

Faculty of Digital Transformation

Department of “Economics and business”

APPROVED BY
Vice-rector for academic affairs,
International Information
Technology University JSC



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6B04103

(Code of Academic Program)

Innovation Management

(Name of Academic Program)

CATALOGUE OF ELECTIVE DISCIPLINES

2021

2021

The catalogue of elective disciplines for the specialty/AP «Management in IT»

Educational Program Innovation Management is developed on the basis of the working curriculum of the specialty/AP.

The catalogue of elective disciplines was discussed at a meeting of the department Economics and Business

minutes No. 11 from "26" 02 2021.

Head of Department


signature

Shildibekov.E.Z

Full name, position, degree

CED compiler


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Ananyev T.V

Full name, position, degree

The catalogue of elective disciplines was approved at a meeting of the Academic Council of "International Information Technology University" JSC minutes No. 4 from "30" 03 2021.

Director of Academic Affairs


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Mustafina A.K

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1 TERMS AND ABBREVIATIONS

1.1 Academic program is a single set of basic characteristics of education, including goals, results and content of training, the organization of educational process, ways and methods for their implementation and criteria for assessing learning outcomes.

The content of academic program of higher education consists of three cycles of disciplines - general education disciplines (hereinafter - GED), basic disciplines (hereinafter - BD) and core disciplines (hereinafter - CD).

The cycle of GED includes disciplines of the compulsory component (hereinafter - CC), the university component (hereinafter - UC) and (or) the component of choice (hereinafter - COC). BD and CD include disciplines of UC and COC.

1.2 Catalogue of elective disciplines (CED) is a systematic annotated list of all COC disciplines, for the entire training period, containing a brief description indicating the purpose of study, a summary of main sections and expected learning outcomes. CED reflects the prerequisites and postrequisites of each academic discipline. It should provide the students with the possibility of an alternative choice of elective disciplines for the formation of an individual educational trajectory.

On the basis of academic program and CED, the students develop individual curricula with the help of advisers.

1.3 Individual curriculum (IC) is a curriculum formed by the students independently with the help of an adviser for each academic year on the basis of the academic program, the catalogue of elective disciplines or modules;

IC defines an individual educational trajectory of each student separately. It includes disciplines and types of educational activities (internship, experimental research, forms of final certification) of the compulsory component (CC), the university component (UC) and the component of choice (COC).

1.4 Advisor is a teacher who performs the functions of an academic mentor of a student (according to the appropriate academic program), and assists in choosing a learning path (creating an individual curriculum) and mastering the academic program during the training period.

1.5 The university component is a list of compulsory educational disciplines determined by the university independently for the mastering of the academic program.

1.6 The component of choice is a list of academic disciplines and the corresponding minimum amounts of academic credits offered by the university and independently chosen by students in any academic period, taking into account their prerequisites and postrequisites.

1.7 Elective disciplines are educational disciplines that are a part of the university component and the component of choice in the framework of established academic credits, introduced by organizations of education reflecting the individual preparation of students and taking into account the specifics of socio-economic development, the needs of a particular region and established scientific schools.

1.8 Postrequisites are the disciplines and (or) modules and other types of academic work, the study of which requires knowledge, skills and competencies acquired at the end of the study of this discipline and (or) modules;

1.9 Prerequisites are the disciplines and (or) modules and other types of educational work containing knowledge, abilities, skills and competencies necessary for the mastering of the studied discipline and (or) modules;

1.10 Competencies are the ability of the practical use of acquired knowledge and skills in professional activities.

2 ELECTIVE DISCIPLINES

Cycle of discipline	Code of discipline	Name of discipline	Semester	Credits	Prerequisites
<i>3 year</i>					
БД	MRK6702	Digital marketing and brand management	5	5	Marketing
	MAT6011	Econometrics	5	5	Statistics
БД	MGT6713	State and local government	6	5	Management
БД	FIN6702	Corporate finance	6	5	Finance
БД	FIN6704	Financial markets and intermediaries	6	5	Finance
ПД	MGT6715	Knowledge management and information systems	6	5	Management
<i>4 year</i>					
БД	ACC6703	Managerial Accounting	7	5	Finance
БД	FIN6715	1C Accounting	7	5	Finance
БД	SFT6143	SAP	7	5	Information-communication technologies
ПД	MGT6716	Change management	7	5	Management
ПД	MGT6717	Innovation management	7	5	Management

