



Lodz University
of Technology

Study programme

Faculty:	Faculty of Organization and Management
Major:	Marketing in the Industry
Level of study:	first-cycle programme (inżynier)
Form of study:	full-time studies
Academic year:	2026/27

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Basic information

Name of the field of study:	Marketing in the Industry
Level of study:	first-cycle programme (inżynier)
Study profile:	general academic
Form of studies:	full-time studies
Duration of studies (number of semesters):	7
The number of ECTS points required to complete studies:	210
Total number of hours of classes:	2625
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:	210
Professional title awarded to graduates:	inżynier
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	90%
Material Engineering	10%

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	1MWP1	Knows and understands the principles of the latest management and marketing concepts (B2B/B2C) and the specifics of market research necessary to create innovative solutions.	P6U_W	P6S_WG, P6S_WK
2	1MWP2	Knows and understands the process of designing an integrated composition of virtual and classic marketing stimuli for market participants.	P6U_W	P6S_WG
3	1MWP3	Knows and understands the fundamentals of ethics and legal regulations (including intellectual property protection) as a reference point for marketing activities on the Internet and beyond.	P6U_W	P6S_WG, P6S_WK
4	1MWP4	Knows and understands the technological process of manufacturing products in selected industrial sectors, based on, among other things, the laws of physics and mathematics.	P6U_W	P6S_WG
5	1MWP5	They are able to conduct market research, critically analyse sources, and develop and implement marketing strategies using modern digital tools and AI.	P6U_U	P6S_UW
6	1MWP6	They are able to manage customer relations based on data and information security principles, guided by the principles of corporate social responsibility (CSR).	P6U_U	P6S_UK
7	1MWP7	They can plan the work of a team, participate in debates by presenting and evaluating different opinions, communicate in a foreign language (B2) and plan their own learning independently.	P6U_U	P6S_UK, P6S_UO, P6S_UU
8	1MWP8	They are able to solve engineering problems at every stage of the product life cycle, recognising their importance for the functioning of society.	P6U_U	P6S_UW
9	1MWP9	They are prepared to critically assess their knowledge, look for expert advice, and supplement and improve their acquired knowledge and skills.	P6U_K	P6S_KK
10	1MWP10	They are ready to responsibly perform the role of an engineer, strive to improve the quality of life, and make decisions in difficult situations in accordance with ethics and a pro-quality culture.	P6U_K	P6S_KO, P6S_KR

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

No.	Course name	Program content	1MWP1	1MWP2	1MWP3	1MWP4	1MWP5	1MWP6	1MWP7	1MWP8	1MWP9	1MWP10
1	Creative Marketing Communication	The role of creativity in marketing communication. Generation of communication ideas. Brand storytelling and narrative building. Creation of coherent creative concepts. Mechanisms of marketing message impact. Memorability and audience engagement in market communication.	x	x				x				
2	Basics of Marketing	Marketing as a customer- and market-oriented concept. Basic marketing concepts and functions. Consumer needs, market offerings and organizational goals. Customer value creation. Market environment analysis. Formulation of marketing strategies. Planning and implementation of marketing activities. Decisions regarding product, price, distribution and promotion. Coordination of marketing activities in a dynamic market environment.	x	x			x					
3	Mathematics I	Fundamentals of linear algebra. Matrices, determinants and systems of linear equations. Methods for solving systems of linear equations. Elements of analytic geometry in three-dimensional space. Sequences and limits of functions. Differential calculus of single-variable functions and its applications. Integral calculus of single-variable functions and its applications. Basics of mathematical logic and set algebra. Functions and their properties. Elementary functions and functional equations and inequalities.				x						
4	Fundamentals of Physics	Energy. Motion. Vibrations. Waves. Acoustics. Electromagnetism. Optics. Quantum mechanics. Conducting laboratory experiments in mechanical engineering, as well as thermal imaging and acoustic diagnostics.				x						
5	Modern Information Technologies I	Document creation and standardization. Data analysis and organization. Preparation of presentations and visual communication. Basics of algorithmization and work automation. Digital hygiene and cybersecurity. Conscious use of artificial intelligence in working with content and data.					x	x				
6	Economics	Fundamentals of microeconomics and macroeconomics. Resource allocation mechanisms. Market functioning. Macroeconomic equilibrium and its determinants. Basic economic models. Tools for economic process analysis. Rational economic decision-making.	x								x	
7	Critical Thinking	Analysis of facts, evidence and observations. Drawing conclusions and making informed choices. Identifying underlying assumptions in thinking. Justification of ideas and actions. Evaluation of arguments from multiple perspectives. Rational reasoning and assessment of decision consequences.									x	
8	Mathematics II	Fundamentals of multivariable calculus. Complex numbers. Probability theory and its applications. Random variables and probability distributions. Descriptive statistics. Analysis of statistical relationships and linear regression. Graphical methods of data organization and presentation.				x						
9	Modern Information Technologies II	Data analysis tools in spreadsheets. Basic spreadsheet functions and formulas. Array formulas. Operations on data and tables. Data importing. Data presentation and visualization. Basics of data workflow automation.					x					
10	Engineering Drawing	2D and 3D software basics. Creating technical drawings. Configuring spreadsheets. Tools supporting precision drawing. Commands for drawing and modelling 2D and 3D objects. Preparing documentation for printing.				x						

