RĪGAS TEHNISKĀ UNIVERSITĀTE

RTU Course "Business Process Management and Engineering"

33000 Datorzinātnes, informācijas tehnoloģijas un enerģētikas fakultāte

General data

Code	DE0740
Course title	Business Process Management and Engineering
Course status in the programme	Compulsory/Courses of Limited Choice
Responsible instructor	Mārīte Kirikova
Volume of the course: parts and credits points	1 part6.0 ECTS credits
Language of instruction	LV, EN
Abstract	Business process management and engineering require an understanding of basic principles of business process modelling, management, improvement, and reengineering. During the study course students will learn to develop business process models, assign performance identifiers to process elements, assess the correspondence of the business process to its goal, and to develop business process change proposals and implement changes at the level of a business process model.
Goals and objectives of the course in terms of competences and skills	The goal of the study course is to prepare the student for the accomplishment of the following tasks: business process modelling, business process design, business process management, and definition of information systems and services requirements based on detailed business process models. The objectives of the study course: 1. To enable students to learn professional business process notation and powerful process modelling and analysis tools. 2. To develop an understanding of the range of business processes and their management and improvement opportunities. 3. To develop the ability to methodically identify ICT opportunities for business process support.
Structure and tasks of independent studies	The independent studies include individual assignments in which the aspects of business process modeling and management discussed in the course must be understood more deeply and business process models must be developed for the problem area chosen by the student.
Recommended literature	Obligātā/Obligatory: 1. Sharp A. and McDermott P. Workflow Modeling: Tools for Process Improvement and Application Development, 2nd ed., ARTECH HOUSE, 2009. 2. Business Process Model and Notation https://www.bpmn.org/ Papildu/Additional: 1. Fundamentals of Business Process Management (2018), by Marlon Dumas, Marcello La Rosa, Jan Mendling, Hajo A. Reijers. 2. Business Process Management, Concepts, Languages, Architectures by Mathias Weske, Springer, 2019. 3. Jeston J. and Nelis J. Business Process Management: Practical Guidelines for Successful implementations, Elsevier, 2006.
Course prerequisites	Recommended: knowledge of systems theories and requirements engineering.

Course contents

Content	Full- and part-time intramural studies		Part time extramural studies	
	Contact Hours	Indep. work	Contact Hours	Indep. work
Basics of business process modelling.	8	12	0	0
Role of business processes in enterprise/business architecture.	8	12	0	0
Modelling of complex business processes.	8	12	0	0
Business process modelling frameworks (VCOR, SCOR, APQC, etc).	12	18	0	0
Business process simulation, monitoring, analysis, and management.	8	12	0	0
Business process improvement and reengineering.	8	12	0	0
information flow in business processes; design of business process support and management systems.	12	18	0	0
Total:	64	96	0	0

Learning outcomes and assessment

Learning outcomes	Learning outcomes assessment methods and assessment criteria
Is able to recognize and use business process modelling notations and tools.	Business process developed at least in two business process modelling languages using at least two business process modelling tools (individual and group assignments, exam).
Can develop and use in business process models for analysis, management, and improvement of complex business processes.	Develops and demonstrates a non-trivial business process model, its monitoring parameters, simulation, analysis and possibilities of improvement (individual and group assignments, exam).
Can relate business process models to different enterprise architectures and analyse processes in compliance with the chosen architecture.	Demonstrates process analysis according, activity sequence, performers, resources, as well as information flow, service, and other dimensions (individual and group assignments, exam).

Can identify requirements for business process support by information and communication technology	At the examination develops the business process model, its management model, and develops requirements for business process support software for a given system respecting existing ICT resources (individual and group assignments, exam).

Course tests

Tests	% of final assessment
Individual and group assignments (at least 40% of the maximum of the points must be achieved)	50
Exam (business process model development and analysis, at least 40% of the maximum of the points must be achieved)	50
Total:	100

Course planning

Part	Semester			CP	Academic hours			Tests		
	Autumn	Spring	Summer		Lectures	Practical	Lab.	Test	Exam	Work
1.		*		6.0	32.0	0.0	32.0		*	