

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
ODESA I.I. MECHNYKOV NATIONAL UNIVERSITY**

**DEPARTMENT OF MARKETING AND BUSINESS ADMINISTRATION**

**APPROVED**

**Vice-rector for scientific and pedagogical work**

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«\_\_\_\_\_» \_\_\_\_\_ 20\_\_ p.

**WORKING PROGRAM OF EDUCATIONAL DISCIPLINE**

**Marketing and intellectual property protection in the IT industry**

**Level of higher education:** Second (master's)

**Field of knowledge:** 12 Information technologies

**Specialty:** 126 Information systems and technologies

**Educational and professional program:** Information systems and technologies

Work program of the educational discipline "Marketing and intellectual property protection in the IT industry". – Odesa: ONU, 2023. –19 p.

Maryna Chaikovska, Doctor of economic sciences, Professor, professor of the Department of Marketing and Business Administration

The work program was approved at the meeting of the Department of Marketing and Business Administration

Protocol No. \_\_\_\_ of " \_\_\_\_ " \_\_\_\_ 20 \_\_\_\_

Head of the department \_\_\_\_\_ Olena SADCHENKO

Agreed with the guarantor of the EPP "Information Systems and Technologies"

" \_\_\_\_ " \_\_\_\_ 20 \_\_\_\_

Guarantor of EPP \_\_\_\_\_ Eugene MALAKHOV

Approved by the Educational and Methodological Commission (EMC) of the Faculty of Economics and Law

Protocol No. \_\_\_\_ of " \_\_\_\_ " \_\_\_\_ 20 \_\_\_\_

Head of EMC \_\_\_\_\_ Iryna HOLODENKO

Reviewed and approved at a meeting of the Department of Marketing and Business Administration

Protocol No. \_\_\_\_ from " \_\_\_\_ " \_\_\_\_ 20 \_\_\_\_

Head of Department \_\_\_\_\_ (signature) (First Name Surname)

Reviewed and approved at a meeting of the Department of Marketing and Business Administration

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Head of Department \_\_\_\_\_ (signature) (First Name Surname)

## 1. Description of the academic discipline

Name of indicators	Field of knowledge, specialty, specialization, level of higher education	Characteristics of the academic discipline
The total number of credits is 4 hours - 120 content modules - 3	Field of knowledge:  12 Information technologies  Specialty: 126 Information systems and technologies  Level of higher education: Second (master's)	Mandatory
		<b>A year of training</b>
		1-st
		<b>Semester</b>
		2-st
		<b>Lectures</b>
		20 h.
		<b>Laboratory</b>
		18 h.
		<b>Individual work</b>
		82 h.
		<b>Final control form</b>
		Test

## 2. The purpose and tasks of the educational discipline

*The purpose of the course* is to provide higher education students with a system of theoretical knowledge and practical skills regarding the application of modern models, methodologies, marketing management tools in the IT industry and ensuring the protection of intellectual property of IT products and services in a dynamic information environment in the context of the transition of the organization to the use of digital channels.

Tasks of the discipline:

- - mastering the theoretical foundations of marketing in the IT industry, studying their standards and tools, which would make it possible to effectively apply them in the practice of managing the life cycle processes of information systems, products and services of information technologies;
- acquisition of the necessary knowledge and practical skills in economic theory, entrepreneurship and business for the technical and economic substantiation of IT projects, development of an effective marketing strategy,
- acquisition of practical skills in the use of modern methods of managing marketing activities in the IT industry, principles of planning, strategy and tactics of marketing information products and services;
- conducting a study to identify the prerequisites for the introduction of information and communication technologies, selecting and evaluating the effectiveness of their use in order to plan and implement informational, methodical, material, financial and personnel support of the organization;
- acquisition of the necessary knowledge and practical skills regarding the definition, formalization, legal basis of intellectual property rights in the IT industry,

methods of intellectual property protection in the IT industry; formation and management of a complex information protection system.

### **Program Competencies**

–IC: The ability, to solve research and innovation-oriented tasks in the field of information systems and technologies.

–GC03. Ability to communicate with representatives of other professional groups at various levels experts from different fields of knowledge/types of economic activities.

– GC04. Capability to develop and manage projects.

–GCM02. Legal competence in the field of ownership of information systems and technology.

–SKM01. The ability to formalize economic situations, apply mathematical methods for justification and make managerial and technical decisions in various situations.

–SKM06. The ability to provide the analysis, implementation, and support of complex information security systems (combinations of regulatory, organizational, technical means and methods, procedures, practical techniques, etc.).

–SC07. The ability to develop and implement innovative projects in the field of ICT.

### **Program Learning Outcomes**

– LO03. Make effective decisions on the development of information infrastructure, creation, and application of ICT.