No.	Course name	Program content	1MWP1	1MWP2	1MWP3	1MWP4	1MWP5	1MWP6	1MWP7	1MWP8	1MWP9	1MWP10
11	Statistics	Descriptive statistics in marketing. Analysis of structure, correlation and regression. Analysis of dynamics in marketing phenomena. Analysis and presentation of marketing data. Elements of statistical inference. Use of AI tools in data analysis.	x				x					
12	Material Science and Commodity Science	Basic engineering materials and their classification. Material properties and material requirements in product design. Material recycling and sustainable resource use. The role of materials in product marketing. Fundamentals of commodity science. Quality assurance, identification, packaging and logistics in commodity science.				x				x		
13	Fundamentals of Business Law with Elements of Marketing Law	Fundamentals of commercial law. Principles, classification and sources of commercial law. Basics of company law. Formation and liquidation of companies. Prevention of unfair competition. Elements of marketing law.	x		x			x				
14	English B2 module I	First part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
15	English B2+ module I	First part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
16	English C1 module I	First part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
17	German B2 module I	First part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of soft skills oriented around the future working environment of the university graduate.							x			
18	Management of Organizations	Essence of the management process. Organization and its environment. Evolution of management sciences. Managerial roles and competences. Planning and corporate strategy. Organizing business activities. Employee motivation. Control in organizations.	x								x	
19	Basis of Project Management	Project management methods and techniques. Project preparation and goal definition. Project roadmaps. Planning of scope, schedule and budget. Project risk management.	x					x	x		x	
20	Ethics	Descriptive and normative ethics. Theories of morality. Ethics and law relations. Social determinants of moral development. Moral diversity. Contemporary ethical dilemmas.			x							x
21	Anthropology	Human beings in cultural, social and organizational perspectives. Basic anthropological concepts. Cultural and social reality. Organizational context of human functioning. Basic methods of anthropological research.			x							x

No.	Course name	Program content	1MWP1	1MWP2	1MWP3	1MWP4	1MWP5	1MWP6	1MWP7	1MWP8	1MWP9	1MWP10
22	Advanced Manufacturing Techniques	Industry-specific characteristics of industrial production. Fundamental concepts of manufacturing techniques: technologies, processes, and operations. Specifics of innovative trends across various industries and economic sectors. Manufacturing process design as a component of marketing activities. Evolution of production systems; an overview of advanced manufacturing techniques used in forming processes. Application of CAD/CAM systems in production planning and manufacturing processes.	x							x	x	
23	Market Research	Marketing research process. Design and implementation of market research. Qualitative and quantitative research methods in marketing. Formulation of research problems and objectives. Method selection and data quality assessment. Analysis and interpretation of research results. Data-driven marketing decision support.	x	x			x					
24	Sustainable Marketing	Sustainable marketing in industrial enterprises. Responsible shaping of marketing activities in value chains. Integration of market objectives with environmental, social and regulatory conditions. Sectoral differences in sustainable marketing. Analysis of marketing decisions from a long-term value perspective. Inter-organizational relationships and stakeholder responsibility. The role of marketing in the transformation of business models.	x	x				x				
25	Corporate Financial Management	Fundamentals of corporate financial management. Financial and investment decisions in organizations. Economic analysis in decision-making processes. Formulation and evaluation of financial decisions. Interpretation of financial information. Practical aspects of financial management in enterprises.	x								x	
26	Marketing Innovations and E-commerce	Marketing innovations in the digital environment. Operation of enterprises in e-commerce. Online communication and sales. Digital technologies in customer value creation. Design and management of websites and e-commerce platforms. Usability and user experience (UX). Online marketing tools. Consumer behaviour in the digital environment. Integration of online and offline channels.	x	x			x	x				
27	English B2 module II	Second part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
28	English B2+ module II	Second part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
29	English C1 module II	Second part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
30	German B2 module II	Second part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of soft skills oriented around the future working environment of the university graduate.							x			

No.	Course name	Program content	1MWP1	1MWP2	1MWP3	1MWP4	1MWP5	1MWP6	1MWP7	1MWP8	1MWP9	1MWP10
31	Quality Engineering and Occupational Health and Safety	Comprehensive quality and occupational safety management in industrial organizations. TQM philosophy and process approach. Quality management methods, techniques and tools. Quality Management System and ISO 9001 standard. System-based approach to OHS and safety culture. Occupational risk assessment and accident analysis. Legal and economic aspects of occupational safety.	x								x	x
32	Brand and Corporate Image Management	Long-term brand management in organizations. Brand identity development. Organizational image consistency. Brand-stakeholder relationships. Corporate credibility and reputation in a dynamic market environment. Brand as a strategic organizational asset.	x	x							x	
33	Social Media and Content Marketing	Design and management of content-based communication. Digital platforms and social media. Content distribution and algorithmic mechanisms. Reach, visibility and audience engagement. Digital content formats and alignment with user behaviour. Data analysis and communication performance metrics.		x			x	x				
34	B2B Marketing in Industry	Specific characteristics of B2B marketing. Organizational buying processes. Business relationships in B2B marketing. Value offered to institutional customers. Differences between B2B and B2C marketing. Operating conditions in B2B markets.	x	x				x				
35	Managing Teams in a Digital Environment	The essence of teams and teamwork. The specificity of working in a virtual team. Team roles. Team leadership. Qualities of a good leader. Leadership styles. Responsibility, coordination and control of teamwork. Challenges in the process of managing teams in conditions of cultural diversity. Project: Team building. Teams roles. Team communication. Organization of work. Motivating team members. Control and evaluation of the team's work.	x				x	x	x			
36	Introduction to Electrical Engineering	Fundamentals of electrical engineering. Electrical circuits and their components. Laws governing current and voltage flow. Analysis of circuits in steady-state and transient conditions. Basics of measurement techniques. Measurement of electrical quantities, units and properties of measuring instruments.				x					x	
37	Health-promoting and Functional Food	Basic concepts of health-promoting food. The role of food in health prevention. Functional food. Dietary food and food for special nutritional purposes. The role of food in the prevention of diet-related diseases.				x					x	
38	Industrial Design Marketing	The role of industrial design in creating product market value. Design as a source of enterprise competitiveness. Socio-cultural context of industrial design. Design as a marketing and strategic tool. Industrial design management. Design marketing and decision-making processes. Cooperation with external partners in design processes.				x					x	
39	Materials in Electrical Engineering	Fundamentals of electrical and electronic materials. Structure and composition of materials. Electrical and physical properties of materials. Applications of materials in electrical engineering and electronics.				x				x	x	
40	Fermented Food and Beverages	Fundamentals of fermentation processes in food and beverage production. Raw materials and fermentation technologies. Fermented products of plant and animal origin. Principles of fermentation and their technological significance. Sensory and quality attributes of fermented products. Basic methods for quality assessment of fermented products.				x				x	x	

