

O. M. BEKETOV NATIONAL UNIVERSITY OF URBAN ECONOMY IN KHARKIV

**Educational and Scientific Institute
energy, information and transport infrastructure**



WORK PROGRAMME OF THE PRACTICAL TRAINING

STUDYING PRACTICE

type of discipline, code for EP	<i>compulsory, EC 36</i>
semester	<i>2</i>
number of ECTS credits	<i>4</i>
duration	<i>4 weeks</i>
form of final control	<i>defence of the practical training report</i>
language of instruction, teaching and assessment	<i>English</i>
department	<i>Computer Science and Information Technology</i>

for higher education applicants:

level of higher education	<i>first (bachelor's degree)</i>
branch of knowledge	<i>12 Computer Science and Informatic Technologies</i>
specialty	<i>122 Computer Science</i>
educational programme	<i>Computer Science</i>
form of study	<i>full-time</i>

2021 – 2022 ACADEMIC YEAR

Developers:

Surname and initials	Position, email	Scientific degree, academic title	Signature
Mykola KARPENKO	Associate Professor Mikola.Karpenko@kname.edu. ua	PhD in Technical Science (Candidate of Technical Science), Associate Professor	
Yuri LEVIKOV	Lecturer Yuriy.Levikov@kname.edu.ua		

The work programme was approved **at the proceedings** of the Department of *Computer Science and Information Technology*

Minutes dated «30» 08 2021 No. 2

Head of the Department  (Maryna NOVOZHYLOVA)

The work programme of the discipline corresponds to the Educational Programme « Computer Science»

Guarantor of the Educational Programme  (Mykola PAN)

1. Purpose of the practical training

Mastering modern information technologies and their practical use in design activities, acquiring skills and professional techniques for processing text and tabular information using packages (including on the basis of cloud technologies) of general purpose, studying visualization tools, specialized applications for processing graphic information (vector and raster types), basic approaches and practical techniques for preparing presentations, software and mastering resources to support presentation work. Also, the introductory practice aims to form in future specialists a modern level of information culture and basic skills in automating individual components of the design work.

2. Interdisciplinary connections

The study of this discipline is directly based on the disciplines "Higher Mathematics", "Programming", "Web Design".

3. Learning outcomes

Programme learning outcome	Teaching methods	Forms of evaluation	Learning outcomes of the discipline
<p>PLO 11. Have the skills to manage the life cycle of software, products and services of information technologies in accordance with the requirements and limitations of the customer, be able to develop project documentation (feasibility study, technical task, business plan, agreement, contract, contract).</p> <p>PLO14. Apply knowledge of methodology and CASE-means of designing complex systems, methods of structural analysis of systems, object-oriented design methodology in the development and research of functional models of organizational, economic and production-technical systems.</p>	<p>Verbal, visual, practical, analytical, reproductive (explanatory-illustrative). Solving of tasks. Lecture notes. Individual work.</p>	<p>Reports on laboratory classes, testing, practical testing of skills and abilities, Individual task, exam.</p>	<p>Be able to use basic knowledge of computer science and IP to organize an effective system of document management project work</p> <p>To know methods of automation of documentary support of design works and elements of document circulation of the enterprise and to have skills of their realization</p> <p>Know the methods of using general-purpose software products to create elements of information systems for document automation</p> <p>Know the methods of using cloud technologies and special software products in solving problems of document automation in design activities</p>

4. Programme of the practical training

Content module 1. Use of office applications in professional activities

The issues considered: the structure of the educational system, the capabilities of it-Academy, special issues regarding the work with office applications, data processing and tabular documents, visualization tools and business graphics, automation elements, Dash tools, OneNote technologies, the use of time planning systems, special issues regarding the use of office technologies in design activities.

Content module 2. Cloud technologies and visualization tools in design activities

The issues of using cloud technologies (in particular, Google and Outlook) in projecting activities, namely: organization and maintenance of document flow, data processing, support of presentation work, etc. are considered.

Content module 3. Use of computer graphics and specialized online resources in design activities

The issues considered: work with raster graphics (basic techniques and software), techniques for working with vector graphics, practical methods of preparation of graphic material, technology of work with electronic presentations MS PowerPoint, online services to support presentation work and visualization tools.