3 DESCRIPTION OF ELECTIVE DISCIPLINES

1. Digital marketing and brand management

Description of discipline	
Code of discipline	MRK6702
Name of discipline	Digital Marketing and Brand Management
Number of credits (ECTS)	5
Course, semester	3,5
Department	Economy and Business
Course author (s)	Shildibekov E.Zh
Prerequisites	Marketing
Postrequisites	
The aim of study of a discipline	The aim of the course is to develop a deep understanding of modern digital marketing concepts and technologies that are widely used by professionals in the field, as well as by academia. This course provides an overview of digital marketing, the sensitive art of building relationships between products and services and unique consumers, businesses, and markets.
Brief course description (main sections)	Digital Marketing and Brand Management is a new and exciting combination of technology, marketing and data analytics that solves the key marketing challenges of today. Many of the challenges include new ways of interacting with customers and gaining deeper customer knowledge by facilitating online communication channels and better meeting customer needs. This course also explores identifying customer behavior patterns and analyzing them to achieve new levels of customer satisfaction and drive traffic to a website or application.
Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)	Students who successfully complete the course will be able to: <ul style="list-style-type: none"> • Be able to outline an approach to developing digital marketing plans - understand the meaning of each element of the marketing mix on the Internet - browse and select electronic models suitable for your business • Understand online customers and their buying behavior - develop a strategy and plan for social media marketing management - understand the basics of web design - evaluate the range of options for increasing traffic • Know the success factors for various online communication tools

2. Econometrics

Description of discipline	
Code of discipline	MAT6011
Name of discipline	Econometrics
Number of credits (ECTS)	5
Course, semester	3,5
Department	Economy and Business
Course author (s)	Shildibekov E.Zh
Prerequisites	Statistics
Postrequisites	

The aim of study of a discipline	to give students a scientific understanding of the methods and models that allow obtaining quantitative expressions for the laws of economic theory based on economic statistics using statistical tools
Brief course description (main sections)	The curriculum of the discipline can be used in additional vocational education and vocational training according to the profile
Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)	<p>As a result of mastering the discipline, the student must know:</p> <ul style="list-style-type: none"> • Know the methodology of econometric research • Know the main types of econometric data • Know basic econometric models for cross-sectional data • Know the features of time series analysis <p>be able to:</p> <ul style="list-style-type: none"> • Be able to formulate the problem in a form suitable for econometric research • Be able to find the data needed to conduct an econometric study • Be able to test statistical hypotheses • Be able to build point and interval forecasts <p>own:</p> <ul style="list-style-type: none"> • Possess the skills of working in basic statistical packages • Have the skills to evaluate regression models • Possess the skills of diagnosing models • Have the skills to interpret the main results of model evaluation

3. State and local government

Description of discipline	
Code of discipline	MGT6713
Name of discipline	State and local government
Number of credits (ECTS)	5
Course, semester	6
Department	Economy and Business
Course author (s)	Shildibekov E.Zh
Prerequisites	Management
Postrequisites	
The aim of study of a discipline	The aim of the course is to provide an understanding of how innovation occurs and what are the important explanatory factors, as well as economic and social consequences. The course focuses on the techniques and processes that entrepreneurs and managers use to effectively manage innovation in new and existing organizations and networks.
Brief course description (main sections)	This course is based on the assumption that an integrated approach to strategy (why?) And implementation (how?) Innovation is needed. The module contains exercises on applying innovation-related theories to specific innovation contexts and phases.

Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)	Students who successfully complete the course will be able to: <ul style="list-style-type: none"> • Systematically integrate knowledge and understanding of various aspects of innovation and their role in business and society. • Critically evaluate ongoing research and development in innovation management • Apply innovation-related theories in a variety of settings to generate new approaches to innovation. • Identify, evaluate and propose solutions to innovation-related problems in large and small organizations Demonstrate an understanding of the sustainability aspects of innovation
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4. Corporate finance

