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MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION

Federal State Autonomous Educational Institution of Higher Education

"Moscow Polytechnic University"

(Moscow Poly)

APPROVE
Vice-President
for International Affairs
_____ /Yu.D. Davydova/
"30" 05 2022

Dean,
Faculty of Economics and Management
_____ /A.V. Nazarenko/
"30" 05 2022

WORKING PROGRAM OF THE DISCIPLINE

"Foresight management"

Field of study
38.03.02 Management

Educational program (profile)
"Business Process Management"

Qualification (degree)
Bachelor

Form of study
Part-time

Moscow 2022

1. The goals of mastering the discipline

The main goal of mastering the discipline "Foresight management" should include:

- formation of students' knowledge and skills in the field of foresight technologies.

The main tasks of mastering the discipline "Foresight management" include:

– Mastering the theory of methodology and Foresight technologies.

– Acquaintance with domestic and foreign experience in the application of foresight technologies.

– Assessment of the feasibility of using Foresight.

2. The place of the discipline in the structure of the bachelor's program

The discipline "Foresight Management" is one of the elective academic disciplines of the basic cycle (B1.2.ED) of the bachelor's degree program.

The discipline "Foresight Management" is interconnected with the following disciplines and practices of the EP:

- Corporate management;
- Organization development management.

3.The list of planned learning outcomes for the discipline (module), correlated with the planned results of mastering the educational program.

As a result of mastering the discipline, students form the following competence and the following learning outcomes should be achieved as a stage in the formation of the relevant competence:

Competency code	As a result of mastering the educational program, the student must have	List of planned learning outcomes by discipline
PC-5	Capable of gathering information about business problems and identifying business opportunities in the organization	**know:**modern domestic and foreign experience in the use of foresight technologies. **be able to:**formulate goals, objectives and a set of measures for the application of foresight technology. **own:**methods and approaches to identify the reasons for the use of foresight technologies; forecasting skills.

4. Structure and content of the discipline

Part-time education

The total labor intensity of the discipline is 5 credit units, i.e. 180 academic hours (of which 126 hours are independent work of students).

Sections of the discipline "Foresight Management" are studied in the third year.

Sixth semester:lectures - 18 hours, seminars - 36 hours, the form of control - an exam.

The structure and content of the discipline "Foresight Management" in terms of terms and types of work are reflected in the Appendix.

The content of the sections of the discipline

Topic 1 Foresight as a method of analysis and design of the future

The concept of foresight. Object and subject of foresight. Features of foresight in relation to the plan.

Topic 2 The difference between foresight and forecasting

The difference between foresight and forecasting.Key features of foresight and forecasting.Peculiarities of expert opinions in forecasting and foresight.

Topic 3 Main elements of foresight

Horizon and subjects of foresight. Scenarios and roadmaps. Situational and conceptual approaches.

Topic 4 Bridges between situations and concepts

First, second and third bridges between situations and concepts. Benchmarking as a way to integrate situational and conceptual approaches. Roadmap variant and a set of projects.

Topic 5 Technology Foresight

Features of technological foresight. New technologies used in foresights. The original technology classification system. National features of technological foresight.

Topic 6 Technology Classification System

Sequence of technological foresight. Economy as a set of industrial units. The main features and features of industrial units.

Topic 7 Foresight tools

Selection of experts. Conditions for conducting expert surveys. Accounting for the diversity of expert opinions.

Topic 8 Foresight techniques

Delphi method. Semantic differential and Wa-Westendorp method. Saaty Hierarchy Method and TURF Analysis.

Topic 9 Processing the results of an expert survey

Methods for processing expert assessments and judgments. Principles and stages of content analysis. Formulation of conclusions and recommendations.

5. Educational technologies

The methodology for teaching the discipline "Foresight Management" and the implementation of a competency-based approach in the presentation and perception of the material provides for the use of the following active and interactive forms of conducting group, individual, classroom classes in combination with extracurricular work in order to form and develop the professional skills of students:

– lectures;

- preparation for seminars;

– preparation, presentation and discussion of reports at seminars;

- organization and conduct of current control of students' knowledge in the form of testing.