No.	Course name	Program content	1MWP1	1MWP2	1MWP3	1MWP4	1MWP5	1MWP6	1MWP7	1MWP8	1MWP9	1MWP10
41	Modern Technologies in Textiles and Plastics Processing	Innovative technologies in textile materials and plastics. Advanced materials and non-conventional raw materials. Functional properties of materials and methods of their evaluation. Directions of technological development in materials engineering. Design of materials and products. Technology analysis and assessment of product structure and function.				x				x	x	
42	English B2 module III	Third part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
43	English B2+ module III	Third part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
44	English C1 module III	Third part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
45	German B2 module III	Third part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of soft skills oriented around the future working environment of the university graduate.							x			
46	Improvement Semester at Partner Institutions	Development of knowledge and skills in partner institutions. Completion of study programs at other faculties and universities. Enhancement of social and engineering competences. Life cycle of technical devices, facilities and systems. Critical analysis and evaluation of existing technical solutions.							x		x	x
47	Summative Module	Team-based work on marketing problems in an industrial environment. Marketing planning in enterprise management, taking into account technological and production constraints. Designing and validating the market strategy of a product or manufacturing process, complemented by technological and material analysis. Product life cycle analysis, standardization, and quality requirements. Market research, segmentation, and target groups linked to the technological capabilities of the organization. Marketing mix and new product development with an assessment of technical feasibility. Sales processes and stakeholder relationships. Corporate marketing strategies in the context of technological, cost, and environmental constraints.							x	x	x	
48	Technology Transfer and Intellectual Property Protection	The course covers the principles and tools of technology transfer and intellectual property protection in bringing R&D outcomes into economic practice. Students learn core IP instruments (patents, designs, trademarks, copyright, trade secrets), invention disclosure procedures, and the basics of prior-art analysis and legal risk assessment. The course also addresses academia-industry collaboration models, licensing, and key contract and negotiation aspects in R&D projects.			x			x				

No.	Course name	Program content	1MWP1	1MWP2	1MWP3	1MWP4	1MWP5	1MWP6	1MWP7	1MWP8	1MWP9	1MWP10
49	Research Methodology	Fundamentals of scientific research in management sciences. Formulation of research problems and objectives. Literature studies and the use of AI in research. Qualitative and quantitative research methods and techniques. Analysis and interpretation of research results. Research integrity, ethics and planning of research projects.					x				x	
50	Human Resource Management	The nature and importance of human resource management in an industrial organization. Workforce planning and employee recruitment. Employee motivation and performance appraisal. Employee development and competency management. Communication and employee relations in the organization. HR analytics; contemporary HRM challenges in the industrial sector.	x						x		x	
51	Sales Techniques and Negotiations	Fundamentals of effective business sales. Sales techniques and customer needs analysis. Building customer relationships. Negotiation strategies and techniques. Tools supporting sales and negotiation processes. Handling objections and difficult sales situations. Exercises, simulations and case studies in sales and negotiations.	x	x								
52	Electric Devices	Fundamentals of power systems and electrical installations. Principles of electricity generation, transmission and use. Power engineering devices and their operation. Automation and control elements in engineering practice. Technical, environmental and safety aspects. Measurement methods and safe operation of electrical equipment.				x				x	x	
53	Nutrients and Anti-nutrients in Food	Food composition and its importance for human health. Macro- and micronutrients in food. Nutritional and antinutritional components. Nutritional and energy value of food products. Natural food components and food additives. Factors affecting food quality and safety. Basic methods for determining food components and their role in health prevention.				x				x	x	
54	Material and Commodity Science of Fibrous Products and Plastics	Structure and properties of fibrous materials and plastics. Raw materials and material structures. Principles of material processing and application. Quality assessment criteria for products. Functional, technological and environmental aspects of materials. Methods of material identification and evaluation of properties and user comfort.				x				x	x	
55	Electronic Devices	Fundamentals of electronics and electronic circuits. Structure and operating principles of electronic devices. Semiconductor components and their applications. Basic electronic circuits. Applications of electronics in modern devices. Design and functional aspects of electronics. Basic electronic components and their operation in practical circuits.				x				x	x	
56	Food Products Commodity Science	Characteristics of food products treated as industrial goods, with particular emphasis on quality attributes, usability and shelf life. Introduction to basic concepts of commodity science and the specificity of food products resulting from their biological origin and quality variability. Raw materials and semi-finished products used in the food industry and their influence on the properties of finished products. Overview of the main commodity groups of food products together with their characteristic quality features.				x				x	x	
57	Commodities of Conventionally Manufactured Goods	Characteristics and classification of ready-made products. Apparel and technical products. Material selection and product construction. Manufacturing methods for ready-made products. Criteria for quality and functional property assessment. User comfort of products. Laboratory methods for evaluating materials and product quality.				x				x	x	

No.	Course name	Program content	1MWP1	1MWP2	1MWP3	1MWP4	1MWP5	1MWP6	1MWP7	1MWP8	1MWP9	1MWP10
58	English B2 module IV	Fourth part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
59	English B2+ module IV	Fourth part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
60	English C1 module IV	Fourth part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of interpersonal skills oriented around the future working environment of the university graduate.							x			
61	German B2 module IV	Fourth part of a business language course with elements of industry-specific terminology; development of all language skills; development and improvement of soft skills oriented around the future working environment of the university graduate.							x			
62	Final Project	Independent preparation of a thesis. Thesis development under the supervisor's guidance. Preparation of the thesis in accordance with the approved concept, consistent with the profile and learning outcomes of the study programme, and approved by the Programme Council, which verifies this compliance. 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		x	
63	Internship	Familiarization with the functioning of the enterprise (with particular emphasis on the areas of marketing and production engineering). Practical application of theoretical knowledge in management and marketing. Methods, techniques, and tools of management in marketing activities. Implementation of operational management functions for marketing processes and projects. Identifying, diagnosing, and solving problems in marketing communication. Critical analysis of marketing phenomena and the impact of the environment. Decision-making in the area of marketing functions. Communication, negotiation, persuasion, and teamwork. Developing and deepening practical skills in critical analysis, interpretation, and evaluation of phenomena of production, technological, and logistical processes (particularly those related to subjects chosen by the student from elective modules), as well as assessing the impact of the environment on these phenomena. Acquiring and expanding the student's knowledge in the area of product life cycle, its material specifics, and the organization of its production process.							x		x	x
64	Diploma Seminar	Preparation of a first-cycle diploma thesis. Structure and organization of the diploma thesis. Formal and editorial requirements of the thesis. Diploma thesis concept and research methodology. Presentation and discussion of thesis assumptions. Argumentation, presentation and planning of diploma work.					x		x		x	
65	Managerial Competencies	The role and responsibilities of a manager in an organization. Key areas of management. Contemporary concepts of managerial competences. Practical application of competences in teamwork. Development of managerial skills through exercises and case studies. Analysis of real managerial challenges.			x				x		x	x

