



APPROVED

Vice-rector for educational activities

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Цифровые продукты для бизнеса / Digital infrastructure for business

Syllabus of the course

Specialty	38.03.02 Management
Specialization	Business management and digital innovations
Level of higher education	Bachelor
Form of training	Full-time
Year of enrolment	2023

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Total number of hours	144	Form of final attestation: Exam: term 3
incl:		
contact work	48	
self-study	60	
practical training	0	
control hours	36	

Hours distribution:

Term:	3
Type of classes	Hours
Contact hours	20
Practical training	28
Laboratory work	
Total contact hours	48
Self-study	60
Control hours	36
Total academic hours	144
Total credits	4

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1. LEARNING OBJECTIVES

Objective:	Students master the theoretical and practical foundations of planning, organizing the execution of work, and completing the project in accordance with the assignment received.
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2. COURSE PLACE IN THE PROGRAMME STRUCTURE

The discipline B1.O Digital infrastructure for business refers to the mandatory part of Block 1.

3. EXPECTED LEARNING OUTCOMES

Code and name of graduate competence	Code and name of the competence achievement indicator	Expected learning outcomes
PC-2 - Planning, organization of work execution, completion of the project in accordance with the assignment received	PC-2.1 - Development of a project schedule, cost estimate and financing plan in accordance with the assignment received	<p>Know: basic concepts and classifications of information technologies used for planning and organizing work, completing a project.</p> <p>Be able to: develop a project schedule, draw up cost estimates and a project financing plan.</p> <p>Possess: skills in planning and organizing the execution of work, drawing up cost estimates and a financing plan using information technology and digital products for business.</p>

4. COURSE STRUCTURE AND CONTENT

Code and name of the topics	Course content	Academic hours			
		Contact work			Self-study
		Lectures	Practices	Workshops	
Topic 1. Basic concepts and classification of information technologies	The essence, features, functions and advantages of business planning, classification of information technologies and digital products for business.	4	4		12
Topic 2. Modeling of business processes based on Case technologies	Purpose of Case technologies, HIPO technology, Varnier-Orr diagram, IDEF methodology, functional modeling methodology, data flow diagrams.	4	6		12
Topic 3. Project life cycle	Basic concepts of project management, structure of the project life cycle, patterns of the project life cycle, project management processes, schedule development.	4	6		12
Topic 4. Basic	Strategic and investment planning, economic content	4	6		12

elements of business planning	and main elements of strategic planning, classification of strategies, goals and strategies for project implementation.				
Topic 5. Financial planning of the project	Primary documents of the financial plan, purpose, structure and calculation methods of the main documents of the financial plan, types of project financing strategies.	4	6		12
Control hours:					36
Total hours:		20	28	0	60

5. TEACHING AND LEARNING TOOLS OF THE COURSE

5.1 Recommended literature

Bibliographic description of the publication (author, title, type, place and year of publication, number of pages)	Digital resources
Kazantsev A.K. Operations management: textbook / A.K. Kazantsev, V.V. Kobzev, V.M. Makarov; under general ed. A.K. Kazantseva. - M.: INFRA-M, 2019. — 478 p. — (Higher education: Bachelor's degree).	https://znanium.com/read?id=355063
Shcherbakova N.A. Business planning: textbook / N.A. Shcherbakova. – Novosibirsk: NSTU Publishing House, 2020. – 87 p.	https://znanium.com/read?id=397613

