Institute of Cyber-physical Systems			2024-25-2			
Name of the subject:	Code of the subject:	Credits:	Weekly hours:			
				lec	sem	lab
Cloud based Business Intelligence and analysis – SAP Analytics Cloud	NKVCB1EBNF	4	full-time	0		3
Responsible person for the subject: Dr. habil. Rita FLEINER			Classification: associate professor			
Subject lecturer(s): Attila Ritzl						
Prerequisites:	Comprehensive Exam					
Way of the assessment:	Mid-term grade					

Course description	
Goal:	Within the scope of the subject, students will learn about the SAP Analytics Cloud report creation software, the different steps, real business cases, problems, operating models and roles.
Course description:	Introduction to the world of cloud-based business intelligence; Data environment; connection types; basics of data modeling; Report creation I. – Analytics Designer; Story; Data Analyzer; Self - Service; Making a report II. – SAP Analytics Cloud report types; BI Admin role – management of housekeeping; monitoring; other BI roles; Life-cycle management; Decision support - using artificial intelligence; User Experience (UX) trends; Financial planning; what-if cases; General recommendations for best performance; example analysis; documentation research; BI consulting; planning; development; and maintenance everyday questions; Market trends; players; opportunities; outlook

Lecture schedule	
Education week	Topic
1.	Introduction to the world of cloud-based business intelligence
2.	Data environment, connection types, basics of data modeling
3.	Report creation I. – Analytics Designer, Story, Data Analyzer, Self - Service
4.	Making a report II. – SAP Analytics Cloud report types
5.	BI Admin role – management of housekeeping, monitoring, other BI roles
6.	Life-cycle management
7.	Decision support - using artificial intelligence
8.	User Experience (UX) trends
9.	Financial planning, what-if cases
10.	General recommendations for best performance, example analysis, documentation research
11.	BI consulting, planning, development, and maintenance everyday questions
12.	Market trends, players, opportunities, outlook
13.	Test
14.	Retake test

Mid-term requirements	
Conditions for obtaining a mid-term grade/signature	Participation at lessons is mandatory. Signature cannot be assigned to students who missed more than 30% of lessons. During the semester, students can choose how to acquire grade: - Work on individual project with 3 milestones. - Take a test on whole semester's topics.

Assessment schedule

Education week	Topic
13.	Test
14.	Retake Test
Method used to calculate the *mid-term grade* (to be filled out only for subjects with mid-term grades)	
Based on student choice: test or project. Test result need to exceed 51%, project has to meet basic requirement and milestone deadlines have to be kept.	
Type of the replacement	
Type of the replacement of written test/mid-term grade/signature	Test can be re-taken on last week of semester.
Type of the exam (to be filled out only for subjects with exams)	
Calculation of the exam mark (to be filled only for subjects with exams)	
Final grade calculation methods:	
Test's or project's grade (0-50: 1, 51-65: 2, 66-75: 3, 76-85: 4, 86-100: 5).	
References	
Obligatory:	1. Hastie, T., Tibshirani, R., Friedman, J. (2009). The elements of statistical learning: data mining, inference and prediction. (https://web.stanford.edu/~hastie/ElemStatLearn/) 2. Documents posted on Moodle
Recommended:	1. Cole Nussbaumer Knaflic: Storytelling With Data: A Data Visualization Guide for Business Professionals 2. Ryan Goodman, Jared Hansen: Getting Started with SAP Analytics Cloud
Other references:	