No.	Course name	Program content	1MWP1	1MWP2	1MWP3	1MWP4	1MWP5	1MWP6	1MWP7	1MWP8	1MWP9	1MWP10
66	Social Competences for an Engineer	Social competences of engineers in business and project environments. Interpersonal communication in industrial marketing contexts. Active listening and effective questioning. Clear messaging and adaptation of communication style to different audiences. Self-presentation and data-driven persuasive communication. Presentation of analytical results and marketing recommendations. Professional attitudes: ethics of cooperation and organizational culture. Stress resilience and stakeholder relationship management.			x				x		x	x
67	Marketing Controlling	Company profitability. Income statement analysis and interpretation. Impact of marketing on financial performance and firm value. Marketing profitability and brand value indicators. Sales and marketing budgeting. Cost-volume-profit (CVP) analysis. Optimization of marketing activities.	x	x								
68	Optoelectronic Systems for General Use	Fundamentals of optoelectronics. Operating principles and structure of optoelectronic systems. Emission, transmission and detection of optical radiation. Interaction of optical and electronic components. Applications of optoelectronic systems in technology and everyday life. Usability and safety aspects in optoelectronics. Basics of designing simple optoelectronic systems. Measurement methods in optoelectronics.				x				x	x	
69	Designing a new generation of food	Fundamentals of food product development. Innovation trends in the food industry. Food design in response to consumer needs. Quality and safety of new food products. Consumer acceptance of food products. Basics of sensory evaluation. Conceptual design of new product solutions.				x				x	x	
70	Innovative Design Techniques for Fibre Products and Plastics	Modern methods of product design and development. Computer-aided design (CAD). Engineering tools in the design of textile and plastic products. Product modeling and design. Visualization of design solutions. Working in design environments. Creation of simple models and design solutions.				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	Creative Marketing Communication	3			3	
2	Basics of Marketing	5			5	
3	Mathematics I	7				
4	Fundamentals of Physics	6			6	
5	Modern Information Technologies I	3				
6	Economics	4			4	
7	Critical Thinking	2	2		2	
8	Mathematics II	7				
9	Modern Information Technologies II	3				
10	Engineering Drawing	3			3	
11	Statistics	4			4	
12	Material Science and Commodity Science	5			5	
13	Fundamentals of Business Law with Elements of Marketing Law	2			2	
14	English B2 module I	2		2		
15	English B2+ module I	2		2		
16	English C1 module I	2		2		
17	German B2 module I	2		2		
18	Management of Organizations	4			4	
19	Basis of Project Management	3				
20	Ethics	4	4	4		
21	Anthropology	4	4	4		

No.	Course name	ECTS	Subjects in the field of humanities and social sciences	Elective subjects	Profile items	Classes in a foreign language
22	Advanced Manufacturing Techniques	4			4	
23	Market Research	3			3	
24	Sustainable Marketing	5			5	
25	Corporate Financial Management	5			5	
26	Marketing Innovations and E-commerce	4				
27	English B2 module II	2		2		
28	English B2+ module II	2		2		
29	English C1 module II	2		2		
30	German B2 module II	2		2		
31	Quality Engineering and Occupational Health and Safety	6			6	
32	Brand and Corporate Image Management	4			4	
33	Social Media and Content Marketing	3			3	
34	B2B Marketing in Industry	4			4	
35	Managing Teams in a Digital Environment	3			3	
36	Introduction to Electrical Engineering	4		4	4	
37	Health-promoting and Functional Food	4		4	4	
38	Industrial Design Marketing	4		4	4	
39	Materials in Electrical Engineering	4		4	4	
40	Fermented Food and Beverages	4		4	4	
41	Modern Technologies in Textiles and Plastics Processing	4		4	4	
42	English B2 module III	2		2		
43	English B2+ module III	2		2		

No.	Course name	ECTS	Subjects in the field of humanities and social sciences	Elective subjects	Profile items	Classes in a foreign language
44	English C1 module III	2		2		
45	German B2 module III	2		2		
46	Improvement Semester at Partner Institutions	30		30		
47	Summative Module	7		7	7	
48	Technology Transfer and Intellectual Property Protection	3			3	
49	Research Methodology	2			2	
50	Human Resource Management	3			3	
51	Sales Techniques and Negotiations	4			4	
52	Electric Devices	4		4	4	
53	Nutrients and Anti-nutrients in Food	4		4	4	
54	Material and Commodity Science of Fibrous Products and Plastics	4		4	4	
55	Electronic Devices	4		4	4	
56	Food Products Commodity Science	4		4	4	
57	Commodities of Conventionally Manufactured Goods	4		4	4	
58	English B2 module IV	3		3		
59	English B2+ module IV	3		3		
60	English C1 module IV	3		3		
61	German B2 module IV	3		3		
62	Final Project	15		15		
63	Internship	6				
64	Diploma Seminar	2				
65	Managerial Competencies	2		2		

No.	Course name	ECTS	Subjects in the field of humanities and social sciences	Elective subjects	Profile items	Classes in a foreign language
66	Social Competences for an Engineer	2		2		
67	Marketing Controlling	2			2	
68	Optoelectronic Systems for General Use	3		3	3	
69	Designing a new generation of food	3		3	3	
70	Innovative Design Techniques for Fibre Products and Plastics	3		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)	86/210 (40.95%)
The total number of ECTS credits to be earned by a student through courses in the fields of humanities or social sciences	6
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	115/210 (54.76%)

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 choice of tools depends on the specific nature of the subject and the form of teaching and is described in detail in the course descriptions.

