Management and production engineering – 6 semester

Lp.	Subject	Description	Semester	ECTS credits	Number of hours for the form of education						Form of passing	
					Lecture	Exercise	Practical classes	ZK	PS	PZ	Exam	Credit
1.	**Design of Production Systems**	This course covers methods for designing and optimizing production systems, including layouts and workflows. Students will learn to create efficient and effective production layouts.		3	15	-	30				-	x
2.	**Design of Industrial Plants**	Students will learn the principles of designing industrial plants, considering technical, economic, and ergonomic aspects. They will learn to create plans for facilities that maximize productivity and minimize costs.	6	3	15	-	30				-	x
3.	**Data Analysis**	This course focuses on techniques for analyzing large datasets using statistical and programming tools. Students will acquire skills in processing and interpreting data.	6	3	15	15	30				-	x
4.	**Business inteligence**	Students will learn tools and techniques that support decision-making processes in organizations. They will learn to create reports and analyses that facilitate strategic management.	6	3	15	-	30				-	x

5.	**Human Resources Management**	This course covers managing human resources, including recruitment, employee development, and compensation management. Students will learn effective personnel management methods.	6	**3**	15	30	-				x	x
6.	**Professional Ethics**	Students will explore ethical principles in various professions and their practical application. They will learn to identify and resolve ethical dilemmas.	6	**3**	15	30	-				x	x
7.	**Marketing in Trade and Services**	This course discusses marketing strategies specific to the trade and services sectors. Students will learn to create effective marketing campaigns.	6	**3**	15	30	-				-	x
8.	**Customer Relationship Management**	Students will learn techniques for building and maintaining long-term relationships with customers. They will learn to manage customer interactions to increase loyalty.	6	**3**	15	30	-				x	x
9.	**Finance**	This course covers basic financial topics such as budgeting, financial analysis, and investment planning. Students will learn to make financial decisions at the enterprise level.		**3**	15	15	-				x	x
10.	**Quality Engineering**	This course focuses on techniques and tools for ensuring quality in production and service processes. Students will learn to identify and eliminate sources of errors.		**3**	15	-	30				x	x
11.	**Innovative Processes and Patent Policy**	Students will learn the principles of introducing innovations in enterprises and issues related to intellectual property protection. They		**2**	30	-	-				-	x

		will learn how to effectively manage innovation processes and patents.											
12.	**Integrated ERP Systems (I-scala)**	This course covers an introduction to ERP systems and their application in enterprise resource management. Students will learn to use the I-scala system to optimize business processes.		**2**	-	-	30				-	x
13.	**Pre-diploma Seminar**	Students prepare for writing their diploma thesis by participating in seminars where they discuss their projects and receive substantive support.			4	-	-					
14.	**Professional Practice III**	Students gain practical professional experience in selected companies, applying theoretical knowledge in practice.		**8**	-	-	240				-	x
	Total:			**42 ECTS**								