Digital Marketing	Marketing strategies in the digital environment; digital marketing tools; building brand value in digital channels; stakeholder relationship management; social media marketing; content marketing; web analytics; marketing automation; use of data and algorithms in decision-making processes; evaluation of digital marketing effectiveness; consumer behaviour in digital environments; ethical aspects of digital marketing; data protection and privacy; legal and regulatory frameworks in digital marketing.	x	x			x			x		
6	Techno-humanities	Humanistic and social contexts of technological development; Social consequences of technology (sociology of technology); Ideas and values related to technology (philosophy of technology, politics, ethics); Human-technology relations (anthropology and psychology); Environmental impact of technology; Developing a reflective approach to technology; Building skills in presenting viewpoints and formulating opinions and evaluations.							x	x	x	
7	Foreign Language for Specialist Purposes	English language course at B2+ level; developing the ability to communicate effectively in speech and writing, using specialist terminology from the field of study. Building a terminological foundation supporting autonomous language use and engagement with more advanced academic topics.							x			x

No.	Course name	Program content	2ZAR1	2ZAR2	2ZAR3	2ZAR4	2ZAR5	2ZAR6	2ZAR7	2ZAR8	2ZAR9	2ZAR10
8	Strategic Management and CSR	Strategic management processes and designing a coherent organizational development strategy; Aligning mission and business model with environmental analysis and key trends (climate, technology, regulations); Stakeholder identification and materiality analysis of social, environmental, and governance issues (ESG/CSR); Formulating strategic goals, functional programs, and social and environmental initiatives; Resource planning, risk management, and development of an implementation roadmap; Designing performance metrics, progress reporting, and governance mechanisms; Applying knowledge through case studies and a team project (strategy map and responsibility report outline) prepared for stakeholder presentation.			x	x		x		x		
9	Managerial Controlling	Preparation of operational and strategic budgets; Profitability analysis of products, customers, and market segments; Use of controlling reports in managerial decision-making.			x		x					
10	Value-based Management	Determinants of enterprise value; value-based management concept; methods of measuring company value; income-based, asset-based, and market-based valuation approaches; indicator-based analysis in value-based management; evaluation of business performance; value creation and maximization; integration of strategic, financial, and operational perspectives in management.			x		x					
11	Project Management Methodologies	Methodological approaches to project management; Classification and evolution of project management methodologies; Criteria for selecting project management methodologies depending on project characteristics and organizational context; Structure of project management methodologies and the project life cycle; Management of key project areas within selected methodologies; The role of project management methodologies in standardization and continuous improvement of project management in organizations;	x					x				
12	Quality Management System	A theoretical and practical approach to quality management systems; Quality Management System according to ISO 9001 and an overview of international industry standards; System terminology and requirements; Integration of management systems and guidelines for their improvement; Application of knowledge in the practical context of business operations.	x			x			x	x		
13	Data Analysis and Forecasting in Business	Elements of descriptive and mathematical statistics as well as economic forecasting; Statistical parameters and their estimation in populations and random samples; Correlation analysis; Interval estimation and hypothesis testing; Forecasting using time series and regression models; Qualitative forecasting methods.				x	x					
14	Data Analysis and Operation Research	Descriptive and mathematical statistics; statistical parameters and their estimation in populations and random samples; correlation analysis; interval estimation; statistical hypothesis testing; operations research in management; mathematical modeling of decision problems; linear programming; network programming; dynamic programming; game theory; practical applications of analytical methods in managerial decision support.				x	x					