Achievement of the required outcomes will be assessed by means of:

- written work (exams, tests, reports, essays, projects, posters, dissertation),
- oral presentations (oral knowledge tests, presentations, papers),
- practical and project-based tasks (individual and group),
- observation and assessment of participation during lessons,
- self-assessment and peer assessment (particularly in team projects),
- a competency-based examination and a final examination.

Assessment may be formative (ongoing, repeated during classes) or summative (final). The final result is awarded in accordance with the grading scale set out in the TUL Study Regulations.

Assessment methods are used both during classes at the university and in companies, including during study visits, work placements, project work and dissertation projects. The course coordinator, together with the teaching team, is responsible for the assessment process.

Details of the methods of assessment and evaluation of learning outcomes are provided for each course in the Course Description. It 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 degree programme, and the forms and conditions for passing the course. In accordance with the Study Regulations in force at TUL, every student receives full information regarding the verification and assessment of learning outcomes, in accordance with the Course Description, during the first class of a given course.

An additional tool for verifying learning outcomes for the entire course of study is the competency examination, conducted in the final semester. It is based on a case study analysis and involves testing knowledge and skills in accordance with the three 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.

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

Professional internships

The placement lasts a minimum of 6 weeks, during which the student will devote at least 100 teaching hours (75 clock hours) to carrying out various tasks (as agreed with the placement organiser). The placement is carried out on the basis of the document 'Notification of the location and programme of the placement', approved by the Faculty Placement Supervisor (the supervisor is responsible for academic supervision, ensuring the placement aligns with the learning outcomes, and its completion), which specifies: the location of the placement, the scope of the intern's tasks and responsibilities, the duration of the placement, and the contact details of the Company Placement Supervisor (the supervisor who provides substantive supervision of the student during the placement and who issues a final assessment of the student's performance and completion of the placement).

The objectives of the placement have been operationalised in the form of a placement programme, which covers specific topics with which the student should familiarise themselves during the placement.

The objectives of the placement are:

- To familiarise the student with the functioning of a company and/or organisation with particular emphasis on issues related to marketing management in a modern industrial enterprise.
- To introduce the student to the practical application of the theoretical issues covered so far, with particular emphasis on those related to the elective modules chosen by the student.
- To acquire and expand the student's knowledge and skills regarding methods, techniques and tools for managing a business and/or organisation (with particular emphasis on marketing management).
- Developing and deepening practical skills in identifying, diagnosing and solving problems related to management in the field of marketing.
- To develop and deepen practical skills in the critical analysis, interpretation and evaluation of phenomena and manufacturing, technological and logistical processes, as well as the assessment of the environment's impact on these phenomena.
- To acquire and broaden students' knowledge of the product life cycle, its material characteristics and the organisation of its production process.
- To develop and deepen practical skills in the critical analysis, interpretation and evaluation of phenomena and management processes in the field of marketing on various scales, as well as the assessment of the impact of the environment on these phenomena.
- To prepare students to perform basic (operational) management functions in the field of marketing – students should actively participate in the planning, development and/or implementation of general and instrumental commercial and social marketing strategies based on a marketing mix tailored to the specific nature of the Business-to-Consumer (B2C) and the Business-to-Business (B2B) market, as well as acquiring and expanding knowledge and skills regarding the latest approaches in marketing concepts applied in these markets, paying particular attention to issues of compliance with the principles of ethics and social acceptance of marketing activities.
- To familiarise students with the practical aspects of customer relationship management based on data and information security principles in real-world and virtual environments, guided in professional practice by the principles of corporate social responsibility and professional ethics.
- Developing and enhancing skills in effective communication, negotiation, persuasion and teamwork.
- 11. Preparing students to fulfil their role as engineers in society, particularly in terms of striving to improve quality of life and competitiveness, by seeking optimal management and marketing solutions that are socially acceptable and consistent with ethical principles.

The placement must be carried out in accordance with data protection principles, confidentiality of information, and academic and professional ethics. During the placement, the student is responsible for the safe use of IT tools. Suggested placement locations (linked to the elective modules chosen by the student) include manufacturing companies, as well as design and consultancy firms and R&D (R&D), where technical, economic and IT knowledge in the field of organisational management is applied in an operational context, with particular emphasis on those related to management in the field of marketing and management in the field of production engineering.

During the placement, student interns must:

1. Familiarise themselves with and comply with the internship regulations.
2. Comply with health and safety regulations.
3. Familiarise themselves with the scope of their duties, as well as the regulations, codes of conduct, procedures and working

methods applied within the company and/or organisation.

4. Maintain regular contact with the internship supervisor from the company and/or organisation, and work effectively as part of a team.
5. Familiarise yourself with the following issues relating to the placement location:
 - legal status and the legal and procedural basis for its operations;
 - organisational structure;
 - the core processes carried out (with particular emphasis on processes in the areas of marketing and production engineering);
 - the organisation and functioning of the marketing system;
 - the technical solutions and information technologies used;
 - the system and methods for document circulation and information flow;
 - the human resources management system;
 - the system and functioning of the finance and accounting departments.

The basis for passing the placement is the achievement of all the intended learning outcomes relating to student placements and the submission of complete documentation.

Upon completion of the placement, students prepare a written report describing the course of the placement, confirming their familiarity with the required topics and containing an assessment of the course and implementation of the placement issued by the Departmental Placement Supervisor, as well as an assessment of the placement venue and conditions issued by the student. On the basis of the information contained in the report, the Faculty Internship Supervisor assesses whether and to what extent the learning objectives and outcomes have been achieved. The number of ECTS credits allocated to the professional internship is 4.

