

The syllabus of the discipline  
*Information systems in e-commerce*

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Field name	Detailed content, comments
Name of the faculty	Faculty of Infocommunications
Level of higher education	First (bachelor's)
Code and name of the specialty	172 Telecommunications and radio engineering
Type and name of educational program	EPP "Information and Network Engineering"
Name of the discipline	Information systems in e-commerce
Number of ECTS credits	3
Discipline structure (distribution by types and hours of study)	16 hours - 8 lectures, 4 hours - 2 practical classes, 16 hours - 4 laboratory classes, 6 hours - 3 consultations, 48 hours - homework, <b>type of control:</b> credit
Schedule (terms) of studying the discipline	3rd year, VI semester
Prerequisites for studying the discipline	Basic knowledge of: Fundamentals of information and communication technologies; Fundamentals of circuitry; Higher mathematics (special sections); Guided electrical and optical communication systems; Data processing technologies in IR; Local area networks; Mobile systems communication.
Competences, knowledge, skills, understanding, which is acquired by the applicant in higher education in the learning process	Competences, knowledge, skills, understanding acquired by the applicant in higher education in the learning process The discipline is used to form the following competencies: LC-3 Ability to use the basics of legal knowledge in various fields. ZK-4 Skills in the use of information and communication technologies. LC-5 Ability to search, process and analyze information from various sources. FC-3 Ability to have the basic methods, methods and means of obtaining, storing, processing information. FC-4 Ability to have skills of independent work on the computer and in computer networks; to carry out computer modeling of devices, systems and processes with use of universal packages of applied computer programs. FC-5 Ability to use regulatory and legal documentation specific to the field of telecommunications networks, telecommunications and radio systems (laws of Ukraine, technical regulations, international and national standards, recommendations of the International Telecommunication Union, etc.). FC-8 Willingness to promote the introduction of advanced technologies and standards. FC-9 Ability to accept and develop new equipment in accordance with current regulations. FC-14 Readiness to study scientific and technical information, domestic and foreign experience on the subject of investment (or other) project; skills collect and analyze information in order to form a weekend data for the design and manufacture of telecommunications and radio equipment.

The quality of the educational process	Educational-methodical and material-technical resource provision of the educational program, within the framework of which the discipline is studied, meets the licensing requirements and accreditation conditions of the educational activity of the university. Annual monitoring and revision of the curriculum of the discipline in accordance with the requirements and recommendations of the Ministry of Education and Science, state certification of acquired competencies of graduates, standards of cooperation with employers to ensure a competitive level of training Adherence to the principles of academic integrity ( <a href="https://lib.nure.ua/plagiat">https://lib.nure.ua/plagiat</a> ). Contains public information on the requirements, competencies, level of education within the current educational program
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### **Description and content of the discipline**

The purpose of the discipline - the formation of competencies in the implementation of business transactions and e-commerce agreements using information technology.

### **Content**

#### **Content module 1. General principles of e-commerce in Ukraine**

Topic 1. The concept and essence of e-commerce. E-commerce in Ukraine.

Topic 2. Basic information technologies of e-commerce

Topic 3. B2B e-commerce system

Topic 4. B2C e-commerce systems

#### **Content module 2. E-commerce systems in the corporate sector**

Topic 1. Ways of organizing online stores

Topic 2. E-commerce systems G2C and G2B

Topic 3. Internet marketing

Topic 4. Electronic trust services

### **Learning outcomes of higher education**

As a result of studying the discipline, students must:

**know:** the concept of "e-business" and "e-commerce"; features of functioning of business models of e-commerce; information technologies for the implementation of marketing activities on the Internet; features and benefits of Internet marketing; elements of the electronic market; features of virtual enterprises; e-commerce tactics.

