

**NATIONAL UNIVERSITY OF LIFE AND
ENVIRONMENTAL SCIENCES OF UKRAINE**

Department of Statistics and Economic Analysis

«CONFIRMED»
Dean of Economic Faculty,
A. D. DIBROVA
" 30 " 2023

«APPROVED»
at the meeting of the department
of Statistics and Economic Analysis
Record № 12 dated on "28" April 2023
Head of Department
I.D. LAZYSHYNA

«REVIEWED»
Program Coordinator
I.D. LAZARYSHUNA

**PROGRAM ON EDUCATIONAL PRACTICE OF THE DISCIPLINE
"ANALYSIS IN APPLICATION SOFTWARE SOLUTIONS
IN THE AGRICULTURAL SECTOR"**

Speciality:	071 – Accounting and Taxation (Analytical and Accounting and Legal Support of Business)
Faculty:	Economic
Developer:	BOHDANIUK Olena , Associate Professor of the Department of Statistics and economic analysis

Kyiv – 2023

1. DESCRIPTION OF EDUCATIONAL PRACTICE

Field of knowledge, specialty, educational program, educational degree		
Field of knowlege	<u>07 «Management and Administration»</u> (cipher and name)	
Speciality	<u>071 "Accounting and Taxation"</u> (Analytical and Accounting and Legal Support of Business) (cipher and name)	
Educational degree	<i>bachelor</i> (bachelor, specialist, master)	
CHARACTERISTICS OF THE DISCIPLINE		
View	Selective	
Total hours	60	
Number of ECTS credits	2	
Form control	Passed	
INDICATORS OF ACADEMIC DISCIPLINE FOR FULL-TIME EDUCATION		
	full-time education	Correspondence form of education
Year of preparation	3	
Semester	6	
Lecture classes	-	
Practical, seminar classes	4 h	
Laboratory classes	46 h	
Independent work	10 h	
Number of weekly classroom hours for full-time education	60 h	

Results of practical training are acquisition of practical use of applied software solutions for analysis in the agricultural sector.

Objectives:

- Assessments of types of economic information. Database.
- To learn the levels of analysis in applied software solutions.
- To consider analytical application solutions for business entities of the agricultural sector.
- Using of Advanced Excel for Business Analysis.
- Considering Power BI for Business decisions and analytical reporting.
- To learn Google Analytics and You control as an analytical system for compliance, market analysis, business intelligence and investigations.

Educational practice of students is an integral part of the process of training specialists in higher educational institutions. Consistent practical training of students should be carried out in accordance with the tasks of future professional activity, which is defined by the

educational program "Analytical and accounting and legal support of business" and the curriculum.

The purpose of educational practice is to consolidate the theoretical knowledge obtained from the discipline " Analysis in application software solutions in the agricultural sector " and to acquire professional competencies in the processing of statistical information based on the use of Microsoft Excel, Power BI, Tableau, Google Analytics and YouControl.

Educational practices in full will allow students to gain practical skills:

- collection of primary analytical data;
- summary and processing of primary information;
- work with software products Microsoft Excel, Power BI, Tableau, Google Analytics and You control;
- transformation of information using macros into various forms of its storage;
- use of macros to automate ordinary tasks and create user functions of the software product;
- generalization and interpretation of analytical information.

As a result of practical training, students acquire the following competencies:

- use of Microsoft Excel package for processing analytical data;
- data visualization and analysis in Excel;
- the use of macros to solve problems in accordance with a specific situation;
- use of Microsoft Power BI tools for the analysis of information;
- solving professional problems with the help of modern information systems and software products, in particular Power BI;
- formation of analytical reports on the basis of modern information means of visualization and processing of statistical information;
- master easy, powerful ways to create, customize, change, and control pivot tables
- control all future pivot tables using new pivot table defaults;
- transform huge data sets into clear summary reports;
- instantly highlight most profitable customers, products, or regions;
- use Power Query to quickly import, clean, shape, and analyze disparate data sources;
- build geographical pivot tables with 3D Map;
- construct and share state-of-the-art dynamic dashboards;
- revamp analyses on the fly by dragging and dropping fields;
- build dynamic self-service reporting systems.