No.	Course name	Program content	ZZAR1	ZZAR2	ZZAR3	ZZAR4	ZZAR5	ZZAR6	ZZAR7	ZZAR8	ZZAR9	ZZAR10
15	Project Management Techniques and Tools	Project life cycle; project initiation (goals, scope, stakeholders); project planning (schedule, budget, resources); project risk management; project execution; progress monitoring and change control; project team management; project communication; managing scope, stakeholders, and risks using practical project management tools.	x					x				
16	Project Leadership Methods	The role of the project leader in the organization; project leadership styles and methods; situational and adaptive leadership in project environments; building team engagement, motivation, and accountability; communication and collaboration in project teams; decision-making and problem-solving in the work of a project leader.	x					x				
17	Research Methodology	Advanced issues in research methodology in management sciences; Research design and implementation; Qualitative and quantitative research approaches as well as principles of triangulation and methodological rigor; Critical analysis of academic literature with particular emphasis on systematic literature reviews (SLR); Preparation of a master's-level research proposal.				x	x					
18	Risk Management	Risk, risk management methods, integrated project risk management. Holistic approach to risk management, methods of dealing with risk. Risk measurement. Risk measures. Subjective approach in risk analysis and risk attitude measures. ISO 31000 standard.	x	x		x		x				
19	Innovation Management	Definitions and classifications of innovation – from product and process innovations to disruptive business models; Innovation diffusion processes and organizational absorptive capacity; Evolution of innovation models – from linear to interactive and network-based – open models; Sources of financing for innovation activities (own capital, venture capital, public support); Relationships between innovation investment and a firm's long-term competitive advantage.	x			x	x			x		
20	Design and Analysis in Survey Research	Organization of a survey study; Questionnaire design; Sampling methods; Survey data analysis including coding, data validation, graphical presentation, and statistical analysis.		x			x					
21	Modelling and Simulation of Business Processes	Analytical design, verification, and optimization of organizational processes using computer simulation; Building business process models and evaluating their efficiency under conditions of variability and uncertainty; Fundamentals of process system modeling, discrete-event logic, process parameterization, and results interpretation; Practical process modeling and analysis in FlexSim and AnyLogic environments; Experimenting with decision scenarios and identifying bottlenecks; Using simulation results to support managerial decision-making and process management.		x			x					
22	Strategic HR	The essence and role of strategic HR; Developing an HR strategy; Strategic workforce planning; Strategic talent acquisition and development of competencies; Strategic performance management; Compensation strategies; HR in organizational change processes; HR analytics in strategic decision-making.	x			x					x	x
23	E-Business Strategies	E-business models; competitive strategies in the digital environment; the role of information and communication technologies in management; customer relationship management (CRM); key e-business strategies; mechanisms for building competitive advantage; impact of the technological and legal environment on digital organizations; e-commerce; digital communication.		x					x			

No.	Course name	Program content	ZZAR1	ZZAR2	ZZAR3	ZZAR4	ZZAR5	ZZAR6	ZZAR7	ZZAR8	ZZAR9	ZZAR10
24	International Business Research	Design and implementation of empirical research in international markets; quantitative and qualitative methods in comparative research; analysis of secondary data; cross-cultural research in managerial decision-making; data quality assessment; measurement reliability and validity; challenges of comparability of research results across countries.		x					x			
25	Law and Regulation of the Digital Economy	Introduction to law; digital economy and consumer law; data protection and privacy; intellectual property law and platform regulation; cybersecurity and technological regulation.		x		x						
26	Legal Risk Management in Business Activity	Sources and types of legal risks; regulatory risk analysis; investment and credit risk analysis; operational legal risk analysis; legal liability of management boards and supervisory boards; legal risk management in organizational decision-making processes.		x		x						
27	Knowledge Management and Technology Transfer	The role of knowledge as a strategic organizational resource; models and strategies of knowledge management; processes of knowledge creation, acquisition, diffusion, and protection; barriers and determinants of effective knowledge management; tools and instruments supporting knowledge management; technology transfer and knowledge commercialization; science-business collaboration; intellectual property protection in technology transfer processes.	x			x			x		x	
28	Leadership in the Organization	The essence of leadership and its importance in processes of change, innovation, and crisis situations (including green and digital transformation); Leadership theories and models as well as determinants of leadership effectiveness; Leadership roles and behaviors at different stages of organizational change; Shared and distributed leadership in project teams, network structures, and digital environments.							x	x	x	
29	Diploma Seminar	The content of education is adequate to the issues of the research topics selected and accepted by the RKS and the supervisor, undertaken by the graduates. The structure of the diploma thesis. Technical issues related to the preparation of the diploma thesis – editorial requirements Creating a literature database (APA) – methods of collecting data. Presentations of subsequent stages of the implementation of diploma theses – discussion of examples of diploma theses. Discussion of the principles of operation of the anti-plagiate system. Transfer of knowledge on the principles of preparation, content and technical issues related to the competency exam – discussion of a selected example.				x	x					x
30	Final Project	Independent preparation of a bachelor's thesis. Thesis development under the supervisor's guidance. Preparation of the thesis in accordance with the approved concept. Formal and editorial requirements of the thesis. Conducting research and analysis of results. Formulation of conclusions and submission of the complete diploma thesis.				x	x					x
31	Sustainable Consumption and Production Management	Shaping sustainable production and consumption patterns in organizations. Circular economy in production, logistics and marketing processes. Eco-design and product life cycle management. The role of managers in shaping sustainable, responsible and safe organizational practices. Integration of regulatory requirements into existing management and reporting systems.			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	Concepts, Methods and Techniques of Management	6			6	
2	Economic Fundamentals of Managerial Decision-Making	4			4	
3	Business Models	3				
4	Project Team in Digital Organizations	6			6	
5	Digital Marketing	4				
6	Techno-humanities	5	5			
7	Foreign Language for Specialist Purposes	2				
8	Strategic Management and CSR	4			4	
9	Managerial Controlling	2				
10	Value-based Management	4			4	
11	Project Management Methodologies	4				
12	Quality Management System	5			5	
13	Data Analysis and Forecasting in Business	7		7		
14	Data Analysis and Operation Research	7		7		
15	Project Management Techniques and Tools	4		4		
16	Project Leadership Methods	4		4		
17	Research Methodology	2			2	
18	Risk Management	4			4	
19	Innovation Management	5			5	
20	Design and Analysis in Survey Research	5		5		
21	Modelling and Simulation of Business Processes	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	Strategic HR	5			5	
23	E-Business Strategies	5		5		5
24	International Business Research	5		5		5
25	Law and Regulation of the Digital Economy	4		4		
26	Legal Risk Management in Business Activity	4		4		
27	Knowledge Management and Technology Transfer	3			3	
28	Leadership in the Organization	2			2	
29	Diploma Seminar	2			2	
30	Final Project	20		20	20	
31	Sustainable Consumption and Production Management	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)	45/120 (37.5%)
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	75/120 (62.5%)

