

Subject card

Subject name and code	SAP S/4HANA in Logistics, PG_00174117						
Field of study	Logistics and Mobility						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	Master's studies		Subject group		Obligatory subject group in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		English		
Semester of study	3		ECTS credits		2.0		
Learning profile	academic		Assessment form		credit		
Conducting unit	Department of Logistics -> Faculty of Economics -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Agnieszka Szmelter-Jarosz				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	0.0	0.0	30
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	30		20.0		0.0	50
Subject objectives	- To introduce students to logistics support system. - To show the functioning of ERP and BI applications in logistics activities. - To prepare students to work in companies with a global range. - To acquaint students with the structure of modules responsible for the logistics support MM, SD, PP, CS, WM in SAP S4/HANA - To teach students how to plan logistics activities in an international organization, including planning material resources, planning, implementation and production control, implementation of sales and distribution processes, customer service.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[LMMU2_W08] has an in-depth knowledge of main and logistics processes occurring in enterprises and economic organisations and with related areas, as well as of processes of change in public institutions; knows methods of research on the regularities governing these changes, taking into account the influence of external stakeholders on them	• Student works independently, expanding own skills and knowledge • Student is open to new methods for solving decision problems in the area of logistics management	[SW4] test/exam - oral or written
	[LMMU2_U06] can practically apply various forms and range of acquired knowledge in logistics and mobility, supplementing it with an independent critical analysis of its efficiency and usefulness	• Student uses SAP S4/HANA system in the logistics management area. • Student is able to plan, carry out and control logistics activities. • Student is able to handle the information flow related to logistics management	[SU8] observation of student's independent or team work
	[LMMU2_K04] is ready to think and act in an entrepreneurial manner; adapts to new situations and conditions; undertakes challenges of creative thinking; acquires resilience to failures; can assess risks and threats and find ways of counteracting their effects	• Student understands the importance of transactional systems (especially ERP) in logistics management. • Student understands the rules of logistics management and logistics support system both in small and big, global company. • Student understands the workflow and stages in logistics processes.	[SK8] observation of student's independent or team work

Subject contents

1. Introduction

1.1. GBI database (company profile, business processes)

1.2. a map of processes in ARIS Publisher for GBI, in particular a map of logistic processes (Procure-to-Pay Processes, Idea-to-Market, Plan-to-Inventory, Forecast-to-Delivery, Order-to-Cash)

1.3. Theoretical background main and logistics processes, logistics management, logistics support system, logistics channels, logistics strategies in global supply chains

2. Materials Management (MM) module:

2.1. Procure-to-Pay process

2.2. Module structure and functionalities

2.3. Case study in Materials Management:

- Introduction to MM study
- Creating new records in master data
- Creating purchase requisitions and requests for quotation
- Maintaining quotations from vendors
- Creating purchase orders and goods receipts
- Verifying physical receipts
- Posting payment to vendors

3. Production Planning (PP) module in SAP S4/HANA:

3.1. Idea-to-Market and Plan-to-Inventory process

3.2. Module structure and functionalities

3.3. Production Planning and Execution case study:

- Introduction to PP study
- Creating and changing records in Material Master
- Changing routing
- Creating SOP (Sales and Operation Plan)
- Running Master Production Schedule
- Creating production orders
- Confirming production completion
- Receiving goods from production orders
- Review of costs assigned to production orders

4. Sales and Distribution (SD) and Customer Service (CS) modules in SAP S4/HANA:

4.1. Order-to-Cash, Quote-to-Cash, Issue-to-Resolution process

4.2. Module structure and functionalities

4.3. Sales and Distribution case study:

- Introduction to SD study
- Creating and changing records in master data
- Creating customer inquiry
- Creating customer quotation
- Creating sales order
- Picking materials on delivery note
- Posting goods issue
- Creating sales invoice
- Posting receipt of customer payment
- Financial transactions in SAP ERP

	5. Warehouse Management (WM) modules in SAP S4/HANA: 5.1. Inventory processes (picking and packing, sorting, Goods Issue, Goods Receipt, Transfer Orders, Transport Orders, top-down activities, warehouse structure) 5.2. Module structure and functionalities 5.3. Warehouse Management case study: 5.3.1. Supply: • Creating purchase order • Displaying material inventories • Receiving goods • Running reports • Creating and confirming transfer orders 5.3.2. Sales: • Creating sales order • Creating outbound delivery • Creating and confirming transfer order • Shipping materials • Displaying material inventories 6. Assessment test. During the consultation, individual questions from students will be discussed, doubts will be clarified, and additional explanations regarding the content of the subject will be provided.
Prerequisites and co-requisites	A. Formal requirements Passing the following subjects: IT Tools in Logistics and Mobility Tools for Business Planning B. Prerequisites Knowledge: Basic theories and principles of Business Process Modelling and Management, enterprise management and information systems. Basic knowledge about logistics. Skills: Computer skills (Windows, MS Office), Good knowledge of English language.

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	test	51.0%	50.0%
	ongoing assessment (in-class activities)	51.0%	50.0%
Recommended reading	Basic literature	A.1. used during classes · SAP University Alliances materials (lecture and classes scenarios) · additional materials uploaded by teacher A.2. studied by the student · L. K. Lau, Managing Business with SAP: Planning, Implementation and Evaluation, Idea Group Inc., 2005. · Szmelter A., Communication in global supply chains in automotive industry, Information Systems in Management 2015, Vol. 4, no 3, p. 205-218	
	Supplementary literature	· E. Monk, B. Wagner, Enterprise Resource Planning, Cengage Learning EMEA, 2008. · G. C. Williams, Implementing SAP ERP Sales&Distribution, McGraw Hill Professional, 2008. · J. Kappauf, B. Lauterbach, M. Koch, Logistics Core Operations with SAP, Springer, 2011	
	eResources addresses		
	Example issues/ example questions/ tasks being completed		
Work placement	Not applicable		

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