

**GOALS AND OUTCOMES OF THE STUDY PROGRAM
1-26 03 01 «INFORMATION RESOURCES MANAGEMENT»**

Qualification: «Manager and Economist of Information Systems»

The main goal of improving the quality of the IRM program is the updating the curriculum in accordance with the needs of the innovation economy, the requirements of the information society, educational demands of modern business and requirements of Bologna process.

Main goal of the IRM program: to form and develop the professional competencies for work in the field of information resources, systems and technologies, business analysis and management.

The main areas of the professional activities of IRM graduates:

- computer programming, consulting and other related services;
- activities in the field of information services;
- data processing, provision of information placement services and related activities;
- data processing, provision of information placement services and related activities; activity of web portals; research and development;
- management in the social and economic sphere.

Main outcomes of the program (according to the educational standard approved by the Ministry of Education of the Republic of Belarus):

Academic learning outcomes (including knowledge and skills on the studied subjects, ability to learn):

- be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems.
- be able to the system and comparative analysis.
- to have research skills.
- be able to work independently.
- have an interdisciplinary approach to problem solving.

Social and personal learning outcomes:

- be capable in social interaction.
- to have the ability to interpersonal communication.
- to be able to work in a team.

Professional learning outcomes:

- to predict and plan the dynamics of the creation and development of information technology, systems and resources
- to apply methods of system analysis and project management to organize activities to create, use and develop information technology, systems and resources.
- to develop and apply mathematical models of processes and objects, modern mathematical methods and information technologies for solving problems of economics and management.
- be able to solve practical problems, creatively apply the achievements of international scientific research in the field of IT-technologies.

Main learning outcomes of IRM specialist (updated):

1. Apply basic scientific and theoretical knowledge to solve practical problems. **K**

2. Develop data structures for use in information systems, operational analysis systems and intellectual systems. **P**
3. Perform modeling, design of software tools and documentation to support activities in various subject areas. **P**
4. Perform comprehensive testing of the developed software products and applied software. **P**
5. Plan and organize automated support of various activities. **P**
6. Build and optimize models of various systems and processes. **P**
7. Analyse perspectives and directions of development of information systems and technologies. **R**
8. Work independently and in a team. **S**
9. Generate new ideas focusing on creativity, critical thinking, communication and collaboration. **S**

Table 1. Updated learning outcomes and IRM study programme

Courses	Study programme learning outcomes								
	1(K)	2(P)	3(P)	4(P)	5(P)	6(P)	7(R)	8(S)	9(S)
Integrated module "Philosophy"	x							x	x
Sociology	x							x	x
The integrated module "Political Science"	x							x	x
Integrated module "History"	x							x	x
Safety of human vital activity	x							x	x
Basics of Management	x							x	x
Belarusian language (professional vocabulary)	x							x	x
Foreign language	x							x	x
Higher Mathematics	x					x		x	x
Economic theory	x							x	x
National Economy of Belarus	x							x	x
Economy of organization	x				x			x	x
Term paper on discipline "Economics of organization"	x				x			x	x
Organization Management	x				x			x	x
Law in IT sphere	x							x	x
Fundamentals of Informatics and Programming	x				x			x	x
Basics of Marketing	x							x	x
Intellectual Property and Information Protection	x				x			x	x
Technologies of analysis and data processing	x				x			x	x
Psychology of information perception	x							x	x
Business foreign language	x							x	x
Principles of algorithmization and programming	x		x	x	x			x	
Algorithmization and programming	x		x	x	x			x	
Course work on the discipline "Algorithmization and programming"	x		x	x	x			x	
Computer networks	x				x				
Management of electronic business	x	x					x	x	x
Database systems	x	x	x		x			x	x