- LO011. Solve digital transformation tasks in new or unfamiliar environments based on specialized conceptual knowledge, including modern scientific achievements in the field of information technology, research, and knowledge integration from various fields.

–LOM01. Provide authorial support for the design and implementation of information systems and technologies, utilize intellectual property knowledge in inventive activities, and international cooperation in the IT field.

–LOM02. Choose the most practical organization of marketing for software products for the firm and represent the overall sequence of activities for the organization and operation of any channel for the sale of software products and information technologies.

### **EXPECTED RESULTS**

As a result of studying the course, the student must

**to know:** theoretical, methodological and methodological foundations of marketing in the IT industry, the main categories of the information sphere of the economy; the concept of software product marketing; system of standards of marketing research and marketing information; types of information products and services as goods; policy principles in marketing activity; channels and means of distribution of information products; principles of planning, strategy and tactics of software product marketing, regulatory and organizational support for the formation of a comprehensive system of information protection and intellectual property rights in the IT industry;

**to be able to:** effectively apply the practical skills of collecting and analyzing marketing information in practice; forecasting the marketing situation; planning and adjusting the firm's marketing policy; describe the concept of marketing of information products and services; analyze approaches to identifying consumers of information products; determine the structure and content of the market of information products and services; characterize the system of marketing research and marketing information; analyze policy principles in marketing activities; navigate the channels and means of distribution of information products and services; characterize planning principles, strategy and marketing tactics of information processes and services; to make effective decisions regarding the management of innovative projects and projects to create a comprehensive information protection system in the IT industry.

### **3. Course content**

#### **Module 1. Marketing of software products and services in the general concept of marketing.**

Topic 1. Digital transformations of the mechanisms of interaction of the subjects of marketing activity in the conditions of the transition of the organization to the use of digital channels.

Digital economy and cyber-physical approach to Industry 4.0 management. Information, information technologies, information products and services. Features of information products and services as a product. The structure and content of the information market. Characteristics of sectors of the information market. Mechanism of functioning of the information market. The software segment in the structure of the information market.

Topic 2. Marketing of software products and information services as an independent direction in marketing activities.

Modern requirements for an effective marketing digital ecosystem. Development trends of the IT market of Ukraine. Influence factors and problematic issues. Definition and components of marketing. Evolution Concept and functions of marketing information products and services. Marketing management of information products and services. Trends in the development of the information market of Ukraine. Promising trends in the development of the IT ecosystem of the national economy.

#### **Module 2. Marketing management tools and tactics in the IT industry.**

Topic 3 Marketing research and marketing information.

Marketing information and marketing environment. Systems of marketing research and marketing information, their characteristics and purpose. The process of marketing research in the information field. The concept of the life cycle (LI) of information goods and services. Characteristics of the main stages of the housing complex. Application of the concept of housing to PPI.

Topic 4. Marketing planning, strategy and tactics in the IT industry.

Strategic planning of marketing activities. Engineering approach and modeling tools for quality assurance of marketing IT projects. An integrated approach in the formation of networks in IT projects of partner marketing. The evolution of development stages interacts with customers in the IT industry. Dominants of CRM concept implementation in marketing IT projects. Modeling the sales funnel in marketing IT projects.

Model of interactive collaborative interaction of partners in partner marketing projects. A model of personalized pricing in marketing IT projects.

### **Module 3. Management of a complex system of protection of information and intellectual property in the IT industry.**

Topic 5. Ensuring information security in the marketing IT project management system.

Criteria of an effective information security system in modern conditions of dynamic business processes. Information security management as part of the marketing management system. Risk analysis, design, implementation, control, support and improvement of measures in the field of information security. Organizational structures, policies, responsibilities, procedures, processes and resources. Creation of an effective mechanism for managing access to information. Non-state regulation of information protection in Ukraine. An adaptive approach to the formation of the information security system.

Topic 6. Intellectual property protection strategy in the marketing of innovative projects in the IT industry.

Directions for improving the national system of protection of intellectual property rights and copyrights and the strategy of Ukraine's integration into the EU. The issue of legal protection of software products and IT startups. Intellectual property rights. Property rights in the IT industry. Copyright and patent law. General civil law and special laws of Ukraine regarding intellectual property in the IT industry. Forms of protection of intellectual property rights in the IT industry. International standards for the protection of intellectual property rights.

