

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Information Systems Development Tools				
Head of course	PhD Marin Kaluža, College Professor				
Study programme	Specialist professional graduate study of Information Technology in Business Systems				
Status of a course	Obligatory				
Year of study	1.	Semester	I	ECTS credits	6
Teaching plan (L + E + S+ Pr)	1L+3E				
Goals of a course					
Acquisition of competencies for information system planning, analysis and design. Acquiring knowledge and competences in the field of application of CASE and RAD tools. Acquire web application development competencies using RAD tools.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
<p>Outcome 1: Apply information and communication systems design methods.</p> <p>Outcome 2: Apply the CASE tool in the development of business information systems.</p> <p>Outcome 3: Apply software engineering principles in the development of information systems.</p> <p>Outcome 4: Apply quality standards to the process of the development of business information systems.</p> <p>Outcome 5: Apply the standards and methods of controlling and auditing the business information system.</p> <p>Outcome 6: Apply appropriate tools in the implementation of information and communication systems.</p> <p>Outcome 7: Apply methods and techniques for creating and managing databases.</p> <p>Outcome 8: Apply methods and techniques for managing security and data protection in information and communication systems.</p> <p>Outcome 17: Present development and software solutions within a business organization.</p>					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> 1. Plan an information system development, construct a process model, data model, user interface model and propose software architecture. 2. Distinguish the capabilities of CASE and RAD tools, and highlight a suitable RAD software development tool. 3. Use the RAD tool to build web applications when developing new software. 4. Demonstrate the capabilities of RAD tools for web applications development, and demonstrate the capabilities of the created application. 					
Content of a course					
About information system in general. Access to information system development. Development phases of information system. Engineering approach to information system development. Information technology in the development of IS. Definition of CASE tools. Structure of CASE tools. Classification of CASE tools. Overview of the most common CASE tools. Criterion of comparison. CASE tools quality evaluation. Information system analysis and design through the application of CASE tools.					
Teaching modes	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
Comments					
Students' obligations					

Grading, evaluation and monitoring of students' work continuously during lectures and exams

Grading is based upon evaluation of 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.

Continuous check-up:

Outcomes	Theoretical exam (written exam)	Practical exam 1 - project (presentation)	Practical exam 2 - project (group work)	Practical exam 3 - project (individual work)	Threshold	Max
Outcome 1	10%	10%	5%	10%	17,5%	35%
Outcome 2	20%				10%	20%
Outcome 3			15%	20%	17,5%	35%
Outcome 4		10%			5%	10%
Percentage of ECTS	1,8	1,2	1,2	1,8		
Total	30%	20%	20%	30%	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Exam term:

Outcomes	Theoretical part (oral / written exam)	Practical part Project	Max
Outcome 1	10%	25%	30%
Outcome 2	20%		20%
Outcome 3		35%	35%
Outcome 4		10%	15%
Percentage of ECTS	1,8	4,2	
Total	30%	70%	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

Obligatory literature

1. Materials used in the lectures from the course Information Systems Development Tools available on Moodle.

Additional literature