The proportion of classes conducted in interactive forms is determined by the main goal of the educational program, the peculiarity of the contingent of students and the content of the discipline"Foresight management" and in general for the discipline makes up 50% of the classroom.

6. Evaluation tools for current monitoring of progress, intermediate certification based on the results of mastering the discipline and educational and methodological support for independent work of students

In the learning process, the following assessment forms of independent work of students, assessment tools for monitoring progress and intermediate assessments are used:

Evaluative means of monitoring progress include control questions and tasks in the form of blank testing, participation in a business game, and presentation of a report.

When performing current control, it is possible to use test material. Samples of control questions and tasks for conducting current control are given in the appendix. When implementing the undergraduate program, the organization has the right to use e-learning and distance learning technologies. All materials are posted in the LMS of the Moscow Poly (https://online.mospolytech.ru/).

When teaching people with disabilities, e-learning and distance learning technologies should provide for the possibility of receiving and transmitting information in forms accessible to them.

Samples of questions and tasks for conducting current control are given in the appendix.

6.1. Fund of assessment tools for conducting intermediate certification of students in the discipline (module).

6.1.1. A list of competencies indicating the stages of their formation in the process of mastering the educational program.

As a result of mastering the discipline (module), the following competence is formed:

Competency code	As a result of mastering the educational program, the student must have
PC-5	Capable of gathering information about business problems and identifying business opportunities in the organization

In the process of mastering the educational program, this competence, including their individual components, is formed in stages during the development of disciplines (modules), practices by students in accordance with the curriculum and calendar schedule of the educational process.

6.1.2. Description of indicators and criteria for assessing competencies formed on the basis of the results of mastering the discipline (module), description of assessment scales

An indicator of competency assessment at various stages of their formation is the achievement by students of the planned learning outcomes in the discipline (module).

PC-5 -Capable of gathering information about business problems and identifying business opportunities in the organization				
Index	**Evaluation criteria**			
	2	**3**	**four**	**5**
know:modern domestic and foreign experience in the use of foresight technologies. .	The student demonstrates the complete absence or insufficient compliance of the following knowledge: principles of goal-setting, types, methods, principles, tools of scientific and technical forecasting and planning, features of the organization of forecasting and planning at the enterprise.	The student demonstrates incomplete compliance of the following knowledge with the principles of goal setting, types, methods, principles, tools of scientific and technical forecasting and planning, features of the organization of forecasting and planning at the enterprise. Significant errors are made, there is a lack of knowledge, for a number of indicators, the student experiences significant difficulties	The student demonstrates partial compliance with the following knowledge: principles of goal setting, types, methods, principles, tools for scientific and technical forecasting and planning, features of the organization of forecasting and planning at the enterprise, but minor errors, inaccuracies, and difficulties in analytical operations are allowed.	The student demonstrates full compliance with the following knowledge: principles of goal-setting, types, methods, principles, tools for scientific and technical forecasting and planning, features of the organization of forecasting and planning at the enterprise, freely operates with the acquired knowledge.