5.2 List of software (including national production)

- 7-Zip
- LibreOffice
- ОС АЛЪТ образование 10

5.3 List of reference systems and modern professional databases

№	Name of reference systems and professional databases
1.	Digital library Grebennikon.ru – www.grebennikon.ru
2.	Science Digital Library eLIBRARY – www.elibrary.ru
3.	Science Digital Library КиберЛеника – www.cyberleninka.ru
4.	Database ПОЛПРЕД Справочники – www.polpred.com
5.	Database OECD Books, Papers & Statistics on the platform OECD iLibrary www.oecd-ilibrary.org
6.	Legal reference system КонсультантПлюс (installed resource UNECON or www.consultant.ru)
7.	Legal reference system «ГАРАНТ» (installed resource UNECON or www.garant.ru)
8.	Information and referral system «Кодекс» (installed resource UNECON or www.kodeks.ru)
9.	Digital library system BOOK.ru - www.book.ru
10.	Digital library system ЭБС ЮРАЙТ – www.urait.ru
11.	Digital library system ЗНАНИУМ (ZNANIUM) – www.znanium.com
12.	Digital library UNECON – opac.unecon.ru

6. TECHNICAL FACILITIES

There are special rooms for lectures, seminars, coursework, group and individual consultations, current and interim assessments, as well as rooms for self-study.

The premises are equipped with equipment and teaching aids.

The rooms for students' independent work are equipped with computers with Internet connection and access to the university's electronic learning environment.

Name of classroom	Classroom location
3-4-5 Classroom (for conducting lecture-type classes and seminar-type classes, course design (completing coursework), group and individual consultations, ongoing monitoring and intermediate certification), equipped with a multimedia complex. Specialized furniture and equipment: Educational furniture on 40 seats, teacher's workplace, 1 pc. lectern, 1 pc. 3-section chalk board, 1 pc. chair, 1 pc. hanger stand. Portable multimedia kit: HP 250 G6 1WY58EA laptop, LG PF1500G multimedia projector. Sets of demonstration equipment and educational visual aids: multimedia applications for lecture courses and practical exercises, interactive educational visual aids.	191023, St. Petersburg, Griboedova canal, 30-32, lit. A, B, P
3-4-7 Classroom (for conducting lecture-type classes and seminar-type classes, course design (completing coursework), group and individual consultations, ongoing monitoring and intermediate certification), equipped with a multimedia complex. Specialized furniture and equipment: Educational furniture on 25 seats, teacher's workplace - 2 pcs., marker board - 1 pc., hanger rack - 3 pcs., blinds - 2 pcs. Portable multimedia kit: HP 250 G6 1WY58EA laptop, LG PF1500G multimedia projector. Sets of demonstration equipment and educational visual aids: multimedia applications for lecture courses and practical exercises, interactive educational visual aids.	191023, St. Petersburg, Griboedova canal, 30-32, lit. A, B, P

7. METHODOLOGICAL GUIDELINES FOR STUDENTS

The following documents should be made available to the trainee before the start of the course:

- training and methodological documentation;
- local normative acts regulating the main issues of the organisation and implementation of educational activities, including those regulating the procedure for current monitoring and interim assessment of students;
- the schedule of consultations of the teaching staff.

The level and depth of mastering the discipline is determined by the active and systematic work of students in lectures, seminars, independent work, including in terms of identifying the most significant and relevant problems for further study. A special condition for qualitative mastering of the discipline is an effective organisation of work, which allows distributing the academic workload evenly in accordance with the schedule of the educational process.

When preparing for classes, students have the opportunity to attend consultations with the staff of UNECON according to the timetable set out in the schedule of consultations.

The students' in- and out-of-classroom work should aim to form:

- the fundamentals of the learner's world view and scientific understanding;

- basic knowledge relevant to the training area and the declared professional field, forming the target and professional basis for training;
- professional competences oriented towards the needs of the labour market;
- an individual trajectory by mastering a unique set of professional competences that complement the learner's competence model, through a focus on specific professional specialised areas of knowledge defined by labour market representatives;
- meta-skills for learners, such as teamwork and leadership, data analysis, digital skills, project design and implementation, intercultural interaction.

8. SPECIFICATIONS FOR TEACHING DISABLED PERSONS

Students with disabilities, if necessary, are taught on the basis of an adapted work programme using special teaching methods and didactic materials that take into account the particularities of their psychophysical development, individual capacities and health status.