5. Structure of the discipline and distribution of time

Content modules	Number of hours				
	total	includes			
		lectures	practice	lab	independent work
Module1 (1 semester)	120	–	–	–	120
Content module 1	30	–	–	–	30
Content module 2	30	–	–	–	30
Content module 3	30	–	–	–	30
Final control(exam)	30	–	–	–	30

6. Methods of control and the procedure for assessing learning outcomes

The current control system is based on the use of such forms of control:

- interview based on lecture materials;
- interview based on the results of the practical lesson;
- testing in a virtual educational environment;
- presentation of the report on the individual task.

The final control in the form of a differentiated test is carried out in writing.

Structure of the practical training and distribution of points

Змістові модулі	Максимальна кількість балів
MODULE (semester)	100
Content module 1	20
Content module 2	20
Content module 3	15
Individual task	15
Final control	30

Types of the tasks, means of control and maximum number of points

Types of the tasks and means of control	Distribution of points
Content module 1	20
Practical task "Organization and processing of the document registry", (report, oral survey)	5
Tasks for independent work "Organization and processing of the document registry", (report, oral survey)	5
Practical task "Database processing" (on the example of analyzing the database of warehouse operations, according to individual data)	5
Tasks for self-operation "Database processing" (according to individual data, (report, oral survey)	5
Content module 2	20
Practical task "Development of graphic material and presentation on practice materials", (report, oral survey)	10
Tasks for independent work "Development of graphic material and presentation on practice materials", (report, oral survey)	10
Content module 3	20
Practical task "Preparation of a report on the work done (as a result of an individual project)", (report, oral survey)	5
Tasks for self-work "Preparation of a report on the work done (based on the individual project)", (report, oral survey)	5
Practical task "Development of a personal WEB-page" (according to the results of practice), (report, oral survey)	5
Tasks for self-work "Development of a personal WEB-page" (according to the results of practice), (report, oral survey)	5
Individual task	15
Final control – differentiated test	30
Theoretical Question 1	10
Theoretical Question 2	10
Problem	10
TOTAL FOR THE MODULE	100

Grading scale

The sum of points for all types of educational activities	Score on a national scale	
	for the exam, diff. test	for test
90-100	excellent	passed
82-89	good	
74-81		
64-73		
60-63	satisfactory	failed with the possibility of retaking
35-59	unsatisfactory with the possibility of retaking	
0-34	unsatisfactory with compulsory re-study of the discipline	failed with compulsory re-study of the discipline

7. Material and technical and information support

Methodical support

1. MS Teams discipline support channel -

https://teams.microsoft.com/#/school/files/%D0%97%D0%B0%D0%B3%D0%B0%D0%BB%D1%8C%D0%BD%D0%B5?threadId=19:af69a4fdfee74aa395c86e2f149b8513@thread.tacv2&ctx=channel&rootfolder=%252Fsites%252Fmsteams_b52e81%252FShared%2520Documents%252FGeneral%252F%25D0%259F%25D1%2580%25D0%25B0%25D0%25BA%25D1%2582%25D0%25B8%25D1%2587%25D0%25BD%25D1%2596%2520%25D0%25B7%25D0%25B0%25D0%25BD%25D1%258F%25D1%2582%25D1%258F

Recommended literature and information resources

1. Aaron Baddeley - EXCEL 2021 ALL-IN-ONE CRASH COURSE (in English) Independently published 514p. (May 4, 2021) ISBN-13: 979-8748834452
2. Matt Vic - Microsoft PowerPoint for Beginners 2021 222p. (in English) Independently published (August 13, 2021) ISBN-13: 979-8456250094
3. M.L. Humphrey - Microsoft Office 2019 Beginner 345p. (in English) M.L. Humphrey Publishing (May 24, 2021) ISBN-13: 978-1637440490

Hardware, equipment, software products

Laboratory	PC and equipment	Name of application packages (including licensed)	Internet access, availability of access channels (yes / no)
Laboratory of Corporate Network Technologies	Computer LENOVO Think Centre E50-00 – 12	- Office 365 (Microsoft Office Professional) - GIMP - NotePad ++ - Maple	Yes