The placement may be completed by the student prior to the semester in which it is included in the study programme, but this must be done with the consent of the Faculty Placement Supervisor. The placement must be finalised before sitting the final examination. Placements may be undertaken remotely or in a hybrid format, provided that the following conditions are met cumulatively:

1. There is a specific unforeseen circumstance preventing the student from undertaking the placement in person.
2. The nature of the tasks allows them to be carried out remotely.
3. The achievement of the learning outcomes specified in the study programme is ensured.
4. The student is guaranteed regular contact with the Departmental Internship Supervisor.
5. The internship programme has been approved by the Faculty Internship Supervisor.
6. An application with a written justification of the reasons necessitating the completion of the placement in a remote and/or hybrid mode has been submitted and accepted by the Vice-Dean for Student Affairs.

Characteristics of the course

Graduate profile

A graduate of the Industrial Marketing programme is an engineer with interdisciplinary skills in technical sciences, economics and marketing, prepared to operate at the interface of technological, market and organisational processes in industrial and technological enterprises.

Graduates possess engineering knowledge enabling them to understand basic production processes, quality issues, materials science and the organisation of technical processes, allowing them to collaborate effectively with production, R&D and quality departments, as well as technical teams. At the same time, they possess knowledge of industrial marketing (B2B), market research, the behaviour of institutional buyers and management, enabling them to analyse the market conditions affecting the operations of industrial enterprises.

Graduates are able to participate in the preparation and implementation of marketing activities, including market analyses, communication activities, support for product management processes and promotional activities, taking into account the specific nature of the industrial and technological market. They possess the ability to analyse marketing data and interpret research results for the purposes of operational and design decision-making.

Graduates possess basic engineering competencies enabling them to understand the technological aspects of industrial products, assess material properties in the context of their market application, and analyse the product life cycle (LCA). They understand the relationships between material properties, production processes and product quality parameters, which enables them to collaborate effectively with technical and R&D teams in the design and improvement of product solutions. They are able to interpret technical data and formulate marketing recommendations, taking into account material, production and quality considerations.

During their studies, graduates acquire skills in the use of modern digital and IT tools supporting marketing activities, including basic analytical tools, information systems and digital solutions used in B2B marketing and sales. They are familiar with the potential applications of artificial intelligence-based tools as aids to data analysis and marketing communication.

The teaching process on the Marketing in Industry programme is based on active learning methods, such as PBL, case studies and team projects carried out in collaboration with industrial companies. Students work on tasks reflecting the real challenges of B2B markets, including customer needs analysis, technical product design and marketing activity planning.

Projects carried out using Project-Based Learning methods also include tasks arising from practical production, quality and material issues encountered in industrial enterprises. This allows students to integrate marketing knowledge with the fundamentals of engineering in the process of analysing and evaluating market and product solutions.

These methods are used, among others, in the following modules:

B2B Marketing in Industry – case studies of manufacturing and technology companies.

Market research – PBL projects involving the preparation and implementation of market research.

Marketing Innovation and E-commerce – work on the implementation of digital solutions in an industrial environment.

Social Media and Content Marketing – implementation of communication projects for industrial brands.

Graduates possess the social skills necessary for teamwork, interpersonal communication and the execution of project tasks in an interdisciplinary environment. They are prepared for further study at the Master's level and to take up employment in, amongst others: industrial enterprises (marketing, sales and product development departments), consultancy firms (technical and business consultancy), IT firms developing solutions for industry, firms specialising in digital transformation and martech, B2B e-commerce firms and industrial platforms.

Examples of graduate roles include: Content Manager, Brand Manager, Product Manager, Industrial Marketing Specialist, and New Media Campaign Coordinator.

The graduate profile was developed with the involvement of external stakeholders, and the programme takes into account current labour market needs and the dynamic changes taking place in the industrial and technological sectors.

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

One of the key objectives of the mission of the Lodz University of Technology, as set out in the University's strategy for 2025-2030, is to build a sustainable research university based on modern forms of education and innovation that benefit society at regional, national and global levels. Activities related to the Industrial Marketing degree programme are fully in line with this objective. Students on this programme will be provided with the opportunity to acquire up-to-date knowledge, skills and social competences at the highest level. They will thus be able to gain valuable cognitive and practical experience, developing their innate potential. This will enable the achievement of the general and specific objectives set out in the TUL strategy with regard to the key areas of the university's strategic development. Redefining the Industrial Marketing programme and training professional managers and specialists in industrial marketing who stand out for their knowledge of the latest solutions in this field, and who are characterised by the ability to effectively overcome the challenges associated with the functioning of the modern B2B market, fits particularly well with the implementation of the objectives of the Lodz University of Technology related to the following areas: innovation, impact on the socio-economic environment, talent development, sustainable development, inspiring education, internationalisation and student development. The educational process on the Marketing in Industry programme will be based on the use of state-of-the-art teaching methods and techniques enabling the development of talent through the discovery and individual nurturing of students' abilities and passions, as well as channelling their intellectual potential, including their creative and social potential, for the common good of the ŁUT community and society as a whole. The inclusion of this programme in the educational offering of the Lodz University of Technology will enhance the university's market potential, distinguishing it from other academic institutions. It will also contribute to building a strong, positive image, further strengthening its value as a partner for external stakeholders, particularly representatives of business or other academic institutions. It will also increase the attractiveness of Lodz University of Technology as a unique place of study for people from Poland and other countries wishing to develop their interests in marketing, which is one of the cornerstones of the university's strategy.

Educational objectives and employment and continuing education opportunities

The educational objective of the first-cycle degree programme in Industrial Marketing is to prepare graduates for professional practice in the field of marketing, with particular emphasis on the specific characteristics of industrial and technological enterprises. The programme focuses on imparting fundamental, well-established theoretical knowledge in the fields of marketing, management, economics and finance, supplemented by topics specific to the industrial sector, such as B2B marketing, technical product management and engagement with institutional markets.

A key objective of the programme is to develop analytical and practical skills enabling students to identify the needs of industrial clients, analyse the market and competition, segment audiences, and plan and implement marketing activities in an environment dominated by technology and production processes. Students acquire competencies in marketing research, market data analysis, marketing communication, brand building and customer relationship management.