#### 4. Course structure

Titles of topics	Number of hours				
	Total				
		lec	pr	lab	iw
1	2	3	4	5	6
<b>Module 1. Marketing of software products and services in the general concept of marketing</b>					
Topic 1. Digital transformations of the mechanisms of interaction of the subjects of marketing activity in the conditions of the transition of the organization to the use of digital channels.	15	4	2	-	9
Topic 2. Marketing of software products and information services as an independent direction in marketing activities.	15	4	2		9
Control work M 1	10		2		8
Total M1	40	8	6		26
<b>Module 2. Marketing management tools and tactics in the IT industry</b>					
Topic 3. Marketing research and marketing information.	15	2	2		11
Topic 4. Marketing planning, strategy and tactics in the IT industry.	15	4	2		9
Control work M 2	10		2		13
Total M2	40	6	6		28
<b>Module 3. Management of a complex system of protection of information and intellectual property in the IT industry</b>					
Topic 5. Ensuring information security in the marketing IT project management system.	15	2	2		11
Topic 6. Intellectual property protection strategy in the marketing of innovative projects in the IT industry.	15	4	2		9
Control work M 3	10		2		8
Total M3	40	6	6		28
<b>Total</b>	<b>120</b>	<b>20</b>	<b>18</b>		<b>82</b>

### 5. Topics of seminar classes

Seminar classes are not provided.

### 6. Topics of practical classes

№	Titles of topics	Number of hours
<b>Module 1. Marketing of software products and services in the general concept of marketing</b>		
1.	Digital transformations of the mechanisms of interaction of the subjects of marketing activity in the conditions of the transition of the organization to the use of digital channels.	2
2.	Marketing of software products and information services as an independent direction in marketing activities.	2
3.	Control work M 1	2
<b>Module 2. Marketing management tools and tactics in the IT industry</b>		
4.	Marketing research and marketing information.	2
5.	Marketing planning, strategy and tactics in the IT industry.	2
6.	Control work M 2	2
<b>Module 3. Management of a complex system of protection of information and intellectual property in the IT industry</b>		
7.	Ensuring information security in the marketing IT project management system	2
8.	Intellectual property protection strategy in the marketing of innovative projects in the IT industry	2
9.	Control work M 3	2
<b>Total</b>		<b>18</b>

### 7. Topics of laboratory classes

Laboratory classes are not provided.

### 8. Individual work

№	Titles of topics	Number of hours
<b>Module 1. Marketing of software products and services in the general concept of marketing</b>		
1.	Digital transformations of the mechanisms of interaction of the subjects of marketing activity in the conditions of the transition of the organization to the use of digital channels.	9
2.	Marketing of software products and information services as an independent direction in marketing activities.	9
3.	Control work M 1	8
<b>Module 2. Marketing management tools and tactics in the IT industry</b>		
4.	Marketing research and marketing information.	11
5.	Marketing planning, strategy and tactics in the IT industry.	9
6.	Control work M 2	8



<b>Module 3. Management of a complex system of protection of information and intellectual property in the IT industry</b>		
7.	Ensuring information security in the marketing IT project management system	11
8.	Intellectual property protection strategy in the marketing of innovative projects in the IT industry	9
9.	Control work M 3	8
<b>Total</b>		<b>82</b>

Individual work includes:

- [1] – preparation for lectures, laboratory classes, and current controls for meaningful modules
- [2] – writing abstracts and preparing a presentation for defense
- [3] – solving practical problems
- [4] – performance of laboratory work in the software environment.

### **9. Teaching methods**

The following teaching methods are used in the process of studying an academic discipline:

- verbal methods: lecture, story, conversation, explanation, discussion, discussion of problem situations; project method, case method, brainstorming, preparation and defense of essays
- visual methods: multimedia presentation, demonstration (in the form of distributed illustrative material);
- practical methods: solving practical problems (including calculations), performing situational exercises and discussing problem situations; analysis of statistical data, performance of individual tasks, essay writing, preparation and presentation of reports, discussion of reports.

### **10. Forms of control and assessment methods (including criteria for evaluating learning outcomes)**

Current control:

- oral control: individual / face-to-face survey on questions of the relevant topic, evaluation of the performance of individual independent tasks, protection of projects; evaluation of essays (report and presentation evaluation);
- written control: assessment of solving practical problems, assessment of the quality of independent work by topic, portfolio, self-check tests; assessment of solving situational exercises and problem situations;
- test control: evaluation of current testing by topics.

Periodic control:

- test control: evaluation of control works by meaningful modules (testing).

Final control: exam.

### Criteria for evaluating the educational achievements of higher education applicants for various types of work

Type of work	Scores
Current control:	
- Survey on the questions of the relevant topic at the practical session, participation of the applicants in the discussion of problematic issues	0- 2
- Making essays on one of the proposed topics: report and demonstration of the presentation	0- 3
- Solving practical problems, situational exercises and problem situations	0- 5
Periodic control:	
- Control work on meaningful modules in the form of testing	0- 10