Methods of verifying and assessing learning outcomes

The verification of learning outcomes is based on a variety of assessment methods, tailored to the categories of outcomes: knowledge, skills and social competences. The selection of verification tools depends on the specific nature of the course and the form of teaching, and is described in detail in the Course Descriptions.

Achievement of the required learning outcomes is assessed using, amongst other things:

- written work (exams, tests, reports, essays, projects, posters, dissertation),
- oral presentations (oral knowledge tests, presentations, papers),
- 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,
- a competency-based examination and a final examination.

The assessment of learning outcomes may be formative (ongoing, repeated during classes) or summative (final). Assessment results are reported in accordance with the grading scale set out in the Study Regulations of the Lodz University of Technology.

Assessment methods are used both during classes held at the university and in companies, including during study visits, project work and the preparation of final theses. The course coordinator is responsible for the assessment process in collaboration with the teaching team.

Information on how learning outcomes are assessed and evaluated is set out in detail for each module in the Module Description. This document contains information on learning outcome indicators (knowledge, skills, social competences), methods of assessment tailored to the nature of the outcome, learning outcomes assigned to the study programme, and the forms and conditions for passing the course. In accordance with the Study Regulations in force at the Lodz University of Technology, every student receives full information regarding the principles of assessment and evaluation of learning outcomes during the first class of a given course.

An additional tool for assessing learning outcomes across the entire course of study is the competency-based examination, conducted during the final semester. It is based on a case study analysis and involves testing knowledge and skills, particularly at the higher cognitive levels of Bloom's taxonomy. The examination is conducted by a committee appointed by the Vice-Dean for Student Affairs, and its result forms part of the final assessment of the learning outcomes achieved.

Upon passing all the modules specified in the programme of study and the competency exam, the student is entitled to defend their dissertation. The dissertation examination constitutes the final stage of verifying learning outcomes, and the result obtained is a composite of the marks from the preparation of the dissertation, its review, and the course of the dissertation examination.

Professional internships

not applicable

Characteristics of the course

Graduate profile

Graduates of the Master's degree programme in Management possess advanced and in-depth knowledge of management and quality sciences, as well as supporting disciplines, enabling them to independently analyse and interpret complex phenomena occurring in modern organisations. They are prepared to operate in an organisational environment characterised by high volatility, decision-making uncertainty, regulatory pressure, and ongoing digital and sustainable transformation.

The graduate profile is shaped within the context of a technical university, which is reflected in a systemic view of the organisation as a complex socio-technical system integrating business processes, information and communication technologies, data, and quality and regulatory conditions. Graduates understand the mechanisms behind the development of organisational strategies, business models and the management of change, innovation, projects and risk, as well as the relationship between managerial decisions and their economic, social and environmental consequences, including in the context of CSR and ESG principles.