**be able to:** use modern network information products; to organize the company's communications in the infocommunication network; to build neural networks of different structure and complexity; develop advertising campaigns in the infocommunication network; use methods of banner advertising; to develop conceptual provisions for the organization of virtual representation of the enterprise in the network; use payment systems for online payments; create multifunctional Web-sites for commercial activities on the Internet; perform business operations and transactions using modern electronic tools

and applications for building business systems on the Internet.possess

List of competencies: PRN-3 Apply: basic knowledge in the field of informatics and modern information technologies, have skills in programming and use of software and work in computer networks, ability to create databases, use Internet resources and demonstrate ability to develop algorithms and computer programs for the use of high-level languages and object-oriented programming technologies for the implementation of tasks in the field of telecommunications and radio engineering. PRN-5 Be able to use computer-aided design systems for the development of devices for telecommunications and radio systems and networks. PRN-6 Be able to use modern programming languages to implement algorithms for managing telecommunications networks. PRN-7 Be able to work with tools of collective management and distributed information storage. PRN-8 Ability to analyze the performance of software products, to have the means of their software debugging and testing, to apply modern technologies of visual design of software products. PRN-10 Ability to calculate the parameters of efficiency and quality of work of elements, objects and services provided in telecommunications. PRN-12 Ability to explain and reproduce the principles of construction and operation of hardware and software systems of management and maintenance systems and their application in information and telecommunication networks, telecommunication, radio and technological systems; PRN-13 Skills to ensure reliable and high-quality operation of information and communication networks, telecommunication and radio systems.

### **Assessment system according to each task for passing the test / exam**

To assess the work of a student during the semester, the final rating score  $Q_{\text{sem}}$  is calculated as the sum of marks for different types of classes and control activities

Type of lesson / control measure	Rating
Lb № 1, 2	$(6...10) \times 2 = 12...20$
Pr № 1	$(6...10) \times 1 = 6...10$
Control testing 1	$(6...10) \times 1 = 6...10$
<b>Checkpoint 1</b>	<b>22...40</b>
Lb № 3, 4	$(6...10) \times 2 = 12...20$
Pr № 2	$(6...10) \times 1 = 6...10$
Control testing 2	$(6...10) \times 1 = 6...10$
Practice Control testing	$(12...20) \times 1 = 12...20$
<b>Checkpoint 2</b>	<b>38...60</b>
<b>Total for the semester</b>	<b>60...100</b>

## Qualitative evaluation criteria in the national scale and ECTS

**Satisfactory, D, E (60-74).** Have a minimum of knowledge and skills. Work out and defend all laboratory work and IDPs.

**Well, C (75-89).** Know the main topics of the discipline. Work out and defend all laboratory work and ID.

**Excellent, A, B (90-100).** Know all the topics of the discipline. Work out and defend all laboratory work and IDPs. Prepare essays on each of the content modules.

### Assessment scale: national and ECTS

The sum of points for all types of educational activities	ECTS assessment	Score on a national scale	
		for exam, course project (work), practice	for offset
90 – 100	<b>A</b>	perfectly	credited
82-89	<b>B</b>	fine	
74-81	<b>C</b>	satisfactorily	
64-73	<b>D</b>		
60-63	<b>E</b>		
35-59	<b>FX</b>	unsatisfactory with the possibility of reassembly	not credited with the possibility of re-assembly
0-34	<b>F</b>	unsatisfactory with mandatory re-examination	not credited with compulsory re-study of the discipline