		in operating knowledge as they are transferred to new situations.		
be able to:formulate goals, objectives and a set of measures for the application of foresight technology.	The student does not know how or insufficiently knows how to use quantitative and qualitative methods for conducting scientific research and managing innovation processes.	The student demonstrates incomplete compliance with the following skills: use quantitative and qualitative methods to conduct research and manage innovation processes.	The student demonstrates partial compliance with the following skills: use quantitative and qualitative methods to conduct research and manage innovation processes. Skills are mastered, but minor errors, inaccuracies, difficulties in analytical operations, transferring skills to new, non-standard situations are allowed.	The student demonstrates full compliance with the following skills: use quantitative and qualitative methods to conduct research and manage innovation processes. Freely operates with acquired skills, applies them in situations of increased complexity.
own:methods and approaches to identify the reasons for the use of foresight technologies, forecasting skills	The student does not possess or insufficiently possesses the skills to assess the economic and social conditions for the implementation of innovative programs; - methods and tools for forecasting and planning innovative development.	The student has the skills to assess the economic and social conditions for the implementation of innovative programs; - methods and tools for forecasting and planning innovative development. Forecasting skills, significant errors are made, there is a lack of skills in a number of indicators, the student experiences significant difficulties in applying skills in new situations.	The student partially owns the skills of assessing the economic and social conditions for the implementation of innovative programs; - methods and tools for forecasting and planning innovative development. Forecasting skills are mastered, but minor errors, inaccuracies, difficulties in analytical operations, transferring skills to new, non-standard situations are allowed.	The student fully owns the skills of assessing the economic and social conditions for the implementation of innovative programs; - methods and tools for forecasting and planning innovative development, freely applies the acquired skills in situations of increased complexity.

Scales for assessing the results of intermediate certification and their description:

Form of intermediate certification: exam.

Intermediate certification of students in the form of an exam is carried out based on the results of all types of educational work provided for by the curriculum for a given discipline (module), while taking into account the results of current monitoring of progress during the semester. The assessment of the degree of achievement by students of the planned learning outcomes in the discipline (module) is carried out by the teacher conducting classes in the discipline (module) by the method of expert assessment. Based on the results of the intermediate attestation for the discipline (module), the mark "excellent", "good", "satisfactory" or "unsatisfactory" is given.

Only students who have completed all types of educational work provided for by the work program in the discipline "Foresight Management" (passed the intermediate control) are allowed to the intermediate certification

Evaluation scale	Description
Excellent	All types of educational work provided for by the curriculum were completed. The student demonstrates the correspondence of knowledge, skills and abilities given in the tables of indicators, operates with the acquired knowledge, skills, skills, applies them in situations of increased complexity. In this case, minor errors, inaccuracies, difficulties in analytical operations, transferring knowledge and skills to new, non-standard situations can be made.
Good	All types of educational work provided for by the curriculum were completed. The student demonstrates incomplete, correct correspondence of knowledge, skills, and abilities given in the tables of indicators, or if 2-3 minor errors were made at the same time.
Satisfactorily	All types of educational work provided for by the curriculum were completed. The student demonstrates the conformity of knowledge, which covers the main, most important part of the material, but at the same time one significant error or inaccuracy was made.
unsatisfactory	One or more types of educational work provided for by the curriculum have not been completed. The student demonstrates incomplete correspondence of knowledge, skills and abilities given in the tables of indicators, significant errors are made, the lack of knowledge, skills and abilities is manifested in a number of indicators, the student experiences significant difficulties in operating knowledge and skills when transferring them to new situations.

The evaluation funds are presented in the annex to the work program.

7. Educational, methodological and information support of the discipline "Foresight management"

a) basic literature:

1. Litvak, B. G. Strategic management: a textbook for bachelors / B. G. Litvak. - Moscow: Yurayt Publishing House, 2022. - 507 p. — (Bachelor. Academic course). - ISBN 978-5-9916-2929-4. — Text: electronic // Educational platform Urayt [website]. — URL: https://urait.ru/bcode/508941 (date of access: 11/13/2022).

2. Chernomorchenko, S. I. Planning and design of organizations: a textbook for universities / S. I. Chernomorchenko. - 2nd ed. - Moscow: Yurayt Publishing House, 2022. - 221 p. - (Higher education). - ISBN 978-5-534-11222-1. — Text: electronic // Educational platform Urayt [website]. — URL: https://urait.ru/bcode/495648 (date of access: 11/13/2022).

b) additional literature:

1. Mashunin, Yu. K. Forecasting and planning of socio-economic systems: a textbook for universities / Yu. K. Mashunin. - Moscow: Yurayt Publishing House, 2022. - 330 p. - (Higher education). - ISBN 978-5-534-14698-1. — Text: electronic // Educational platform Urayt [website]. — URL: https://urait.ru/bcode/496702 (date of access: 11/13/2022).