The programme also emphasises preparation for working in a digitalised and automated environment, including the use of digital marketing tools, IT systems supporting sales and marketing, and data analysis. An important element of the programme is the development of social skills, such as: teamwork, business communication, creativity, critical thinking, and accountability for marketing decisions. The Bachelor's degree programme also serves as a foundation for further study at Master's level.

Graduates of the Industrial Marketing programme are prepared to take up entry-level executive and specialist roles in manufacturing companies, technology firms, research and development centres, as well as in organisations providing services to industry. They find employment in departments such as marketing, sales, customer service, product development and market communications.

Typical roles include marketing specialist, brand manager assistant, market research specialist, digital marketing specialist, promotional activities coordinator, and B2B sales support. The skills acquired during the course also enable graduates to work in marketing agencies serving the industrial sector, as well as to set up their own businesses.

Completing a first-cycle degree in Industrial Marketing enables students to continue their education at the second-cycle (master's) level, both in fields related to marketing and management, as well as in other related disciplines.

The learning objectives are achieved through methods such as Problem-Based Learning (PBL), case study analysis and project-based classes focused on the practical challenges faced by industrial enterprises. The use of PBL and case studies allows for a clear distinction between general marketing content and the industrial component of the programme, focusing the curriculum on the specific nature of technical products, B2B markets, manufacturing processes and collaboration with the industrial environment.

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

An opinion on the 'Marketing in Industry' degree programme was sought from representatives of the Business Council operating at the Faculty of Organisation and Management of the Lodz University of Technology. Representatives of businesses, acting as key external stakeholders, assessed the programme both on the basis of their experience from previous cooperation with the Faculty and on the basis of an analysis of the structure and content of the proposed programme. The opinions presented indicate that the Industrial Marketing programme is highly rated in terms of its academic content, the relevance of its content and its alignment with the needs of the labour market, particularly in the manufacturing and technology sectors.

Entrepreneurs emphasised that graduates of the Industrial Marketing programme will bring to organisations interdisciplinary knowledge in the fields of marketing, management, economics, finance and law, as well as an understanding of the specific nature of industrial enterprises as socio-technical systems based on technological processes, data and market relations. According to external stakeholders, such training facilitates the effective integration of market perspectives with the technological and organisational conditions of business operations.

In the opinion of representatives of the Business Council, the competencies that future graduates will acquire during their studies will translate directly into business practice. Particular praise was given to the ability to analyse industrial markets and B2B clients, work with marketing data, plan and implement marketing activities, prepare reports and management analyses, and operate efficiently in a digital environment. At the same time, it was noted that the programme will enable the development of future graduates' soft skills, including teamwork, effective communication, critical thinking, and a proactive attitude towards market and technological changes.

Entrepreneurs also emphasised that they expect future graduates to demonstrate a sense of responsibility for the marketing decisions they make, an awareness of their impact on the organisation's performance, and a readiness to further develop their professional skills. In the opinion of external stakeholders, the Marketing in Industry programme provides a coherent and solid foundation for graduates to function effectively in modern industrial enterprises and for their further professional and educational development.

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

Candidates applying for admission to the first-cycle degree programme in Industrial Marketing should possess aptitudes enabling them to undertake studies with a technical and business profile, combining marketing issues with the functioning of industrial enterprises.

In particular, candidates are expected to have:

- basic mathematical and analytical skills, enabling data analysis and an understanding of quantitative relationships,
- knowledge of a modern foreign language at a level sufficient for communication and the use of industry-specific materials,
- an interest in marketing, the market, products and processes within industrial enterprises,
- basic information and digital skills,
- a willingness to engage in systematic study and to work both independently and as part of a team.

Admission is based on the results of the school-leaving examination in compulsory subjects: mathematics and a foreign language, as well as – to be chosen – physics, chemistry, geography, computer science or a vocational qualification (economic technician, logistics technician, commercial technician).

The unit organizing education

Faculty of Organization and Management

Education program

Semester 1

Course	Number of hours	ECTS points	Form of verification	Obligatory
Creative Marketing Communication	Tutorials: 30 Lecture: 15	3	Graded assignment	Obligatory
Basics of Marketing	Tutorials: 30 Lecture: 30	5	Exam	Obligatory
Mathematics I	Tutorials: 60 Lecture: 30	7	Exam	Obligatory
Fundamentals of Physics	Tutorials: 15 Laboratory classes: 45 Project work: 15 Lecture: 15	6	Graded assignment	Obligatory
Modern Information Technologies I	Laboratory classes: 30 E-learning: 15	3	Graded assignment	Obligatory
Economics	Tutorials: 30 Lecture: 15	4	Graded assignment	Obligatory
Critical Thinking	Tutorials: 15 Lecture: 15	2	Graded assignment	Obligatory
Sum	405	30		

Semester 2

Course	Number of hours	ECTS points	Form of verification	Obligatory
Mathematics II	Tutorials: 45 Lecture: 45	7	Exam	Obligatory
Modern Information Technologies II	Laboratory classes: 30 E-learning: 15	3	Graded assignment	Obligatory

Course	Number of hours	ECTS points	Form of verification	Obligatory
Engineering Drawing	Laboratory classes: 45	3	Graded assignment	Obligatory
Statistics	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Obligatory
Material Science and Commodity Science	Tutorials: 30 Project work: 15 Lecture: 30	5	Exam	Obligatory
Fundamentals of Business Law with Elements of Marketing Law	Lecture: 30	2	Graded assignment	Obligatory
Foreign Language Module 1		2	Graded assignment	Obligatory group
The student chooses one module from the group.				
English B2 module I	Tutorials: 30	2	Graded assignment	Optional
English B2+ module I	Tutorials: 30	2	Graded assignment	Optional
English C1 module I	Tutorials: 30	2	Graded assignment	Optional
German B2 module I	Tutorials: 30	2	Graded assignment	Optional
Physical Education 1	Tutorials: 30	0	Pass	Obligatory
Management of Organizations	Tutorials: 30 Lecture: 30	4	Graded assignment	Obligatory
Sum	450	30		

Semester 3

Course	Number of hours	ECTS points	Form of verification	Obligatory
Basis of Project Management	Tutorials: 15 Laboratory classes: 15 Lecture: 15	3	Graded assignment	Obligatory
Elective Course 1		4	Graded assignment	Obligatory group
The student chooses 1 course from the group				