Type of work	Scores	Evaluation criteria
Survey on questions of the relevant topic in a practical session, participation of applicants in the discussion of problematic issues	0	The acquirer does not participate in the practical session, is only an observer; never speaks or asks questions, disinterested in learning the material; gives wrong answers to questions, shows unsatisfactory knowledge of conceptual apparatus and literary sources.
	1	The acquirer sometimes participates in practical training; partially speaks and asks questions; makes mistakes when answering questions; shows passive work in practical classes; shows fragmentary knowledge of the conceptual apparatus and literary sources; shows the inability to publicly present the material.
	2	The applicant takes an active part in practical training; demonstrates deep knowledge, gives complete and detailed answers to questions; actively participates in the discussion of problematic issues, uses additional educational and methodological and scientific literature; knows how to form his attitude to a certain problem; expresses his own reasoning, gives appropriate examples; knows how to find the most adequate forms of conflict resolution; able to present the material publicly.
Writing essays on one of the proposed topics: report and demonstration of the presentation	0	Essays (reports) and presentations that are not made independently or borrowed from the Internet are not counted.
	1	The report and presentation were completed independently, the design meets the requirements with minor violations, the topicality of the topic was worked out, the theoretical analysis contains inaccuracies, but orally the applicant explains the material confidently and with the help of the teacher is corrected, the substantive material is presented well, general conclusions are formulated in the conclusion, the topic is generally disclosed with minor gaps, information in the presentation is provided with references to sources, but they are formatted with errors.
	2	The report and presentation were completed independently, the design meets the requirements, the relevance of the topic was worked out with the indication of previously unresolved aspects, the theoretical analysis is thorough and independent, the applicant explains the material orally and without the help of a teacher, the meaningful material is presented well, independent conclusions are formulated in the conclusion, the topic is generally disclosed, information the presentation is presented using self-developed schemes, drawings, graphs, contains links to sources that are appropriately designed and are relevant.

	3	The report and presentation are made independently and original, the design meets the requirements, the relevance of the topic is fully disclosed with the indication of previously unresolved aspects, the object and subject are correctly defined, the hypothesis of own research, the method corresponds to the topic and the task, the theoretical analysis is thorough and independent, the applicant freely presents material; the content of the presentation is not overloaded with slides with text material; the conclusion formulates independent thorough judgments supported by factual evidence and calculations, the information on the slides is presented mainly schematically using independently developed drawings and graphs, contains references to sources that are appropriately designed and are relevant.
Solving practical problems, situational exercises and problem situations	0	The applicant did not complete the practical task, situational exercise, problem situation.
	1	The acquirer completed a practical task, solved a situational exercise, a problematic situation, but did not sufficiently reveal the essence, allowing at the same time significant inaccuracies; lack of developed skills and research and substantiation of conclusions; a limited number of sources were used.
	2	The applicant completed a practical task, solved a situational exercise, a problem situation, but demonstrates fragmented knowledge of the subject of study and research, has difficulties in identifying its essential features, identifying cause-and-effect relationships and formulating conclusions; a limited number of sources were used.
	3	The applicant completed a practical task, solved a situational exercise, a problem situation, fully demonstrates knowledge of the subject of study, clearly describes its essential features, reveals cause-and-effect relationships and formulates conclusions; freely uses acquired theoretical knowledge when analyzing practical material; in addition to the recommended literature, uses additional literature, demonstrates knowledge of the content of relevant normative legal acts.
	4	The applicant completed a practical task, solved a situational exercise, a problem situation, fully substantiates the chosen research methods and tools, fully and clearly presents the main theoretical concepts for the analysis of practical material; in the analytical/calculation part, it provides a full-fledged analysis of the problem under investigation, its comprehensive coverage, in the conclusion, it formulates detailed conclusions, in addition to the recommended literature, it uses additional literature, it demonstrates knowledge of the content of the relevant regulatory and legal acts.
	5	The applicant completed a practical task, solved a situational exercise, a problem situation, fully demonstrates mastery of scientific research skills; shows independence in the selection, analysis and generalization of relevant statistical and analytical information; draws clear and correct conclusions from the considered problem. The applicant performs a task, solves a situational exercise, a problem situation with a creative approach, using non-standard phrases, demonstrates a detailed, interesting vision, which is distinguished by own thoughts and conclusions; in addition to the recommended literature, uses additional literature, demonstrates knowledge of the content of relevant normative legal acts.
Control work on meaningful	0	The answer to the question is incorrect.
	0,5	The answer to the question is correct.

modules in the form of testing		
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**Deadlines and reassignment policy:** Assignments that are submitted late without good reason will be graded at a lower grade (-10%). Mandatory attendance of students at the final examination. Rescheduling takes place with the permission of the dean's office if there are valid reasons.

**Policy on academic integrity:** regulated by the Code of Academic Integrity of participants in the educational process of the Odessa I.I. Mechnikov National University (order No. 83-02 dated July 1, 2020).

**Attendance Policy:** Attendance is mandatory. In the event that the applicant is absent from a lecture or a practical session, he is obliged to make up for the missed session through a survey outside the classroom time (teacher consultation time).