The possibility of using e-learning, distance learning technologies is provided. All materials are placed in the LMS of the Moscow Poly. (https://online.mospolytech.ru/)

eight. Logistics support of discipline.

Audience for lectures and seminars of the general fund. Training tables with benches, classroom board, portable multimedia complex (projector, projection screen, laptop). Teacher's workplace: table, chair.

9. Guidelines for students when working on lecture notes during the lecture

Lecture - a systematic, consistent, monologue presentation by the teacher of educational material, as a rule, of a theoretical nature. When preparing a lecture, the teacher is guided by the working program of the discipline. In the course of lectures, it is recommended to take notes, which will later allow you to recall the studied educational material, supplement the content during independent work with literature, and prepare for the exam.

You should also pay attention to categories, formulations that reveal the content of certain phenomena and processes, scientific conclusions and practical recommendations, positive experience in oratory. It is advisable to leave fields in the working notes on which to make notes from the recommended literature, supplementing the material of the lecture heard, as well as emphasizing the particular importance of certain theoretical positions.

Lecture conclusions summarize the teacher's reflections on educational issues. The teacher provides a list of used and recommended sources for studying a particular topic. At the end of the lecture, students have the opportunity to ask questions to the teacher on the topic of the lecture. When lecturing on the discipline, electronic multimedia presentations can be used.

Guidelines for students when working at the seminar

Seminars are implemented in accordance with the working curriculum with consistent study of the topics of the discipline. In preparation for the seminars, the student is recommended to study the basic literature, get acquainted with additional literature, new publications in periodicals: magazines, newspapers, etc. In this case, the recommendations of the teacher and the requirements of the curriculum should be taken into account. It is

also recommended to refine your lecture notes by making appropriate entries in it from the literature recommended by the teacher and provided by the curriculum. Abstracts should be prepared for presentations on all educational issues submitted to the seminar.

Since the student's activity in seminars is the subject of monitoring his progress in mastering the course, preparation for seminars requires a responsible attitude. In interactive classes, students should be active.

Guidelines for students on the organization of independent work

Independent work of students is aimed at independent study of a separate topic of the academic discipline. Independent work is mandatory for each student, its volume is determined by the curriculum. During independent work, the student interacts with the recommended materials with the participation of the teacher in the form of consultations. To perform independent work, methodological support is provided. The electronic library system (electronic library) of the university provides the possibility of individual access for each student from any point where there is access to the Internet.

10.Methodological recommendations for the teacher (Guidelines for making presentations)

A presentation (from the English word - presentation) is a set of color slide pictures on a specific topic, which is stored in a special format file with the PP extension. The term "presentation" (sometimes called "slide film") is associated primarily with the information and advertising functions of pictures that are designed for a certain category of viewers (users).

Multimedia computer presentation is:

- dynamic synthesis of text, image, sound;
- the most modern software interface technologies;
- interactive contact of the speaker with the demonstration material;
- mobility and compactness of information carriers and equipment;
- ability to update, supplement and adapt information;
- low cost.

Rules for the design of computer presentations

General Design Rules

Many designers argue that there are no laws and rules in design. There are tips, tricks, tips. Design, like any kind of creativity, art, like any way of some people to communicate with others, like language, like thought, will bypass any rules and laws.

However, there are certain recommendations that should be followed, at least for novice designers, until they feel the strength and confidence to create their own rules and recommendations.

Font design rules:

- Serif fonts are easier to read than sans-serif fonts;
- Capital letters are not recommended for body text.
- Font contrast can be created through: font size, font weight, style, shape, direction, and color.
- Rules for choosing colors.
- The color scheme should consist of no more than two or three colors.
- There are incompatible color combinations.
- Black color has a negative (gloomy) connotation.
- White text on a black background is hard to read (inversion is hard to read).