In order for disabled persons and persons with disabilities to master the curriculum, the University shall ensure that:

- for the visually impaired and visually impaired: availability of information on the timetable in accessible places and adapted forms for learners who are blind or visually impaired; presence of an assistant to assist the learner as needed; production of alternative formats of teaching materials (large print or audio files);
- for the hearing-impaired and hearing-impaired: adequate sound reproduction of information;
- for persons with disabilities and persons with mobility impairments: the possibility of unimpeded access for students to classrooms, restrooms and other areas of the department, as well as their stay in these areas.

Learners with disabilities and persons with disabilities are provided with printed and/or electronic educational resources in forms adapted to their disabilities. The education of students with disabilities may be organized with other students or in separate groups or organisations.

ASSESSMENT RESOURCES

1.1 Control tasks and assignments for interim attestation

1. Technologies for implementing the CALS strategy.
2. Classification of information technologies applicable for planning and organizing the execution of work.
3. Life cycle models of information systems and their comparative analysis.
4. CASE technologies as the basis for modeling business processes.
5. Case technologies: HIPO technology.
6. Case technologies: Warnier-Orr diagram.
7. Case technologies: IDEF methodologies.
8. Case technologies: functional modeling methodology.
9. Case technologies: data flow diagram.
10. Case technologies: work flow diagram.
11. Features of design and construction of CRM systems.
12. Cloud computing: advantages and disadvantages.
13. OLAP systems as a means of supporting management decisions.
14. Functions and benefits of business planning.
15. Project life cycle, life cycle structure.
16. Life cycle patterns and project management processes.
17. Strategic and investment planning.
18. Features of financial planning, content of the financial plan.
19. Assessment of the economic efficiency of the project.
20. Key elements of a marketing plan.
21. Types of business plans, features of their preparation.
22. Schedule development, critical path method, control point diagram.
23. Presentation of the schedule in the form of a Gantt chart.
24. SMART principle.
25. Channels for promoting goods and services.
26. Features of the matrix organizational structure.
27. Features of drawing up a personnel plan.
28. How to draw up an income-expenditure plan.

1.2 Topics for written task

Is not provided by the work programme of the discipline.

1.3 Interim checkpoints

Number	Type	Method of conduct	Topic number
1	Practical task	By means of technical tools and information systems	1-3
2	Practical task	By means of technical tools and information systems	4-5
3	Monitoring	By means of technical tools and information systems	1-5

1.4 Other assessment objects

Is not provided by the work programme of the discipline.

1.5 Self-study

Name of self-study	Topic number
Exam preparation	1-5
Preparation for lectures and practical classes	1-5
Doing homework	1-5

1.6 Grading scale

Scales of assessment and procedures for assessing learning outcomes of the discipline are regulated by the Regulations on the current control of progress and interim attestation of students in higher education programmes and the Regulations on the scoring and rating system.

A grading and rating system is used to assess the learning outcomes of the discipline:

The final control of the discipline is an examination (or a differentiated test), the final grade being formed in accordance with the scale given in the table below:

Баллы	Оценка
≤ 54	fail
55-69	satisfactory
70-84	good
≥ 85	excellent

Grading scale

2 (points to 54)	Demonstrates a lack of understanding of the problem. Many of the requirements of the assignment are not met. An initial perception of the material is demonstrated. The work is incomplete and/or plagiarized.
3 (points 55-69)	Demonstrates a partial understanding of the problem. Most of the requirements of the task have been met. Mastery of the elements of the assigned material. The material is mostly clear and coherent.
4 (points 70-84)	Demonstrates considerable understanding of the issue by the discipline. All requirements of the assignment are fulfilled. The content of the completed tasks is disclosed and examined from different perspectives.
5 (points 85-100)	Demonstrates full understanding of the problem. All requirements of the assignment are fulfilled. Demonstrates proficiency in the discipline. The completed assignments are holistic, complete, structured, present different points of view and demonstrate creativity.