### Methodical support

#### Basic literature

1. Zakon Ukrainy «Pro elektronnu komertsiiu»
2. Zakon Ukrainy "Pro zakhyst prav spozhyvachiv"
3. Zakon Ukrainy "Pro reklamu"
4. Zakon Ukrainy "Pro elektronni dokumenty ta elektronnyi dokumentoobih"
5. Zakon Ukrainy "Pro zakhyst informatsii v informatsiino-telekomunikatsiinykh systemakh"
6. Zakon Ukrainy "Pro telekomunikatsii"
7. Zakon Ukrainy "Pro elektronni dovirchi posluhy"
8. Zakon Ukrainy "Pro platizhni systemy ta perekaz koshtiv v Ukraini",
9. Zakon Ukrainy "Pro finansovi posluhy ta derzhavne rehuliuвання ryнкiv finansovykh posluh"
10. Zakon Ukrainy "Pro zakhyst personalnykh danykh"
11. Tsarov R.Iu., Nikitiuk L.A. Elektronna komertsii: navchalnyi posibnyk vyshchykh navchalnykh zakladiv. – Odesa, OSNAZ im. O.S.Popova, 2012. – 294 s.

12. Shaleva O. I. Elektronna komertsiiia. Navch. posib. /O. I. Shaleva. – K.: Tsentri uchbovoi literatury, 2011. – 216 s.

13. Lytovchenko I. L. Internet marketynh: navchalnyi posibnyk / I. L. Lytovchenko, V. P. Pylypchuk. – K.: Tsentri uchbovoi literatury, 2008. – 184 s.

#### Support literature

1. Zaitseva O.O., Bolotyniuk I.M. Elektronnyi biznes: Navchalnyi posibnyk. / Za nauk. red. N.V. Morze. – IvanoFrankivsk : «LileiaNV» – 2015. – 264 s.

2. Dedenev M. A., Dыlnov D. V., Yvanov M. A. Zashchyta ynformatsyy v bankovskom dele y elektronnom byznese. – M.: KUDYTs-OBRAZ, 2004. – 512 s.

3. Zapechnykov S.V. Kryptohrafycheskye protokoly y ykh prymerenye v fynansovoi y kommercheskoi deiatelnosti. – M.: Horiachaia lynia – Telekom, 2007. – 320 s.

4. Kuznetsov O. O. , Yevseiev S.P., Korol O.H. Zakhyst informatsii v informatsiinykh systemakh – Kharkiv: Vyd. KhNEU, 2010.

#### Methodical instructions for different types of classes

1. Konspekt leksii z dystsypliny “Informatsiini tekhnolohii v elektronni komertsii»» dlia studentiv usikh form navchannia spetsialnosti 172 «Telekomunikatsii ta radiotekhniki», spetsializatsii «Telekomunikatsii», «Informatsiino-merezhna inzheneriia» [Elektronnyi dokument] / Uporiad.: V.A. Zolotarov. – Kharkiv: KhNURE, 2017. – 90 s.

2. Metodychni vkazivky do vykonannia laboratornykh robit z dystsypliny “Informatsiini tekhnolohii v elektronni komertsii»» dlia studentiv usikh form navchannia spetsialnosti 172 «Telekomunikatsii ta radiotekhniki», spetsializatsii «Telekomunikatsii», «Informatsiino-merezhna inzheneriia» [Elektronnyi dokument] / Uporiad.: V.A. Zolotarov. – Kharkiv: KhNURE, 2017. – 18 s.

3. Metodychni vkazivky do praktychnykh zaniat z dystsypliny “Elektronni platizhni systemy» dlia studentiv usikh form navchannia spetsializatsii «Informatsiino-merezhna inzheneriia», «Telekomunikatsii» spetsialnosti 172 «Telekomunikatsii ta radiotekhniki» [Elektronnyi dokument] / Uporiad.: V.A. Zolotarov. – Kharkiv: KhNURE, 2017. – 12 s.

4. Metodychni vkazivky do samostiinoi roboty z dystsypliny «Informatsiini tekhnolohii v elektronni komertsii» dlia studentiv vsikh form spetsialnosti 172 «Telekomunikatsiita radiotekhnika» spetsializatsii «Telekomunikatsii», «Informatsiino-merezhna inzheneriia»[Elektronnyi dokument] / Uporiad. V.A.Zolotarov. – Kharkiv, KhNURE, 2017. – 41 s.

#### Information support

#### Original software