Presentation design guidelines

In order for the presentation to be well perceived by the audience and not cause negative emotions (subconscious or completely conscious), it is necessary to follow the rules for its design.

The presentation involves a combination of information of various types: text, graphics, musical and sound effects, animation and video clips. Therefore, it is necessary to take into account the specifics of combining fragments of information of various types. In addition, the design and demonstration of each of the listed types of information is also subject to certain rules. So, for example, for textual information, the choice of font is important, for graphic information - brightness and color saturation, for their best joint perception, optimal relative position on the slide is necessary.

Consider recommendations for the design and presentation of various types of materials on the screen.

Formatting text information:

- font size: 24-54 pt (headline), 18-36 pt (plain text);
- font color and background color should contrast (the text should be well read), but not hurt the eyes;
- font type: smooth sans-serif font for body text (Arial, Tahoma, Verdana), decorative font can be used for heading if it is legible;
- italics, underlining, bold, capital letters are recommended to be used only for semantic highlighting of a text fragment.

Formatting graphic information:

- drawings, photographs, diagrams are designed to supplement textual information or convey it in a more visual form;
- it is desirable to avoid drawings in the presentation that do not carry a semantic load if they are not part of the style design;
- the color of graphic images should not contrast sharply with the overall style of the slide;
- illustrations are recommended to be accompanied by explanatory text;

- if a graphic image is used as a background, then the text on this background should be well readable.

The content and location of information blocks on the slide:

- there should not be too many information blocks (3-6);
- the recommended size of one information block is no more than 1/2 of the slide size;
- it is desirable to have on the page blocks with different types of information (text, graphs, diagrams, tables, figures) that complement each other;
- keywords in the information block must be highlighted;
- information blocks should be placed horizontally, blocks related in meaning - from left to right;
- the most important information should be placed in the center of the slide;
- the logic of presenting information on slides and in the presentation should correspond to the logic of its presentation.

In addition to the correct arrangement of text blocks, one must not forget about their content - the text. In no case should it contain spelling errors. You should also take into account the general rules for formatting the text.

After creating a presentation and its design, you need to rehearse its presentation and your performance, check how the presentation will look like as a whole (on a computer screen or projection screen), how quickly and adequately it is perceived from different audience locations, under different lighting conditions, noise accompaniment, in an environment as close as possible to the real conditions of the performance.

The work program was compiled on the basis of the Federal State Educational Standard of Higher Education in the direction of training bachelors on March 38, 02 "Management", approved by order of the Ministry of Education and Science of the Russian Federation of August 12, 2020 No. 970 (Registered in the Ministry of Justice of Russia on August 25, 2020 No. 59449).

The program was made by:

Candidate of Economics, Associate Professor of the Department of Management

/ Korotun O.N. /



The program was approved at a meeting of the department "Management"
August 29, 2022, Protocol No. 1

Head of the Department "Management"
k. e. PhD, Associate Professor / Alenina E.E. /

Structure and content of the discipline
"Foresight Management"
in the direction of preparation 38.03.02 "Management" (bachelor)
educational program "Business Process Management"
Part-time education

n/n	Chapter	Semester	Semester week	Types of educational work, including independent student work, and labor intensity in hours					Types of independent work students						Forms of attestation	
				L	F/N	Lab	SRS	DAC	UO	To	DI	R	DC	T	E	Z
one	Topic 1 Foresight as a method of analysis and design of the future	6	1-2	2	four		fourteen						+			
2	Topic 2 The difference between foresight and forecasting	6	3-4	2	four		fourteen						+			
3	Topic 3 Main elements of foresight	6	5-6	2	four		fourteen						+			
four	Topic 4 Bridges between situations and concepts	6	7-8	2	four		fourteen						+			
5	Topic 5 Technology Foresight	6	9-10	2	four		fourteen						+			
6	Topic 6 Technology Classification System	6	11-1-2	2	four		fourteen						+			
7	Topic 7 Foresight tools	6	13-14-	2	four		fourteen						+			
eight	Topic 8 Foresight techniques	6	15-16	2	four		fourteen						+			
9	Topic 9 Processing the results of an expert survey	6	17-18	2	four		fourteen						+			
	Appraisal Form												one		E	
	Total hours per discipline			eighteen	36		126									