During the course of their studies, graduates acquire competencies in:

- analysing and interpreting organisational data and empirical research findings for the purposes of managerial decision-making,
- identifying, diagnosing and solving complex management problems using analytical tools and modern research methods, including case studies,
- designing and evaluating organisational solutions, including digital, innovative and quality-enhancing initiatives,
- project and team management, including in conditions of uncertainty, time pressure and interdisciplinary collaboration,
- critically evaluating information, formulating alternative action scenarios and managerial recommendations,
- communicating with stakeholders using specialist terminology and in a foreign language at a level of at least B2+.

In terms of social competences, graduates are prepared to fulfil managerial and coordinating roles responsibly, work in project teams, and collaborate with internal and external stakeholders. In their activities, they take into account the principles of business ethics, social responsibility and sustainable development, and are able to assess the consequences of decisions from the perspective of the organisation and its environment. Graduates of the Management programme are prepared to work in, amongst others, technology and industrial enterprises, organisations utilising information systems and modern technologies, international corporations, management and consulting firms, and public institutions, as well as possessing the skills necessary to set up and run their own business.

Graduates are prepared for expert and mid-level managerial roles in the areas of project management, business analysis, process management, quality, risk and team management, as well as for implementing innovations, including organisational and technological ones. The graduate profile was developed with the involvement of external stakeholders, and the programme meets the needs of the labour market and the challenges of a knowledge- and technology-based economy.

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

The educational activities undertaken as part of the second-cycle Management programme are highly consistent with the Strategy of the Lodz University of Technology. They are fully in line with the vision and mission set out in the University's Strategy for 2025–2030, reflecting the document's central theme of collaboration. The specific nature of individual subjects, their composition within the overall curriculum, and the methods of teaching enable students to acquire and develop the competences necessary for establishing and maintaining relationships based on partnership and cooperation. There is a particularly high level of alignment between the second-cycle Management programme and the aforementioned strategic objectives, particularly regarding the objectives related to building a sustainable research university based on modern forms of education and innovations that benefit society at regional, national and global levels. Providing students with the opportunity to acquire knowledge, skills and social competences at the highest level will enable the achievement of both the general and specific objectives set out in relation to the key areas of development of the Lodz University of Technology. A comprehensive redefinition of this programme will enable the training of professional managers distinguished by their knowledge of the latest solutions in modern management and characterised by a high level of flexibility and openness to the challenges of the contemporary market environment, which is marked by extreme unpredictability and volatility. Giving the programme a completely new profile fits very clearly with the achievement of the University's objectives related to key areas of activity, namely: innovation, holistic and continuous engagement with participants in the socio-economic environment, the search for and development of talent, participation in sustainable development, modern education and internationalisation — as well as students

as key actors in the initiatives undertaken within each of these areas. The educational process in the second-cycle Management programme will make innovative use of the latest teaching methods and techniques, enabling the active development of talent by discovering and nurturing students' abilities and individual passions, as well as channelling their creative and social potential for the benefit of Lodz University of Technology, a community united by shared values, and for the benefit of society as a whole at regional, national and even global levels. This will thus enable the implementation of another objective embedded in the university's strategic foundations. The proposed Master's degree programme in Management will become a key distinguishing feature of the university compared to other academic institutions (including both Polish and foreign ones). This will help to strengthen its positive image, ensuring that it is perceived by representatives of the business community, local government and other academic institutions as a valuable partner with whom it is worthwhile to undertake a variety of joint ventures. The inclusion of the second-cycle Management programme in the educational offer of the University of Łódź will also be a significant added value for applicants, significantly increasing the university's appeal as a unique and exceptional place of study for young enthusiasts of modern management from Poland and other countries, wishing to deepen the skills acquired during their first-cycle studies, both in the field of management and in other areas of knowledge.

Educational objectives and employment and continuing education opportunities

The aim of the Master's degree programme in Management is to prepare graduates to analyse and solve complex management problems in organisations operating in conditions of dynamic market and technological change. The programme develops in-depth knowledge of contemporary management concepts, business models, organisational development strategies and corporate social responsibility (CSR), as well as the functioning of organisations in the digital economy, including in particular the use of data and analytical tools in decision-making processes.

The programme focuses on developing skills in diagnosing, planning and implementing organisational improvements, including project management, quality management, management controlling, risk management, innovation management and enterprise value management. The programme also covers topics that enhance the implementation of management processes, particularly in the areas of strategic human resource management, digital marketing, stakeholder communication and a foreign language for business purposes.

A key learning outcome is the development of social skills, particularly responsibility and ethical conduct, effective teamwork, leadership skills, and a commitment to lifelong learning and independent career planning.