Lessons that have not been completed are considered failed and no points are awarded for them. As a result, the student's knowledge, evaluated according to the 100-point system, is reflected in the credit and examination information and the credit book.

## **11. Questions for control**

1. Analyze the definition and structure of the information market.
2. Describe information products and services.
3. List the features of information products and services as a product.
4. Analyze the characteristics of the sectors of the information market.
5. Analyze the functioning mechanism of the information market.
6. Describe the objects and subjects of the information market.
7. Analyze the development trends of the innovative IT infrastructure of Ukraine.
8. Analyze the critical problems of the IT industry and ways to overcome them.
9. Analyze the organization of state support for the IT industry.
10. Analyze the peculiarities of the IT sector of the innovative market and global trends.
11. Describe the trends, structure and obstacles to the development of the Ukrainian IT market.
12. Describe the features of marketing innovations in the IT sector.
13. Analyze the prospects for the development of the IT consulting sector (in the UK and the world).
14. State the characteristics and types of franchising.
15. State the characteristics and types of outsourcing.
16. Analyze the definition and components of marketing.
17. Describe the concept and functions of marketing information products and services.
18. Analyze the features of marketing management of information products and services.
19. Compare the definition of marketing by different authors.
20. Draw a conclusion about the evolutionary vector of the conceptual apparatus.
21. Analyze the principles of marketing of innovative activities.

22. Describe the K\*K\*K Model.
23. Analyze the features of PP as a product.
24. Describe the factors of competitiveness of PE.
25. Give the characteristics and values of the elements of the K\*K\*K model.
26. Give examples of each K in the model.
27. Name the main principles of innovative marketing of PP.
28. Analyze the stages of innovative marketing according to Kotler.
29. Analyze marketing information and the marketing environment above.
30. Analyze the system of marketing research and marketing information, its purpose.
31. Analyze the segments of the information market and their features.
32. Define consumers of information products, services and systems.
33. Describe the interaction mechanism of distribution channel participants.
34. Describe the channels and means of distribution of information products, services and systems.
35. Describe the CRM strategy - modeling customer relationships.
36. Analyze the factors increasing the role of the CRM concept in the modern economy.
37. Analyze CRM customer relationship management systems.
38. List the classifications of CRM systems.
39. Conduct a segmental analysis of the Ukrainian market of CRM systems.
40. Analyze the advantages and features of Internet marketing.
41. Compare Internet marketing - electronic business - e-commerce.
42. List the criteria and performance indicators of the site.
43. Describe the concept of benchmarking, types of benchmarking and subsystems.
44. Describe modern methods of site optimization
45. Analyze the motivation of creation, sale, purchase of innovation.
46. Analyze competitiveness in the innovation field.
47. Describe the tools of promotion in innovative marketing of PP.
48. Analyze the role of digital marketing in PE marketing.
49. Analyze the criteria of an effective information security system in modern conditions of dynamic business processes.
50. Describe information security management as part of the marketing management system.
51. Describe organizational structures, policies, responsibilities, procedures, processes, and resources for creating an effective information access management mechanism.
52. Describe the state regulation of information protection in Ukraine.
53. Describe an adaptive approach to the formation of an information security system.
54. Analyze the strategy of intellectual property protection in the marketing of innovative IT projects.
55. Analyze directions for improvement of the national system of protection of intellectual property rights and copyrights and the strategy of Ukraine's integration into the EU.

56. Issues of legal protection of software products and IT startups.
57. Intellectual property right. Property rights in the IT industry.
58. Analyze copyright and patent law. General civil law and special laws of Ukraine regarding intellectual property in the IT industry.
59. Analyze the forms of protection of intellectual property rights in the IT industry.
60. Analyze international standards for the protection of intellectual property rights in the IT industry.

## 12. Distribution of points received by higher education applicants

### Evaluation criteria

Current and periodic control						Total
module 1		module 2		module 3		100
T1	T2	T3	T4	T5	T6	
15	15	15	15	5	5	
Current control in the form of testing (blank testing) according to the content module 1: 10		Current control in the form of testing (blank testing) according to the content module 2: 10		Current control in the form of testing (blank testing) according to the content module 3:10		
Total M 1: 40		Total M 2: 40		Total M 3: 20		
Total: 100						

T1, T2 ... T6 – topics of content modules

\* Note: Control work for the content module is carried out in the form of test tasks after completing the study of the educational material of each content module. Test tasks for control papers consist of 10 test tasks and correspond to the content of the educational material of the relevant content module. For each correct answer to one test task, the applicant receives 0.5 points.