Appendix 2 to
work program

MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION

FEDERAL STATE BUDGETARY EDUCATIONAL INSTITUTION OF HIGHER EDUCATION

"MOSCOW POLYTECHNIC UNIVERSITY"

(MOSCOW POLYTECH)

Direction of training: 38.03.02 "Management"

EP (educational program): "Business Process Management"

Form of education: full-time, part-time,

Type of professional activity: organizational and managerial, information and analytical, entrepreneurial

Department: "Management"

VALUATION FUND

BY DISCIPLINE

FORESIGHT MANAGEMENT

Composition: 1. Passport of the fund of appraisal funds

2. Description of assessment tools: questions for credits, tests, topics of reports

Compiled by:

Associate Professor, Ph.D. Korotun O.N.

Moscow, 2022

INDICATOR OF THE LEVEL OF FORMATION OF COMPETENCES

FORESIGHT MANAGEMENT					
GEF VO 38.03.02 "MANAGEMENT"					
In the process of mastering this discipline, the student forms and demonstrates the following **competencies**:					
COMPETENCES		**List of components**	**Competence formation technology**	**Assessment Tool Form****	**Degrees of levels of development of competencies**
INDEX	**FORMULATION**				
PC-5	Capable of gathering information about business problems and identifying business opportunities in the organization	**know:**modern domestic and foreign experience in the use of foresight technologies. **be able to:**formulate goals, objectives and a set of measures for the application of foresight technology. **own:**methods and approaches to identify the reasons for the use of foresight technologies, forecasting skills.	lecture, independent work, seminars	DS, T, E	**A basic level of** - knowledge of the basic theoretical data on the foresight methodology and methods of its application. **Enhanced level** - possession of methods and skills of economic forecasting; - ability to apply a set of foresight techniques.

Appendix 3
to work program

List of assessment tools by discipline

Foresight management

OS number	Name of the evaluation tool	Brief description of the evaluation tool	Presentation of the evaluation tool in the FOS
one	Report, message (DS)	The product of the student's independent work, which is a public performance on the presentation of the results of solving a specific educational, practical, educational, research or scientific topic	Topics of reports, messages
2	Test (T)	A system of standardized tasks that allows you to automate the procedure for measuring the level of knowledge and skills of a student.	Fund of test tasks
3	Exam	The final form of knowledge assessment. In higher education institutions are held during the session.	Questions for the exam

Questions for the exam in the discipline "Foresight Management" formation of competence PC-5

1. Essence and ideology of Forsythe.
2. Historical, political and economic prerequisites for the formation of technological forecasting
3. Historical, political and economic conditions for the formation of technological forecasting concepts
4. The current stage in the development of future research.
5. What is Forsyth.
6. Historical, cultural and social roots of Forsyth
7. The origins of the emergence and formation of Forsyth
8. Three generations of Forsythe
9. Modern foreign experience in the application of Foresight research
10. The Club of Rome and its role in the study of the problems of the future
11. The history of the emergence and development of the concept of "technological forecasting" in Russia
12. What is meant by the Forsyth horizon?
13. What is meant by Forsyth's focus?
14. Varieties of Forsyth. Brief characteristics.
15. Foresight - as a basis for the study of development prospects
16. Foresight as a basis for making strategic decisions
17. Role, functions and forms of Foresight.
18. Foresight research as a way to combine the intellectual potential of government, business, civil society and science.
19. Main characteristics of the most used Foresight technologies.