Graduates possess the competencies to operate in areas including: project and project team management, change and organisational development management, controlling and business analysis, quality management, risk management, innovation management, strategy and CSR, as well as activities supporting digital transformation.

Thanks to the optional modules, graduates can tailor their skills to areas such as data analysis and forecasting, operations research, project management tools and methods, market research, and business process modelling and simulation, as well as e-business strategy, international business studies, and the law and regulation of the digital economy and legal risk. These skills meet the needs of manufacturing and service companies, technology firms, public institutions, non-governmental organisations and consultancy firms.

Graduates may continue their professional and academic development through:

- third-cycle studies (doctoral programmes) in management and quality sciences (and related disciplines),
- postgraduate studies and professional development programmes, including in the fields of project management, data analytics, financial control, quality management, risk management, leadership and HR, strategy, and sustainable development and corporate social responsibility (CSR),
- certification pathways and specialist courses (e.g. in the areas of project management methodologies, analytical tools, auditing and quality systems, and risk in the digital economy).

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

An opinion on the Master's degree programme in Management was sought from representatives of the Business Council operating at the Faculty of Organisation and Management of the Lodz University of Technology.

The Business Council at the Faculty of Organisation and Management of the Lodz University of Technology, having reviewed the scope of the implemented programme changes and the focus of the learning outcomes for the second-cycle programme, expressed a positive

opinion on the modifications made to the Management programme.

In the Council's view, the programme update provides an appropriate response to the economic conditions of the Łódź region and the country, including the growing volatility of the environment, pressure for efficiency, accelerated digitalisation of processes, and increasing regulatory and social requirements, particularly in the area of responsible management. In an environment where organisations operate under time pressure and in situations of heightened uncertainty, the ability of management staff to quickly diagnose problems, drive change and build cooperation across organisational functions and stakeholders becomes crucial.

The Business Council particularly commended the strengthening of the programme in areas corresponding to the competencies expected of Master's degree graduates, including:

- advanced analysis and synthesis of information for managerial decision-making and the resolution of complex organisational problems, using data, analytical methods and a project-based approach,
- change, project and risk management in a dynamic, multi-stakeholder and often organisationally dispersed environment,
- digital and transformational competencies relevant to process modernisation, operational excellence and maintaining business competitiveness,
- responsible management taking into account the stakeholders' perspective, including ethical and social aspects, which are increasingly becoming a factor in business partners' assessment of an organisation's credibility and maturity.

Furthermore, the Business Council emphasised that in the region's current economic situation, characterised by a transformation of business models, competition for talent, pressure on productivity and the need to implement technological changes, enterprises are signalling a particularly high demand for soft skills, regarded as a prerequisite for the effective implementation of management tools and strategies. In this context, the programme's clear emphasis on:

- managerial communication, including the clear definition of objectives, justifying decisions, presenting conclusions and working with feedback,
- leadership and teamwork, including building commitment, delegating responsibility, and working in interdisciplinary and intercultural teams,
- negotiation and managing relationships with internal and external stakeholders, including conflict resolution,
- resilience and agency in times of change, including the ability to adapt, prioritise actions and maintain the quality of decisions under pressure.

Taking the above into account, the Business Council recommended maintaining and further developing forms of education that reliably allow for the verification of the above competences in practice, in particular project work, case studies, problem-based learning and tasks based on real organisational challenges. Having considered the proposed changes to the curriculum presented to the Council, the Business Council of the Faculty of Management and Economics at the Technical University of Łódź concluded that the Management programme (Master's degree) has been strengthened in a way that enhances the relevance of the education to the needs of the labour market, improves the quality of graduates' preparation for managerial roles, and strengthens their ability to operate in a complex and changing economic environment.

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

Candidates applying for admission to the second-cycle degree programme in Management are expected to possess the competences acquired during their first-cycle studies, particularly in the fields of social sciences, economics, related disciplines or technical subjects. The applicant should understand the basic mechanisms of how organisations and markets function, as well as key concepts in the fields of management, economics and finance, and possess the ability to analyse data and draw conclusions for the purposes of managerial decision-making.

Candidates are expected to be willing to further develop their analytical and project management skills, including planning activities, problem-solving and working with management support tools, such as organisational methods and techniques, the basics of accounting and controlling, as well as elements of project and quality management. Candidates should demonstrate the ability to communicate effectively, work in a team and take responsibility for assigned tasks, as well as an openness to learning and development in the context of organisational change and ongoing digitalisation.

