



RTU Course "Business Process Management and Engineering"

12307 Sistēmu teorijas un projektēšanas katedra

General data

Code	DSP706
Course title	Business Process Management and Engineering
Course status in the programme	Compulsory/Courses of Limited Choice
Course level	Post-graduate Studies
Course type	Academic
Field of study	Computer Science
Responsible instructor	Māriete Kirikova
Volume of the course: parts and credits points	1 part, 4.0 Credit Points, 6.0 ECTS credits
Language of instruction	LV, EN
Possibility of distance learning	Not planned
Maximum auditorium capacity	250
Maximum number of students per semester	250
Abstract	Business process management and engineering requires understanding of basic principles of business process modelling, management, improvement, and reengineering. During the course students will learn to develop business process models, assign performance identifiers to process elements, assess the correspondence of 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 course is to prepare the student for 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.
Structure and tasks of independent studies	There will be individual assignments for getting acquainted with different business process modelling tools and group work for business process model development and analysis tasks.
Recommended literature	Jeston J. and Nelis J. Business Process Management: Practical Guidelines for Successful implementations, Elsevier, 2006 Sharp A. and McDermott P. Workflow Modeling: Tools for Process Improvement and Application Development, 2nd ed., ARTECH HOUSE, 2009. IBM courseware on business process modelling, monitoring, and management. https://www.ibm.com/developerworks/university/courseware/
Course prerequisites	Recommended: knowledge of systems theories and requirements engineering

Course outline

Theme	Hours
Basics of business process modelling	4
Role of business processes in enterprise/business architecture	4
Modelling of complex business processes	8
Business process modelling frameworks (VCOR, SCOR, APQC, etc)	12
Business process simulation, monitoring, analysis, and management	16
Business process optimisation, improvement and reengineering	8
information flow in business processes; design of business process support and management systems	12

Learning outcomes and assessment

Learning outcomes	Assessment methods
Is able to recognize and use business process modelling languages and tools.	Business process developed at least in two business process modelling languages using at least two business process modelling tools.
Can develop and use in business process analysis, management, and improvement models of complex business processes.	Develops and demonstrates a non-trivial business process model, its monitoring parameters, simulation, analysis and possibilities of improvement.
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.
Can develop a business process management model and identify business process support software requirements.	At the examination develops business process model, its management model, and develops requirements for business process support software for a given system respecting existing ICT resources.

Study subject structure

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	4.0	6.0	2.0	0.0	2.0		*	