Successful completion of the practice gives students the opportunity to apply the acquired knowledge in course and diploma design to solve specific economic problems.

2. STRUCTURE OF EDUCATIONAL PRACTICE:

№	Topic names	Total	incl.	
			lecture	practical (independent work)
1	Assessments of types of economic information. Database	4	4	-
2	Advanced Excel for Business Analysis	16		16
3	Power BI for Business decisions and analytical reporting	10		10
4	Tableau for Business decisions and analytical reporting	10		10
5	Your Control as an analytical system for compliance, market analysis, business intelligence and investigations	10		10
6	Writing a report (Independent work)	8		8
7	Protect a report	2		2
GRAND TOTAL		60	4	56

3. FORM OF CONTROL

Passed

4. DISTRIBUTION OF GRADES RECEIVED BY STUDENTS

Evaluation of student knowledge is carried out on a 100-point scale and is converted to national grades according to Table 1 "Regulations and Examinations and Credits at NULES of Ukraine" (order of implementation dated 03.03.2021, protocol №7)

Student rating, points	National grade based on exam results	
	Exams	Credits
90-100	Excellent	Passed
74-89	Good	
60-73	Satisfactory	
0-59	Unsatisfactory	Not passed

In order to determine the rating of a student (listener) in the discipline R_{dis} (up to 100 points), the rating from the exam R_{ex} (up to 30 points) is added to the rating of a student's academic work R_{aw} (up to 70 points): $R_{dis} = R_{aw} + R_{ex}$.

5. METHODOLOGICAL SUPPORT

1. Regulatory documents.
2. Complex of educational and methodological support of discipline.

3. Guidelines for independent study of the discipline.

6. RECOMMENDED LITERATURE

Main

1. Том Фоусет, Фостер Провост. Data Science для бізнесу. Як збирати, аналізувати і використовувати дані. К. : Наш Формат, 2019. 400 с.
2. Бреус С. В. Методи та моделі прийняття управлінських рішень. *Інфраструктура ринку*. 2018. Вип. 24. С. 117-122. URL: <http://www.market-infr.od.ua/uk/24-2018>
3. Конрад Карлберг. Бізнес-аналіз з використанням Excel. Рішення бізнес-завдань. К., 2018. 578с.
4. BABOK Guide: Global Standard for Business Analysis – IIBA, International Institute of Business Analysis. 2015. URL: <https://www.iiba.org/standards-and-resources/babok/>

Supporting literature

1. The Best Guide to Understand Advanced Excel Functions. URL: Advanced Excel Functions [The Only Excel Guide for 2023] (simplilearn.com).
2. Advanced Excel for business. URL: Top Advanced Excel Courses - Learn Advanced Excel Online | Coursera.
3. Microsoft Excel 2019 Pivot Table Data Crunching (Business Skills)
4. Power Pivot and Power BI: The Excel User's Guide to DAX, Power Query, Power BI & Power Pivot in Excel 2010-2016 Paperback – January 1, 2016
5. Excel Dashboards and Reports, 2nd Edition.
6. "The Accidental Analyst: Show Your Data Who's Boss" by Eileen and Stephen McDaniel.
7. Edward Tufte, *The Visual Display of Quantitative Information*.
8. Information Graphics Hardcover – April 18, 2012
9. Practical Tableau: 100 Tips, Tutorials, and Strategies from a Tableau Zen Master 1st Edition
10. Brian Larson, Data Analysis with Microsoft Power BI 1st Edition.
11. Devin Knight, Brian Knight, et al. Microsoft Power BI: Quick Start Guide

Information resources

1. Верховна Рада України <http://zakon.rada.gov.ua/>
2. Кабінет Міністрів України <http://www.kmu.gov.ua/control/>
3. Державний Комітет статистики України <http://ukrstat.gov.ua/>
4. Продовольча та сільськогосподарська організація ООН (ФАО) <http://www.fao.org/>
5. Світовий банк <http://www.worldbank.org/>
6. Євростат <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home>.
7. Рішення для бізнесу YouControl — повне досьє на кожну компанію України. URL: <https://youcontrol.com.ua>.