### **Rating scale: national and ECTS**

Total points for all types of educational activities	Evaluation ECTS	Evaluation according to the national scale
90 - 100	A	excellent
85 - 89	B	good
75 - 84	C	
70 - 74	D	
60 - 69	E	satisfactory
35 - 59	FX	Unsatisfactory with the possibility of reassembly
0 - 34	F	Unsatisfactory with mandatory repeated study of the discipline

### **Criteria for evaluating educational achievements of higher education applicants**

Evaluation according to the national scale	100 point scale ECTS	Theoretical training	Practical training

excellent	90 – 100 / A	The applicant fully possesses the educational material, presents it freely, comprehensively, substantiated and reasoned during oral presentations and written answers. The applicant demonstrates a clear knowledge of the relevant categories, their content, an understanding of their relationship, correctly formulates the interpretation of the relevant concepts, demonstrates knowledge of the content of the regulatory and legal acts provided for by the program, and draws independent conclusions. The acquirer knows how to identify cause-and-effect relationships, independently find additional information and use it to implement tasks, freely uses new information technologies to replenish knowledge.	The applicant can reasonably choose a rational method of performing practical tasks, performs practical tasks not provided for in the curriculum, freely uses the acquired theoretical knowledge when analyzing practical material, shows a creative approach to the performance of individual and collective tasks during individual work.
good	85 – 89 / B	The applicant has a sufficiently complete command of the educational material, presents it reasonably during oral presentations and written answers, while using normative and mandatory literature, applies knowledge to solve standard situations, independently analyzes, summarizes and systematizes educational information, but allows for inaccuracies, which are not essential for the characterization of the subject of the question and do not significantly affect the general characterization of this or that phenomenon (concept).	The applicant has stable skills in performing practical tasks, solves most practical tasks correctly.
	75 – 84 / C	The applicant shows a generally high level of knowledge regarding the entire program of the educational discipline, possesses the educational material at a sufficient level, applies knowledge to solve standard situations, but does not know how to independently analyze some questions, does not fully convincingly argue his answers, allows minor inaccuracies.	According to the sample, the applicant independently performs practical tasks provided for by the program of the academic discipline.
Satisfactorily	70 – 74 / D	The acquirer possesses the educational material at the	The applicant has elementary skills in performing practical

		reproductive level or reproduces a certain part of the educational material with elements of logical connections. The student knows the basic concepts of the educational material, but has difficulties in identifying the essential features of the subject and in identifying cause-and-effect relationships and formulating conclusions.	tasks, solves only half of the practical tasks correctly.
	60 – 69 / E	The applicant does not fully understand the subject of the academic discipline, there are shortcomings in the disclosure of the content of concepts, categories, regularities, names and content of regulatory and legal acts. The acquirer provides unclear characteristics of the relevant phenomena, expresses his thoughts with a significant violation of the logic of the presentation of the material.	The acquirer can use knowledge only in standard practical situations, has unstable skills in performing practical tasks, makes many significant mistakes.
Unsatisfactory with the possibility of reassembly	35 – 59 / FX	The student does not correctly reveal the essence of the basic issues of the educational discipline, makes significant substantive errors, possesses the educational material superficially and fragmentarily, unsystematically singles out random features of the subject, does not know how to formulate his opinion and present it in a logical sequence, make generalizations and conclusions.	The applicant is able to perform only some practical tasks with the help of a teacher. The acquirer lacks developed skills and abilities.
Unsatisfactory with mandatory repeated study of the discipline	0 – 34 / F	The applicant does not know the basic provisions of the academic discipline, does not have the educational material.	The acquirer performs only elements of practical tasks, receives constant help from the teacher.



### ***13. Educational and methodological support***

the work program of the academic discipline;

- reference synopsis of lectures;
- multimedia presentations;
- handout illustrative material (examples of documents);
- test tasks.

- Chaikovska M. P., Sadchenko O. V., Robul Yu. V. Methodical recommendations for the study of the educational discipline "Marketing of software products": for students. day and extracurricular from FMFIT field of knowledge: 12 "Information technologies". Level of higher education: second (master's); Odesa I. Mechnikov national University, econ.-law. f-t, cafe marketing and business administration. Odesa. 2020. 31 p.  
<http://dspace.onu.edu.ua:8080/handle/123456789/30028>

- Chaikovska M. P., Sadchenko O. V., Robul Yu. V. Methodical recommendations for the organization of independent work in the educational discipline "Marketing of software products": for students. day and extracurricular from FMFIT field of knowledge: 12 "Information technologies". Level of higher education: second (master's); Odesa I. Mechnikov national University, econ.-law. f-t, café marketing and business administration. Odesa. 2020. 34 p.  
<http://dspace.onu.edu.ua:8080/handle/123456789/30027>.