Knowledge of a foreign language at a level sufficient to use industry and academic literature is also desirable, as is active participation in courses developing managerial competences, including those conducted in an international environment.

The unit organizing education

Faculty of Organization and Management

Education program

Semester 1

Course	Number of hours	ECTS points	Form of verification	Obligatory
Concepts, Methods and Techniques of Management	Tutorials: 30 Lecture: 30	6	Exam	Obligatory
Economic Fundamentals of Managerial Decision-Making	Tutorials: 30 Lecture: 15	4	Exam	Obligatory
Business Models	Tutorials: 15 Lecture: 15	3	Graded assignment	Obligatory
Project Team in Digital Organizations	Tutorials: 45 Lecture: 30	6	Graded assignment	Obligatory
Digital Marketing	Tutorials: 30	4	Graded assignment	Obligatory
Techno-humanities	Tutorials: 30 Seminar: 15 Lecture: 15	5	Graded assignment	Obligatory
Foreign Language for Specialist Purposes	Tutorials: 45	2	Graded assignment	Obligatory
Sum	345	30		

Semester 2

Course	Number of hours	ECTS points	Form of verification	Obligatory
Strategic Management and CSR	Project work: 30 Lecture: 15	4	Graded assignment	Obligatory
Managerial Controlling	Tutorials: 15 Lecture: 15	2	Graded assignment	Obligatory
Value-based Management	Tutorials: 15 Lecture: 15	4	Exam	Obligatory

Course	Number of hours	ECTS points	Form of verification	Obligatory
Project Management Methodologies	Project work: 30 Lecture: 15	4	Graded assignment	Obligatory
Quality Management System	Tutorials: 45 Lecture: 30	5	Exam	Obligatory
Elective Courses 1		7	Graded assignment	Obligatory group
The student chooses 1 course from the group.				
Data Analysis and Forecasting in Business	Laboratory classes: 45 Lecture: 30	7	Graded assignment	Optional
Data Analysis and Operation Reseach	Laboratory classes: 45 Lecture: 30	7	Graded assignment	Optional
Elective Courses 2		4	Graded assignment	Obligatory group
The student chooses 1 course from the group.				
Project Management Techniques and Tools	Laboratory classes: 15 Project work: 30	4	Graded assignment	Optional
Project Leadership Methods	Laboratory classes: 15 Project work: 30	4	Graded assignment	Optional
Sum	345	30		

Semester 3

Course	Number of hours	ECTS points	Form of verification	Obligatory
Research Methodology	Seminar: 15	2	Graded assignment	Obligatory
Risk Management	Tutorials: 30 Lecture: 15	4	Exam	Obligatory
Innovation Management	Tutorials: 30 Lecture: 30	5	Exam	Obligatory
Elective Courses 3		5	Graded assignment	Obligatory group

Course	Number of hours	ECTS points	Form of verification	Obligatory
The student chooses 1 course from the group.				
Design and Analysis in Survey Research	Laboratory classes: 30 Project work: 15	5	Graded assignment	Optional
Modelling and Simulation of Business Processes	Laboratory classes: 30 Project work: 15	5	Graded assignment	Optional
Strategic HR	Tutorials: 30 Lecture: 30	5	Graded assignment	Obligatory
Elective Courses 4		5	Graded assignment	Obligatory group
The student chooses 1 course from the group.				
E-Business Strategies	Tutorials: 15 Lecture: 15	5	Graded assignment	Optional
International Business Research	Tutorials: 15 Lecture: 15	5	Graded assignment	Optional
Elective Course 5		4	Graded assignment	Obligatory group
The student chooses 1 course from the group.				
Law and Regulation of the Digital Economy	Tutorials: 15 Lecture: 15	4	Graded assignment	Optional
Legal Risk Management in Business Activity	Tutorials: 15 Lecture: 15	4	Graded assignment	Optional
Sum	285	30		

Semester 4

Course	Number of hours	ECTS points	Form of verification	Obligatory
Knowledge Management and Technology Transfer	Tutorials: 15 Project work: 15	3	Graded assignment	Obligatory
Leadership in the Organization	Tutorials: 30	2	Graded assignment	Obligatory

Course	Number of hours	ECTS points	Form of verification	Obligatory
Diploma Seminar	Seminar: 15	2	Graded assignment + exam	Obligatory
Final Project	Diploma Thesis: 0	20	Pass	Obligatory subjects to choose from
Sustainable Consumption and Production Management	Project work: 15 Lecture: 15	3	Graded assignment	Obligatory
Sum	105	30		