Description of discipline	
Code of discipline	FIN6702
Name of discipline	Corporate finance
Number of credits (ECTS)	5
Course, semester	3,6
Department	Economy and Business
Course author (s)	Shildibekov E.Zh
Prerequisites	Finance
Postrequisites	
The aim of study of a discipline	The discipline "Corporate Finance" is an independent discipline, which is an integral part of the training program for students in the direction of "Management" and belongs to the variable part of the curriculum.
Brief course description (main sections)	The main goal of the discipline is to achieve the following educational results: getting students of the fundamentals of theory and foundations of decision-making in the field of a timely corporate finance management system; mastering the analytical apparatus of modern analysis of a complex of corporate financial solutions, including in relation to project management; studying the experience of developing and adapting corporate financial strategies that integrate raising and investing capital;
Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)	As a result of mastering the discipline, the student: <p>a) know:</p> <ul style="list-style-type: none"> • essence, features, criteria and general principles of building strategic management accounting; -the procedure for generating information about the state and use of the organization's resources in order to manage business processes and results of activities; - a system for collecting, processing and preparing information for various divisions of the organization's management apparatus; - the composition and content of the reporting of the internal divisions of the organization; -problems solved by accountants-analysts in the process of generating information useful for making tactical and strategic management decisions. <p>b) be able to:</p> <ul style="list-style-type: none"> • use knowledge about the principles of management accounting to systematize data on costs of production and sales, estimate the

	<p>cost of goods produced and determine profit; - to solve the problems of assessing the efficiency of production and sales of new types of products, changes in the volume and range of products (works, services), capital investments and investments in production stocks, cost management using various types of estimates and budgeting systems</p> <p>c) own:</p> <ul style="list-style-type: none"> • information prepared by management accounting; - nuances of the relationship between financial and management accounting in the process of preparing information for users;
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5. Financial markets and intermediaries

Description of discipline	
Code of discipline	FIN6704
Name of discipline	Financial markets and intermediaries
Number of credits (ECTS)	5
Course, semester	3,6
Department	Economy and Business
Course author (s)	Shildibekov E.Zh
Prerequisites	Finance
Postrequisites	
The aim of study of a discipline	The purpose of teaching the discipline is the formation of bachelors' knowledge in the field of modern directions of management accounting and practical skills of their application in professional activities. To achieve this goal in the course of mastering the course, it is necessary to solve the following problems: formation of knowledge about the content of management accounting, its purpose and principles of formation;
Brief course description (main sections)	In the structure of the course, three interrelated blocks can be distinguished: the implementation of strategic management accounting, the use of modern calculation systems and the principles of transfer pricing. The main topics are: the behavior of costs depending on the strategic type of economic activity and the way of its implementation, the decision support system, the information provision system, the system for changing the methods of providing information, the selection of performance indicators of management at all levels, consistent with the business strategy

<p>Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)</p>	<p>As a result of mastering the discipline, the student:</p> <p>a) know:</p> <ul style="list-style-type: none"> • essence, features, criteria and general principles of building strategic management accounting; -the procedure for generating information about the state and use of the organization's resources in order to manage business processes and results of activities; - a system for collecting, processing and preparing information for various divisions of the organization's management apparatus; - the composition and content of the reporting of the internal divisions of the organization; -problems solved by accountants-analysts in the process of generating information useful for making tactical and strategic management decisions. <p>b) be able to:</p> <ul style="list-style-type: none"> • use knowledge about the principles of management accounting to systematize data on costs of production and sales, estimate the cost of goods produced and determine profit; - to solve the problems of assessing the efficiency of production and sales of new types of products, changes in the volume and range of products (works, services), capital investments and investments in production stocks, cost management using various types of estimates and budgeting systems <p>c) own:</p> <ul style="list-style-type: none"> • information prepared by management accounting; - nuances of the relationship between financial and management accounting in the process of preparing information for users;
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6. Knowledge management and information systems

Description of discipline	
Code of discipline	MGT6715
Name of discipline	Knowledge Management and Information Systems
Number of credits (ESTS)	5
Course, semester	3,6
Department	Economics and Business
Course author (s)	Surshanov S.
Prerequisites	Management
Postrequisites	
The aim of study of a discipline	Provide an understanding of the concepts of information, knowledge and their management, as well as provide an overview of the available tools for managing information and knowledge to help you understand the needs of the actual organization and, accordingly, draw up action plans for its information and knowledge. control.
Brief course description (main sections)	Information technology is rapidly changing business. The competitive advantages of companies are increasingly dependent not on the size and quality of their tangible assets, but on the ability to gain knowledge and manage it, quickly and efficiently implement innovative developments in various fields - from product manufacturing to ways of doing business. , Knowledge management is the ability of a company to create, transform, disseminate, preserve and use knowledge, creating new products, services and processes on their basis to provide a competitive advantage.

