

Subject code	Credits
INF5024	6

Course title in Lithuanian

INTELEKTUALIOS TINKLO PASLAUGOS IR TAIKYMAI

Course title in English

INTELLIGENT WEB SERVICES AND APPLICATIONS

Short course annotation in Lithuanian (up to 500 characters)

Kursas skirtas supažindinti su pagrindiniais intelektualių informacinių sistemų valdymo principais, sprendimo priėmimo informacinėmis technologijomis, specializuotomis apibendrintų veiklos duomenų bazėmis, Web servisų paslaugų projektavimo metodais bei jų taikymais, naudojant Web servisų mainų modelio standartus ir protokolus, kuriant modernias informacines sistemas.

Short course annotation in English (up to 500 characters)

Introduce the basic intelligent information systems management principles, decision support information technologies, specialized aggregate operational databases, Web services design methods and their applications for the development of modern information systems.

Prerequisites for entering the course

„Databases“, „Information systems“, „Internet technologies“, „Mobile and Wireless Communications“.

Course aim

Provide the students with the theoretical and practical knowledge of Web services creation and application.

Content

No	Content (topics)
1.	Business Intelligent Information Systems concept.
2.	Data exchange technology.
3.	Decision support information systems
4.	Expert systems
5.	Data Mining methods and models
6.	Data mining systems
7.	Specialized data bases: data warehouses, data marts.
8.	Analytical data processing in on-line systems (OLAP).
9.	Web services architecture and operation principles.
10.	Web services data exchange model standards and protocols.
11.	XML application for information storage and data exchange.
12.	Role and models of web services intermediaries
13.	Methods of organizing network services using web services.
14.	Web services publication and search mechanisms.

Distribution of workload for students (contact and independent work hours)

Lectures	45 hours
Laboratory work	15 hours
Individual students work	100 hours
Total:	160 hours

Structure of cumulative score and value of its constituent parts

Final written exam (50%), mid-term written exam (17%), and assessments of laboratory (practical) work (33%).

Recommended reference materials

No.	Publication year	Authors of publication and title	Publishing house	Number of copies in		
				University library	Self-study rooms	Other libraries
<i>Basic materials</i>						
1.	2009	Patrick McKeown. Information Technology and the Networked	www.globaltext.org			

		Economy. The Global Text Project is funded by the Jacobs Foundation, Zurich, Switzerland. This book is licensed under a Creative Commons Attribution 3.0 License.				
2.	2009	Developing XML Web Services and Server Components with Visual C# .NET and the Microsoft .NET Framework	CodeIdol			
3.	2006	Dalė Dzemydienė. Intelektualizuotų informacinių sistemų projektavimas ir taikymas. Monografija. ISBN 9955-19-051-5. Vilnius.	Mykolo Riomerio universiteto Leidybos centras.		2	
4.	2002	Ethan Cerami. Web Services Essentials.	O'Reilly.		1	
5.	2002	Eric Newcomer. Understanding Web Services: XML, WSDL, SOAP and UDDI. ISBN 0-201-75081-3 Canada.	Addison Wesley		1	
<i>Supplementary materials</i>						
6.	2013	Introduction to Web Services with Java	Bookboon	http://www.e-booksdirectory.com/details.php?ebook=9339		
7.	2008	XML WebServices and SOAP	BPB Publications	http://www.e-booksdirectory.com/details.php?ebook=1847		

Course programme designed by

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