RĪGAS TEHNISKĀ UNIVERSITĀTE

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Study programme "Business Informatics"

Main attributes

Title	Business Informatics
Identification code	DMB0
Education classification code	45481
Level and type	Academic Master Study
Higher education study field	Information Technology, Computer Engineering, Electronics, Telecommunications, Computer Control and Computer Science
Head of the study field	Agris Ņikitenko
Deputy head of the study field	Jurģis Poriņš
Department responsible	Faculty of Computer Science and Information Technology
Head of the study programme	Mārīte Kirikova
Professional classification code	-
The type of study programme	Full time, Part time
Language	English
Accreditation	31.05.2013 - 31.12.2023; Accreditation certificate No 2020/80
Volume (credit points)	80.0
Duration of studies (years)	Full time studies - 2,0; Part time studies - 2,5
Degree or/and qualification to be obtained	Master Degree of Engineering Science in Business Informatics
Qualification level to be obtained	The 7th level of European Qualifications Framework (EQF) and Latvian Qualifications Framework (LQF)
Programme prerequisites	Bachelor Degree of Engineering Sciences, or Natural Sciences. or Social Sciences (Economics, Business Administration), or Professional Bachelor Degree in Named Branches of Science Related Fields, or comparable education

Description

Abstract	Business Informatics is a new study program with interdisciplinary features. It was launched by RTU in 2010/11 and accredited on November 23, 2011 for 6 years. The program is developed and implemented in cooperation with the University of Buffalo (USA) and International Business Machines Corporation (IBM). The study program „Business Informatics" (total 120 ECTS) consists of 63 ECTS of Compulsory courses, 21 ECTS of Compulsory Limited Choice courses, 6 ECTS - Free Choice, and 30 ECTS - Master Paper. There are three types of courses: ICT courses (for example, Advanced Data Technologies), Business courses (for example, Business Ethics) and integrated courses (for example, Business Process Management and Engineering). Each course has clearly defined learning outcomes and evaluation mechanisms. Various business and ICT issues are integrated in the program at the level of the program and at the level of individual courses. A course can be viewed as a module and the program considered as consisting of several larger granularity models (by themes under the responsibility of a particular teacher) and concentrations (e.g., Educational Informatics: RRI700 + DSP710 + DPI722 + HPS401). Local and international students study together in the program. The enrolment to the program occurs in summer and in winter. In winter it is possible to apply for part time studies. Students of the summer intake have Master Paper as a separate semester in their study plan to facilitate their mobility. Winter intake students can develop their Master Paper more gradually.
Aim	The aim of the Business Informatics study program is to prepare professionals with expertise in systems thinking and engineering sciences who are able to use, choose, develop, and acquire ICT solutions that enable enterprise development; who are able to design intra- and inter-organizational information systems and are capable of participating in corresponding interdisciplinary and international projects.
Tasks	* To develop students' systems thinking ability and their skills to use systems theory in constructing solutions which enable the development of businesses. * To integrate business in ICT topics at different levels of granularity (inside the courses and among the courses). * To apply the newest ICT developments in the study process, facilitate self-organized studies and technology-supported as well as traditional teamwork/group work. * To assure the learning outcomes defined for the program. * To prepare students for their doctoral studies. * To assure the flexibility of the study program and possibility to modify it in order to follow changes in the labor market and new developments in different ICT and business areas. * To develop cooperation with similar or topic-related programs in other countries within ERASMUS and other agreements.