<p>Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)</p>	<p>After completing the course, students should be able to:</p> <ul style="list-style-type: none"> • apply complex theories and practices of knowledge and intellectual capital management; • apply theories to a wide range of scenarios; • formulate action plans for knowledge-based organizations; • highlight the management aspects of the industrial era that may not be suitable for high-tech organizations, and suggest alternatives; • formulate a basis for reflection on high-tech organizations; • describe and work with intangible assets.
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7. Management accounting

Description of discipline	
Code of discipline	ACC6703
Name of discipline	Management Accounting
Number of credits (ECTS)	5
Course, semester	4,7
Department	Economy and Business
Course author (s)	Shildibekov E.Zh
Prerequisites	Finance
Postrequisites	
The aim of study of a discipline	<p>The purpose of teaching the discipline is the formation of undergraduates' knowledge in the field of modern areas of management accounting and practical skills of their application in professional activities. To achieve this goal in the course of mastering the course, it is necessary to solve the following problems: formation of knowledge about the content of management accounting, its purpose and principles of formation;</p>
Brief course description (main sections)	<p>In the structure of the course, three interrelated blocks can be distinguished: the implementation of strategic management accounting, the use of modern calculation systems and the principles of transfer pricing. The main topics are: the behavior of costs depending on the strategic type of economic activity and the way of its implementation, the decision-making support system, the information provision system, the system for changing the methods of providing information, the selection of performance indicators for management at all levels, consistent with the business strategy</p>

<p>Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)</p>	<p>As a result of mastering the discipline, the student:</p> <p>1. should know: a) know:</p> <ul style="list-style-type: none"> • the essence, features, criteria and general principles of building strategic management accounting; - the procedure for generating information about the state and use of the organization's resources in order to manage business processes and performance results; - a system for collecting, processing and preparing information for various departments of the organization's management apparatus; - the composition and content of the reporting of internal divisions of the organization; - problems solved by accountants-analysts in the process of generating information useful for making tactical and strategic management decisions. <p>2. must be able to: b) be able to:</p> <ul style="list-style-type: none"> • use knowledge about the principles of management accounting to systematize data on the costs of production and sales, estimate the cost of production and determine profit; - to solve the problems of evaluating the efficiency of production and sales of new types of products, changes in the volume and range of products (works, services), capital investments and investments in production stocks, cost management using various types of estimates and budgeting systems <p>3. must own: c) own:</p> <ul style="list-style-type: none"> • information prepared by management accounting; - nuances of the relationship between financial and management accounting in the process of preparing information for users;
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8. 1C Accounting

Description of discipline	
Code of discipline	FIN6715
Name of discipline	1C Accounting
Number of credits (ECTS)	5
Course, semester	5,7
Department	Economy and Business
Course author (s)	Shildibekov E.Zh
Prerequisites	Finance
Postrequisites	
The aim of study of a discipline	The course is a series of lectures and laboratory-practical classes that allow you to quickly master the techniques of developing and modifying applied solutions on the 1C: Enterprise 8.1 platform for managing a specific enterprise ("Enterprise Accounting", "Manufacturing Enterprise Management", "Salary and Personnel").
Brief course description (main sections)	The course is a series of lectures and laboratory-practical classes that allow you to quickly master the techniques of developing and modifying applied solutions on the 1C: Enterprise 8.1 platform for managing a specific enterprise ("Enterprise Accounting", "Manufacturing Enterprise Management", "Salary and Personnel").

Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)	<p>As a result of mastering the discipline, the student:</p> <p>know:</p> <ul style="list-style-type: none"> - features of the "1C: Enterprise" system for creating information systems; - built-in programming language of the "1C: Enterprise" system; - principles of development of configuration elements of the 1C: Enterprise system. <p>be able to: - develop your own configuration for accounting and management accounting at the enterprise, using the main components of the configurator (reference books, documents, enumerations); - organize the storage of operational information in all kinds of registers: information registers, accumulation registers, accounting registers; - to receive programmatically information from the database and present it to the user in a convenient form.</p> <p>own: - skills of work in the standard configuration "Enterprise Accounting" of the "1C: Enterprise" system; - the skills of using various types of constructors that are available in the system.</p>
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9. SAP

Description of discipline	
Code of discipline	SFT6143
Name of discipline	SAP
Number of credits (ESTS)	5
Course, semester	7
Department	Economics and Business
Course author (s)	Shildibekov E.Z
Prerequisites	Information-communication technologies
Postrequisites	
The aim of study of a discipline	to form a system of theoretical knowledge and practical skills to solve problems arising in project management in various spheres of economic activity, with an emphasis on projects related to the development and implementation of information systems and technologies (IT projects); to form professional competencies for effective IT project management, including the use of project management information systems; ensure the readiness to apply the acquired knowledge in the digital economy
Brief course description (main sections)	To master the academic discipline, students must know the conceptual foundations of the enterprise, be able to systematize and generalize information, develop specific proposals based on research results, use mathematical and tools to solve management problems.
Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)	<p>KNOW:</p> <ul style="list-style-type: none"> • conceptual apparatus of project management; • principles of standardization in the field of project management, the composition of international and national project management standards; • the best world and national practices included in the PMI PMBOK body of knowledge; • project management methodologies (methods of critical path, PERT analysis, cost analysis, forecasting the values of technical and economic indicators of the project, risk assessment);

