DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Distributed Systems				
Study programme	**Specialist professional graduate study of Information Technology in Business Systems – Major: Software Engineering in Business Systems**				
Status of a course	Obligatory				
Year of study	2	**Semester (Winter/Summer)**	W	**ECTS credits**	4

Goals of a course
Acquiring knowledge in the field of distributed systems. Acquiring competencies for planning and designing research work, presenting research, and analyzing other research work in the field of distributed systems.

Conditions for enrolling course
No conditions

Learning outcomes on a level of a study programme which includes course
Outcome 1: Apply information and communication systems design methods. Outcome 3: Apply software engineering principles in the development of information systems. Outcome 6: Apply appropriate tools in the implementation of information and communication systems. Outcome 7: Apply methods and techniques for creating and managing databases. Outcome 8: Apply methods and techniques for managing security and data protection in information and communication systems. Outcome 11: Design and implement a distributed business information system. Outcome 15: Analyse and recommend the use of IT tools within a business organization. Outcome 16: Assess the place and role of ICT in the context of organization, management and business processes. Outcome 17: Present development and software solutions within a business organization.

Expected learning outcomes on a level of a course
1. Explain examples and characteristics of distributed systems, and compare distributed and centralized systems. 2. Explain the properties of a distributed system, explain the types of distributed systems. 3. Explain the operating principles of distributed computer systems, distributed information systems, and distributed databases. 4. Plan research work, and analyse, compare and propose new technological and technical insights in the field of distributed systems.

Content of a course
Concept, goals and characteristics of distributed systems. Technical basis of distributed systems, assemblies and programming support. Basic structures of distributed systems. Management of distributed databases and distributed processing. Special requirements for operating systems and other programming support. Internet as a distributed system, characteristics, services. Internet and electronic business. Advantages and disadvantages.

Teaching modes	☒ lectures ☐ auditory exercises ☒ seminars and workshops ☐ distance learning ☐ field classes	☒ individual assignments ☐ multimedia and network ☐ laboratory ☐ supervisor's work ☐ other _____

Grading, evaluation and monitoring of students' work continuously during lectures and exams
Grading is based upon evaluation course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.