### **14. Literature**

#### *Normative and legal acts*

1. World Copyright Convention of 1952. URL: [https://zakon.rada.gov.ua/laws/show/995\\_052](https://zakon.rada.gov.ua/laws/show/995_052).
2. About information: Law of Ukraine dated October 2, 1992 No. 2657-XII. URL: <http://zakon.rada.gov.ua/laws/show/2657-12>.
3. On copyright and related rights: Law of Ukraine dated December 23, 1993. URL: <https://zakon.rada.gov.ua/laws/show/3792-12>.
4. On scientific and technical information: Law of Ukraine dated June 25, 1993. URL: <https://zakon.rada.gov.ua/laws/show/3322-12>.
5. On state secrets: Law of Ukraine dated January 21, 1994. URL: <https://zakon.rada.gov.ua/laws/show/3855-12>.
6. On the protection of information in information and telecommunication systems: Law of Ukraine dated July 5, 1994 No. 80/94-VR. URL: <http://zakon.rada.gov.ua/laws/show/80/94-vr>.
7. On scientific and scientific and technical activities: Law of Ukraine dated November 26, 2015. URL: <https://zakon.rada.gov.ua/laws/show/848-19>.
8. On the approval of the concept of reforming the state system of legal protection of intellectual property in Ukraine: Resolution of the Cabinet of Ministers of Ukraine dated June 1, 2016. URL: <https://zakon.rada.gov.ua/laws/show/402-2016>
9. On the main principles of ensuring cyber security of Ukraine: Law of Ukraine dated October 5, 2017 No. 2163-VIII. URL: <http://zakon.rada.gov.ua/laws/show/2163-19>.
10. On the approval of the Concept of the development of the digital economy and society of Ukraine for 2018-2020 and the approval of the plan of measures for its implementation: Order of the Cabinet of Ministers of Ukraine of January 17, 2018 No.

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*Main literature*

1. Aksyutina A.V., Nestertsova-Sobakar O.V., Tropin V.V. etc. Intellectual property: education. study guide higher education closing In general ed. Ph.D. law of Science, Assoc. Nestertsova-Sobakar O.V. Dnipro: Dniprop. state University of Internal Affairs of affairs, 2017. 140 p.
2. Zabarna E.M., Oklander T.O. Marketing Textbook. Odesa: ONPU, 2012. 149p
3. Intellectual property: study guide. Under the editorship V.P. Martynyuk Ternopil: TNEU, 2015. 360 p.
4. Kotler F., Katarjaya G., Setyavan I. Marketing 4.0. From traditional to digital. Kyiv: KM-BUKS, 2019. 224 p.
5. Kibyk O. M., Kotlubai V. O., Khaiminova Yu. V., Nesterova K. S., Kalmykova N. Yu. Marketing: teaching method. manual Odesa, 2020. 68 p.
6. Palekha Yu.I., Palekha O.Yu. Marketing of information products and services: a study guide. K.: Lira-K, 2019. 480 p.
7. Senyshyn O. S., Kryveshko O. V. Marketing: academic. manual. Lviv: Ivan Franko Lviv National University, 2020. 347 p.
8. Chaikovska M.P. Modeling the activity of enterprises: a training manual with the seal of the Ministry of Education and Culture of Ukraine (Letter No. 1/11-18686 dated 03.12.2013). Odesa: ONU, 2013. 360.
9. Chaikovska M.P. Innovative management: Study guide. Odesa: ONU, 2015. 382 p.
10. Chaikovska M.P. Investing: a textbook. Odesa: ONU, 2016. 312 p.

*Additional*

1. Chaikovska M., Bielenkaia E. Management Technologies of Business Modeling in IT Startup Marketing. *Marketing and digital technologies*. 2022. Volume 6.№ 1. Pp. 78-91
2. Chaikovska M., Shkeda O. Analysis of digital indicators of the convergence of behavioral and informational trends of society management in the framework of the societal concept of influencer marketing. *Marketing and digital technologies*. 2022. Volume 6., № 2. P.73-85.
3. Chaikovska M., etc Analysis of technological innovations in digital marketing. *Eastern-European Journal of Enterprise Technologies*. 2018. Vol 5, No 3(95). P. 80-91.
4. Chaikovska M., Chaikovskyy M. Strategies for implementation of Affiliate-projects in marketing activity. *Scientific Journal of Polonia University*. 2018. № 2 (27). P.18-25.
5. Chaikovska M., Chaykovskyy O. Secure and efficient cloud computing environment. *International Scientific Journal INDUSTRY 4.0*, ISSUE 3/2018. Bulgaria: STUME, 2018. pp.112-115.
6. Chaikovska M., Azeev A. Management of information security risk in the protection of continuity of information and communication systems. *International Scientific Journal Proceedings Innovstions-2018*. Volume 1(2) Bulgaria, Varna: STUME, 2018. pp.15-19.