	<ul style="list-style-type: none"> • architecture and functionality of IT project management information systems; • structure and typical content of an IT project; • principles of agile project management methodologies; <p>OWN:</p> <ul style="list-style-type: none"> • building a network diagram; • calculating the critical path; • resource allocation and planning; • calculation of indicators of earned value; • analysis of project risks and determination of response measures; • preparation and presentation of the project; • teamwork using agile methodology; <p>BE ABLE TO:</p> <ul style="list-style-type: none"> • analyze and optimize the work plan and the cost of the project; • draw up project documentation; <ul style="list-style-type: none"> • • apply information systems to solve practical problems of project management. KNOW: • • conceptual apparatus of project management; • • principles of standardization in the field of project management, the composition of international and national project management standards; • • the best world and national practices included in the PMI PMBOK body of knowledge; • • project management methodologies (methods of critical path, PERT analysis, cost analysis, forecasting the values of technical and economic indicators of the project, risk assessment); • • architecture and functionality of IT project management information systems; • • structure and typical content of an IT project; • • principles of agile project management methodologies; • OWN: <ul style="list-style-type: none"> • • building a network diagram; • • calculating the critical path; • • resource allocation and planning; • • calculation of indicators of earned value; • • analysis of project risks and determination of response measures; • • preparation and presentation of the project; • • teamwork using agile methodology; • BE ABLE TO: <ul style="list-style-type: none"> • • analyze and optimize the work plan and the cost of the project; • • draw up project documentation; • • apply information systems to solve practical problems of project management.
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10.Change management

Description of discipline	
Code of discipline	MGT6716
Name of discipline	Change management
Number of credits (ECTS)	5

Course, semester	4,7
Department	Economics and Business
Course author (s)	Sharapieva Z.T
Prerequisites	Management
Postrequisites	Innovation management
The aim of study of a discipline	The purpose of the course is to create a common understanding by the student of the field of change by explaining the various structures and ways of approaching change at the individual, team and organizational levels.
Brief course description (main sections)	This module will familiarize you with the processes, methods and techniques for analyzing the situation in the organization and successfully generating changes in order to withstand and meet the conditions of a changing world. The focus is on how change affects people and teams.
Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)	<p>Students who successfully complete the course will be able to:</p> <ul style="list-style-type: none"> • understand the need for change and its importance, impact and benefits; • determine the correct path of the change process, analyze the situation of change, choose an action, while effectively managing risks; • distinguish between concepts of change, tools, methods, measures and evaluate the appropriateness of their application; • select and apply appropriate models of changes and evaluate their consequences.

11. Innovation management

Description of discipline	
Code of discipline	MGT6717
Name of discipline	Innovation management
Number of credits (ECTS)	5
Course, semester	4,7
Department	Economics and Business
Course author (s)	Sharapieva Z.T
Prerequisites	Management
Postrequisites	
The aim of study of a discipline	The purpose of the course is to give students an understanding of the basic issues of technological innovation management and an understanding of the relevant skills necessary for managing innovation at both the strategic and operational levels. It provides evidence of various approaches based on real world examples and experience of leading international firms.
Brief course description (main sections)	This course is focused on innovation, what it is (or not), how it looks (“search” and “choice”) and how it can be managed (“implement” and “capture”). Innovation is not limited to creativity and new technical ideas, but also takes into account organizational aspects. The course aims to provide an opportunity to learn how to use some of the tools and news ways of thinking that are better suited to solve complex problems and opportunities inherent in modern organizations.

<p>Expected Learning Outcomes (knowledge, abilities, skills and competencies acquired by students)</p>	<p>Students who successfully complete the course will be able to:</p> <ul style="list-style-type: none">• Understand the role of innovation and technological change in economic indicators at the enterprise level and at the national level.• Understand the technological, human, economic, organizational, social and other aspects of innovation• Learn and better manage the impact of new technologies on people and work systems• Demonstrate that effective technology innovation management requires the integration of people, processes, and technologies.• Recognize opportunities for commercializing innovation
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