Term paper on discipline "Database systems"	x	x	x		x			x	x
Administration of information systems	x				x			x	x
WEB-technologies	x		x		x				
Information Security Management	x				x			x	x
Informational resources	x				x			x	x
Information systems and technologies	x	x	x		x	x	x	x	x
Designing of information systems	x	x	x	x	x	x	x	x	x
Term paper on the discipline "Design of information systems"	x	x	x	x	x	x	x	x	x
Information Management	x				x		x	x	x
Theory of systems and systems analysis	x					x		x	x
Information theory	x							x	x
Technologies of creation and processing of multimedia	x							x	x
Econometrics	x					x		x	x
Marketing management in IT-sphere	x			x		x	x	x	
Reengineering of business processes and systems	x				x	x		x	x
Business planning on the basis of informatization tools	x							x	x
Project Management in IT	x			x	x		x	x	x
Finance and financial management	x							x	x
WEB-design and computer graphics	x			x	x			x	x
Accounting and Audit	x							x	x
Computer graphics systems				x				x	x
Technologies of distance education							x	x	
Professional English	x							x	x

Table 2. Correlation between IT Profile and the educational standard approved by the Ministry of Education of the Republic of Belarus (“Information Resource Management” – SBMT BSU)

IT Profile	Belarusian standard PC = professional competence AC = academic competence SPC = social and personal competence
1. PL1. Apply basic scientific and theoretical knowledge to solve practical problem K	AC-1 Be able to apply basic scientific and theoretical knowledge to solve theoretical and practical problems.
2. PL2. Develop data structures for use in information systems, operational analysis systems and intellectual systems P	PC-15 To apply methods of system analysis and project management to create and effectively use information technology, systems and resources. PC-17 To develop and apply mathematical models of processes and objects, modern mathematical methods and information technologies for solving problems of economics and management.
3. PL3. Perform modelling, design of software	PC-18

tools and documentation to support activities in various subject areas P	To design information systems and conduct reengineering of business processes of organizations and enterprises. PC-3 Develop business documents in accordance with established forms.
4. PL4. Perform comprehensive testing of the developed software products and applied software P	PC-21 Provide the administration and operation of information technology, systems and resources.
5. PL5. Plan and organize automated support of various activities P	PC-18 To design information systems and conduct reengineering of business processes of organizations and enterprises. PC-20 Determine the direction of development of information systems and technologies in managerial and economic activities.
6. PL6. Build and optimize models of various systems and processes P	PC-22 Develop and implement new organizational and management solutions that promote innovative development of enterprises and organizations. PC-18 Design information systems and conduct reengineering of business processes of organizations and enterprises.
7. PL7. Analyse perspectives and directions of development of information systems and technologies R	PC -14 Plan the development of information technologies, systems and resources at enterprises and organizations and predict its results.
8. PL8. To be able to work independently and in a team S	SPC-6 Be able to work in a team. AC-4 Be able to work independently.
9. PL9. To be able to generate new ideas focusing on creativity, critical thinking, communication and collaboration S	AC-5 Be able to generate new ideas (have creativity).

The notes about syllabus

No	Courses EN	SBMT need to integrate during the project	Course title in Experimental syllabus	Experimental syllabus ECTS	Notes
1	Law in the IT-sphere / Право в IT сфере	3	Law in IT -sphere	3	
2	Intellectual Property and Protection of Information / Интеллектуальная собственность и защита информации	3	Intellectual Property and Information Protection	3	
3	Psychology of Information Perception / Психология восприятия информации	3	Psychology of information perception	3	
4	Management of IT Projects / Управление ИТ проектами	3	Management of IT projects	3	
5	Multimedia Creation and Processing Technologies / технологии создания и	6	Technologies of creation and processing of	6	

	обработки мультимедиа		multimedia		
6	Computer Networks / Компьютерные сети	3	Computer networks	3	
7	Web Technologies / веб - технологии	3	WEB-technologies	3	
8	English for Specific Purposes / Профессиональный английский	8	English for specific purposes	8	
9	Management of e-business / Управление электронным бизнесом	3	Management of e- business	3	
10	Marketing Management in IT- sphere / Управление маркетингом в ИТ сфере	5	Marketing management in IT- sphere	5	
11	Business Planning based on Informatization Tools / Бизнес-планирование на базе средств информатизации	3	Business planning on the basis of informatization tools	3	
12	Systems of Computer Graphics / системы компьютерной графики		Computer graphics systems*	4	additional
13	Technology of distance Learning		Technologies of distance education	4	additional
14	Principles of algorithmization and programming		Principles of algorithmization and programming	7	additional
	ECTS	43		58	