20. Conceptual apparatus and methodological base of forecasting.
21. The relationship of social, economic, political, demographic, technological and environmental forecasting.
22. Forecasting and foresight - common and differences.
23. Means and forms of design tools.
24. The structure of the design process. Design stages.
25. Foresight Research Technology
26. Foresight's Method Triangle. Rhombus of Foresight methods.
27. Stages of foresight research. Foresight formation rules.
28. The practice of using Foresight to develop national development strategies.
29. The practice of using Foresight to develop regional development strategies
30. Principles and tools of qualitative forecasting.
31. Statistical methods for collecting information and processing it.
32. Expert methods of collecting information (interviews, questionnaires, group methods of analysis).
33. Normative and search forecasting.
34. Foresight methods - Delphi.
35. Foresight methods - Critical technologies.
36. Foresight method - Expert assessments.
37. Foresight Methods - Road Mapping
38. Scenario approach to forecasting.
39. factor models.
40. Regression models in forecasting.
41. Design methodology. Types of design.

Ticket Form

MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
FEDERAL STATE AUTONOMOUS EDUCATIONAL INSTITUTION
HIGHER EDUCATION
"MOSCOW POLYTECHNICAL UNIVERSITY"
(MOSCOW POLYTECH)

Faculty of Economics and Management, Department of "Management"
Discipline: Foresight management
Direction of training:38.03.02 "Management"
Course: __, group _____, form of education: full-time, part-time

TICKET #1.

1. Question assessing competencePC-5
2.Competency QuestionPC-5

Approved at the meeting of the department "29" August 2022, protocol No. 1.

Head Department of "Management" _____ /Alenina E.E./

Test in the discipline "Foresight management"
formation of competence PC-5

1.Technological foresight:
A) allows you to support everything new;
B) stimulates and assists enterprises in the field of technology management and technology transfer;
B) leads to increased competitiveness and growth;
D) All answers are correct.

2. At the current stage of development, preference in organizing forcing research is given to:
A) scientific and technological forecasts;
B) forecasts in the social field;
B) forecasts within the concepts of the knowledge society;
D) research on working conditions and industrial relations.
3. A feature of new Foresights in developed countries, starting from the 2000s, is taking into account such trends and problems of modern development as:

A) Globalization and the development of the knowledge economy,
B) the formation and consolidation of the information society,
C) environmental resource management, healthcare transformation, growing regional disparities
D) All answers are correct.

4. Mark the international organizations involved in the development of foresight research:
A) UNIDO;
B) NASA;
B) UNICEF;
D) OECD.

5. The main amount of funds for financing specific forcing projects is provided by:
A) scientific organizations;
B) non-governmental organizations;
C) governments (federal and regional);
D) private industry.

6. Foresight as a technology of foresight (not an element of the program) appeared:
a) at the turn of the XIX-XX centuries;
b) in the first half of the 20th century;
c) in the 50s of the XX century;
d) at the end of the 20th century.

7. Chronological sequence of distribution of foresight methodology in the world:
A) USSR, Japan, Germany, China
b) USA, Japan, Germany, EU
C) EU, UK, USSR, Japan
D) USA, Canada, Brazil, China

8. The main principles of the Foresight toolkit are:
a) coordination of actions of science, authorities and civil society;
b) coordination of actions of the authorities and business;
c) the initiative of the authorities to develop a plan for the social and economic development of the territory;
d) involvement of social forces, communication of participants, concentration on a long-term period, coordination with existing achievements in the socio-economic sphere, agreement between business, science, government and civil society.

9. According to experts, in Russia the application of the foresight methodology begins:
A) In the 40s of the twentieth century;
B) In the 70s of the twentieth century;
C) In the 90s of the twentieth century;
D) At the beginning of the 21st century.

10. What are the origins of Forsythe?
a) passive forecasting;
b) the planned system used in the USSR;
c) futurology and forecasting;
d) forecasting, planning, futurology.