Course	Number of hours	ECTS points	Form of verification	Obligatory
Ethics	Tutorials: 30 Lecture: 15	4	Graded assignment	Optional
Anthropology	Tutorials: 30 Lecture: 15	4	Graded assignment	Optional
Advanced Manufacturing Techniques	Tutorials: 15 Seminar: 15 Lecture: 15	4	Graded assignment	Obligatory
Market Research	Tutorials: 15 Lecture: 15	3	Exam	Obligatory
Sustainable Marketing	Tutorials: 30 Project work: 15 Lecture: 15	5	Exam	Obligatory
Corporate Financial Management	Tutorials: 30 Lecture: 15	5	Exam	Obligatory
Marketing Innovations and E-commerce	Laboratory classes: 30 Project work: 30	4	Graded assignment	Obligatory
Foreign Language Module 2		2	Graded assignment	Obligatory group
The student chooses one module from the group.				
English B2 module II	Tutorials: 30	2	Graded assignment	Optional
English B2+ module II	Tutorials: 30	2	Graded assignment	Optional
English C1 module II	Tutorials: 30	2	Graded assignment	Optional
German B2 module II	Tutorials: 30	2	Graded assignment	Optional
Physical Education 2	Tutorials: 30	0	Pass	Obligatory
Sum	390	30		

Semester 4

Course	Number of hours	ECTS points	Form of verification	Obligatory
Quality Engineering and Occupational Health and Safety	Tutorials: 45 Lecture: 30	6	Exam	Obligatory
Brand and Corporate Image Management	Tutorials: 15 Project work: 15 Lecture: 15	4	Graded assignment	Obligatory
Social Media and Content Marketing	Laboratory classes: 30	3	Graded assignment	Obligatory
B2B Marketing in Industry	Tutorials: 30 Lecture: 15	4	Exam	Obligatory
Managing Teams in a Digital Environment	Project work: 30 Lecture: 30	3	Graded assignment	Obligatory
Elective Block 2		4	Graded assignment	Obligatory group
The student chooses one module from the group.				
Introduction to Electrical Engineering	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Health-promoting and Functional Food	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Industrial Design Marketing	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Elective Block 3		4	Graded assignment	Obligatory group
The student chooses one module from the group.				
Materials in Electrical Engineering	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Fermented Food and Beverages	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Modern Technologies in Textiles and Plastics Processing	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Foreign Language Module 3		2	Graded assignment	Obligatory group
The student chooses one module from the group.				

Course	Number of hours	ECTS points	Form of verification	Obligatory
English B2 module III	Tutorials: 30	2	Graded assignment	Optional
English B2+ module III	Tutorials: 30	2	Graded assignment	Optional
English C1 module III	Tutorials: 30	2	Graded assignment	Optional
German B2 module III	Tutorials: 30	2	Graded assignment	Optional
Physical Education 3	Tutorials: 30	0	Pass	Obligatory
Sum	405	30		

Semester 5

Course	Number of hours	ECTS points	Form of verification	Obligatory
Improvement Semester at Partner Institutions	Total number of contact hours: 375	30	Graded assignment	Obligatory subjects to choose from
Sum	375	30		

Semester 6

Course	Number of hours	ECTS points	Form of verification	Obligatory
Summative Module	Project work: 105	7	Graded assignment	Obligatory subjects to choose from
Technology Transfer and Intellectual Property Protection	Tutorials: 30 Lecture: 15	3	Graded assignment	Obligatory
Research Methodology	Lecture: 15	2	Graded assignment	Obligatory
Human Resource Management	Tutorials: 30 Lecture: 30	3	Graded assignment	Obligatory

Course	Number of hours	ECTS points	Form of verification	Obligatory
Sales Techniques and Negotiations	Tutorials: 30 Lecture: 30	4	Graded assignment	Obligatory
Elective Block 4		4	Graded assignment	Obligatory group
The student chooses one module from the group.				
Electric Devices	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Nutrients and Anti-nutrients in Food	Laboratory classes: 15 Project work: 15 Lecture: 15	4	Graded assignment	Optional
Material and Commodity Science of Fibrous Products and Plastics	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Elective Block 5		4	Graded assignment	Obligatory group
The student chooses one module from the group.				
Electronic Devices	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Food Products Commodity Science	Tutorials: 30 Lecture: 15	4	Graded assignment	Optional
Commodities of Conventionally Manufactured Goods	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Optional
Foreign Language Module 4		3	Exam	Obligatory group
The student chooses one module from the group.				
English B2 module IV	Tutorials: 30	3	Exam	Optional
English B2+ module IV	Tutorials: 30	3	Exam	Optional
English C1 module IV	Tutorials: 30	3	Exam	Optional
German B2 module IV	Tutorials: 30	3	Exam	Optional
Sum	405	30		

Semester 7

Course	Number of hours	ECTS points	Form of verification	Obligatory
Final Project	Diploma Thesis: 0	15	Pass	Obligatory subjects to choose from
Internship	Internship: 0	6	Pass	Obligatory
Diploma Seminar	Seminar: 15	2	Graded assignment + exam	Obligatory
Elective Block 6		2	Graded assignment	Obligatory group
The student chooses one module from the group.				
Managerial Competencies	Tutorials: 30	2	Graded assignment	Optional
Social Competences for an Engineer	Tutorials: 30	2	Graded assignment	Optional
Marketing Controlling	Tutorials: 30 Lecture: 15	2	Graded assignment	Obligatory
Elective Block 7		3	Graded assignment	Obligatory group
The student chooses one module from the group.				
Optoelectronic Systems for General Use	Tutorials: 15 Laboratory classes: 30 Lecture: 15	3	Graded assignment	Optional
Designing a new generation of food	Laboratory classes: 30 Project work: 15 Lecture: 15	3	Graded assignment	Optional
Innovative Design Techniques for Fibre Products and Plastics	Tutorials: 45 Lecture: 15	3	Graded assignment	Optional
Sum	150	30		