Learning outcomes	* To identify business goals which are supportable by ICT solutions * To identify business problems which are solvable by ICT solutions * Using appropriate technologies, to model and analyze business processes, enterprise and business architecture, and information flows, as well as to design internal and inter-institutional information systems * To follow advances concerning computer systems, communication technologies, and software and methods of their usage and to suggest various solutions and their combinations for raising competitiveness of enterprises and enterprise networks * Using appropriate technologies, to develop enterprise improvement strategies, to plan analysis and change management projects, and define requirements for new products and services * To interpret business concepts in computer science and ICT terms and vice versa * To motivate, educate, and train employees to use the most appropriate ICT solutions, as well as to participate in and lead inter-disciplinary and international teams * To participate in international scientific projects in the area of business informatics as well as to propose and lead scientific projects * To follow the rules of ethics in business and information systems development.
Final/state examination procedure, assessment	Final examination procedure includes development of Master Paper (30 ECTS). The Master Paper is author's original research, where methods, models, techniques and prototypes applicable for solving tasks in the field of business informatics are analytically or experimentally assessed and/or integrated and/or designed. The purpose of the Master Paper is to give students an opportunity to apply their knowledge and skills in the field of scientific research in order have firm grounding for post graduate studies; to further develop their competence in decision making, problem identification, analysis, and solving, as well as to promote creativity and sharpen professional discussion and presentation skills. The learning outcomes in Master Paper are evaluated according to 10 grade (10 – the highest) system according to Regulations of RTU (Studiju rezultātu vērtēšanas nolikums RTU, 2010. gada 29. marts, protokola Nr. 539).
Description of the future employment	Graduates of Business Informatics work for IT companies, public and private institutions using advanced ICT solutions, and consulting firms. They are qualified to fill the positions of Business Architect; Information Architect; Information Systems Architect; Information Engineer; Information Systems Engineer; Systems Analyst and Designer; Business Process Analyst, Engineer, and Manager; Business Analyst, Risk Manager, Requirements Engineer; Chief Information Officer; IS Manager; Business and IT Consultant, and the like.
Special enrollment requirements	Basic requirements: Academic Bachelor Degree in Engineering or Natural Sciences or Social Sciences (Economics, Business Administration) or Professional Baccalaureate Named Branches of Science Related Fields, or the Equivalent Education. Additional requirements: English language skills and the following University level competences: Databases (3 ECTS), Computer Networks (3 ECTS), Higher Mathematics (3 ECTS), Accounting (3 ECTS), Labour Safety (1,5 ECTS).
Opportunity to continue studies	Opportunity to continue Doctoral studies in Latvia: * Riga Technical University „Computer Systems" * Riga Technical University „Information Technology" (direction-Management Information Technology) * Riga Technical University „Environmental Science" * Riga Technical University „E-studies Technology and Management" * University of Liepaja „E-studies Technology and Management" * Vidzeme University of Applied Sciences „Socio-technical Systems Modelling"

Courses

No	Code	Name	Credit points
A		**Compulsory Study Courses**	**38.0**
1	DSP706	Business Process Management and Engineering	4.0
2	DLP700	e-Business Solutions	4.0
3	DOP701	Portfolio Management Technologies	4.0
4	DSP707	Service Science, Management, and Engineering	4.0
5	DSP708	Advanced data technologies	4.0
6	DPI704	Quality, Risk and Security Technologies	4.0
7	DSP703	Systems Theory	4.0
8	DSP701	Knowledge Management Systems	4.0
9	DSP700	Enterprise Architecture and Requirements Engineering	4.0
10	DSP702	Research Methods in Business Informatics	2.0
B		**Compulsory Elective Study Courses**	**18.0**
B1		**Field-Specific Study Courses**	**14.0**
		Networking	*2.0*
1	DPI700	Storage Networking	2.0
2	DSP775	Network Security Requirements	2.0
		Specific Software Applications	*4.0*
1	DSP705	Artificial Intelligence in Business	4.0
2	DSP776	Information Systems Security Engineering	4.0
		Enterprise Information Systems	*4.0*
1	DOP700	Enterprise Information Technology Architecture, Applications and Integration	4.0
2	DOP723	Digital Transformation	4.0
		Analytics	*4.0*
1	DPI721	Business Analytics	4.0
2	DSP779	Advanced Analytics and Knowledge Technologies	4.0
B2		**Humanities and Social Sciences Study Courses**	**4.0**
1	PBM415	Business Law	4.0
2	PBM423	Business Ethics	4.0
3	PBM409	Entrepreneurship	4.0
4	PBM430	Business Communication Skills	4.0
5	HPS401	Pedagogical Process. Basics	4.0
6	PBM429	Leadership	4.0
7	PBM707	Entrepreneurial Finance	4.0
8	PBM467	Corporate Governance	4.0
9	ETH702	Communication and Presentation Skills	2.0
10	HSP446	Pedagogy	2.0
C		**Free Elective Study Courses**	**4.0**
E		**Final Examination**	**20.0**
1	DSP709	Master Thesis	20.0