7. Chaikovska M. Problems of implementation of IKT-projects in marketing activity of the enterprise. *Scientific letters of Academic society of Michal Baludansky*, 2015, № 3. Slovakia, Kosice:ASMB, 2015. c. 33-36.
8. Digital marketing - the marketing model of the 21st century: a collective monograph / by General ed. Doctor of Economics, Prof. M. A. Aucklander. Odesa: Astro-print, 2017. 292 p.
9. Karpishchenko O.O. Peculiarities of promotion of software as a service. Economic problems of sustainable development: abstracts of the reports of the scientific and technical conference of teachers, employees, graduate students and students of the Faculty of Economics and Management dedicated to the Day of Science in Ukraine, Su-my, April 18-22, 2011 / Resp. for issue A. Yu. Zhulavskiy Sumy: Sumy State University, 2011. Part 4. P. 152-153.
10. Chaikovska M. P. Social features and marketing aspects of the formation of the IT ecosystem of Ukraine. Theoretical and methodological bases of management of social systems in the conditions of innovative and ecological development: marketing aspects: monograph / by general. ed. Doctor of Economics, Prof. O. V. Sadchenko. Odesa: Interprint, 2020. P. 70-80.
11. Chaikovska M. P., Azeev A. S. Modern trends in the typology of information threats and trends in the information security market. *Economy and society*. 2017. No. 13. P. 157-163
12. Chaikovska M.P. Modeling "sales funnel" in customer-oriented marketing. Bulletin of the Khmelnytskyi National University. *Scientific journal. Economic sciences*. Volume 2. Khmelnytskyi: Khnu, 2016. P.99-104.
13. Chaikovska M.P., Medved T.S. Dynamic programming methods in real-time pricing problems for systems with a stochastic demand function. *Economic Bulletin of the National Technical University of Ukraine KPI*, 2016(12). P. 55-65.
14. Chaikovska M. P. Conceptual and methodological principles of management of marketing IT projects in conditions of digital transformations: monograph. Odesa: ALDI-PLUS, 2021. 370 p.

### **15. Electronic information resources**

1. Official website of the Cabinet of Ministers of Ukraine [Electronic source: official website / Cabinet of Ministers of Ukraine: [http: // – http://www.ukr-gold.net/links/21951/21962/](http://www.ukr-gold.net/links/21951/21962/)].
2. Verkhovna Rada of Ukraine [Electronic source: official site / Verkhovna Rada of Ukraine. [http: // www.rada.gov.ua](http://www.rada.gov.ua)].
3. Official website of the Accounting Chamber of Ukraine [[Electronic source]: official website / Accounting Chamber of Ukraine; CJSC Softline: <http://www.ac-rada.gov.ua/control/main/uk/index>].
4. Internet portal Activities of the UN system to achieve the Millennium Development Goals" [Electronic source]: Section of web services of the Department of Public Information of the United Nations.: <http://www.un.org/russian/millenniumgoals/>.
5. State Statistics Committee of Ukraine <http://www.ukrstat.gov.ua/>
6. National V.I. Vernadskyi Library of Ukraine <http://www.nbu.gov.ua/>
7. National Parliamentary Library of Ukraine <http://www.nplu.kiev.ua/>

**Distribution of points received by students of higher education according to the results of current, periodic and final control**

Topics of practical lessons	Number of points for the type of work	Total
<b>Module 1. Marketing of software products and services in the general concept of marketing</b>		
Digital transformations of the mechanisms of interaction of the subjects of marketing activity in the conditions of the transition of the organization to the use of digital channels.	0 - 2 (survey) 0 – 3 (abstract, presentation) 0 – 5 (solving practical problems, situational exercises and problem situations) 0 – 5 (solving practical problems, situational exercises and problem situations)	0 - 15
Marketing of software products and information services as an independent direction in marketing activities	0 - 2 (survey) 0 – 3 (abstract, presentation) 0 – 5 (solving practical problems, situational exercises and problem situations) 0 – 5 (solving practical problems, situational exercises and problem situations)	0-15
Control work on content module 1	0 - 10	0 - 10
<b>Module 2. Marketing management tools and tactics in the IT industry</b>		
Marketing research and marketing information.	0 - 2 (survey) 0 – 3 (abstract, presentation) 0 – 5 (solving practical problems, situational exercises and problem situations) 0 – 5 (solving practical problems, situational exercises and problem situations)	0-15
Marketing planning, strategy and tactics in the IT industry.	0 - 2 (survey) 0 – 3 (abstract, presentation) 0 – 5 (solving practical problems, situational exercises and problem situations) 0 – 5 (solving practical problems, situational exercises and problem situations)	0-15
Control work M 2	0 - 10	0 - 10
<b>Module 3. Management of a complex system of protection of information and intellectual property in the IT industry</b>		
Ensuring information security in the marketing IT project management system	0 – 5 (solving practical problems, situational exercises and problem situations)	0 - 5
Intellectual property protection strategy in the marketing of innovative projects in the IT industry	0 – 5 (solving practical problems, situational exercises and problem situations)	0-5
Control work M 3	0 - 10	0-10
<b>Total</b>		<b>0 - 100</b>