Criteria for evaluation:
Excellent - from 90% to 100% correct answers;
Good - from 75% to 90% correct answers;
Satisfactory - from 55% to 75% of correct answers;
Unsatisfactory - less than 55% of correct answers.

Topics of reports
in the discipline "Foresight Management"
(formation of competence PC-5)

1. Methodological foundations for organizing and conducting foresight studies
2. Give a definition of the object for Foresight research.
3. How are challenges and threats identified during Foresight preparation?
4. Scope of Foresight (SCOPE).
5. Development of proposals for the participants of the Foresight study.
6. Information support of Foresight research.
7. Organizational support of Foresight.
8. Possible roles in the Foresight organization.
9. Methodology for the selection and formation of expert groups for conducting Foresight studies.
10. Methodological approach and process of expert evaluation during Foresight.
11. Using the Delphi method in Foresight programs
12. Delphi's mission in the Technological Foresight of the Knowledge Economy
13. Purposes of application and tools of the Delphi survey in Foresight programs
14. The need to carry out studies of cultural and social aspects by the Delphi method
15. Processing the results of the survey and conducting the first stage of technology prioritization
16. Scenario as a tool for streamlining ideas about alternatives for the development of the external environment
17. Key requirements for scenarios. Plurality of kinds and types of scenarios; quantitative and qualitative characteristics of trends and the state of the system for the future
18. Scenarios as a mechanism for the formation of an adaptive strategy and adaptive policy
19. Difference of scenario approach from other Foresight methods
20. Stages of the evolution of the scenario approach

21. Approaches to building alternative scenarios. Advantages and Disadvantages in Scenario Development and Application
22. Scenarios in Technological Foresight programs
23. Formation of a scenario group. Script writing and discussion methodology
24. Initial information for building scenarios. Scenario Development Stages. Formation of scenario alternatives. Technology for building high-quality research scenarios
25. Development of the script skeleton. Sequence of steps in building the skeleton of research scenarios
26. Development of technology roadmaps and a method for analyzing the sequence of technology development
27. Panels and Expert Groups in Foresight Programs
28. Scanning and monitoring - a stage in the study that precedes other Foresight methods
29. Tree of goals and morphological analysis - as methods of normative forecasting
30. SWOT analysis as a technique for the analytical stage of developing Foresight programs
31. Benchmarking - a tool for identifying weaknesses in one's own activities
32. Benchmarking process and benchmarking results - similarities and differences
33. Using Brainstorming in Various Foresight Methods
34. Trend impact analysis - methodology to overcome other forecasting methods
35. Construction of a matrix of mutual influence of events
36. Monte Carlo method. Its content and significance in Foresight studies
37. Simulation dynamic model of mutual influences
38. Critical technologies method and its application in foresight

Report Evaluation Criteria

No.	Criterion	Grade			
		ex.	choir.	satisfactory	unsatisfactory
one	Report Structure	The report contains semantic parts, balanced in volume	The report contains three semantic parts, unbalanced in volume	One of the semantic parts of the report is missing	The report does not trace the presence of semantic parts
2	Content of the report	The content reflects the essence of the problem under consideration and the main results obtained.	The content does not fully reflect the essence of the problem under consideration or the main results obtained.	The content does not fully reflect the essence of the problem under consideration and the main results obtained.	The content does not reflect the essence of the problem under consideration or the main results obtained.
3	Ownership of the material	The student fully owns the material presented, is oriented in the problem, freely answers questions	The student owns the material presented, is oriented in the problem, finds it difficult to answer some questions	The student is not fluent enough in the material presented, poorly oriented in the problem	The student does not own the material presented, poorly oriented in the problem
four	Relevance to the topic	The presented material is fully consistent with the	The material presented contains elements that are not	The material presented contains a large number of	The material presented is slightly relevant to

		stated topic.	relevant to the topic.	elements that are not related to the topic.	the topic.