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KA2 - Cooperation for innovation and the exchange of good practices
Capacity Building in Higher Education
Joint project

“DIGITALIZATION OF ECONOMIC AS AN ELEMENT OF SUSTAINABLE DEVELOPMENT OF UKRAINE AND TAJIKISTAN (DigEco)”

**(up to date Achieved Project results,
Quality Assurance Control)**

**ZHYTOMYR POLYTECHNIC STATE UNIVERSITY
International Project Meeting within DigEco Consortium**

Hamburg, 27 February – 3 March, 2023





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Implementation of the DigEco disciplines within specialties at Zhytomyr Polytechnic

DigEco Project provides a professional training of highly qualified specialists in Digital Economics within 6 Specialties:

051 Economics

072 Finance, banking and insurance

073 Management

076 Entrepreneurship, Trade and Stock Exchanges

242 Tourism

292 International Economic Relations



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Zhytomyr Polytechnic DigEco Web Platform

<https://dig2eco.ztu.edu.ua/>

Університет Абітурієнту Освіта Наука Міжнародна діяльність Дозвілля Випускникам

UA / EN

ЗАГАЛЬНА ІНФОРМАЦІЯ
 Про нас
 Стратегія інтернаціоналізації
 Відділ міжнародних зв'язків
 Центр міжнародної освіти та науки
 Діючі міжнародні проекти
 Реалізовані міжнародні проекти

МОЖЛИВОСТІ
 Міжнародні зв'язки
 - Міжнародні організації
 - Університети-партнери
 Міжнародні грантові проекти
 - ERASMUS+
 - Swedish Institute
 - British Council
 - Visegrad Fund
 Програми академічної мобільності
 - Erasmus+ICM
 - DAAD
 - OeAD
 - NAWA
 Англомовні програми та програми
 подвійних дипломів
 Навчання іноземних громадян

Електронне звернення щодо участі

Контактна інформація

eua EUROPEAN UNIVERSITY ASSOCIATION ebn

Co-funded by the European Union Erasmus+

DigEco

BRITISH COUNCIL Si. Swedish Institute Visegrad Fund

360°

Відкрив для себе Житомирську політехніку
Запрошуємо на діджитал-екскурсію Університетом

ЗД-ТУР

<https://ztu.edu.ua/chapter/127.html>





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DigEco educational-professional programs at Zhytomyr Polytechnic

DigEco educational-professional programs for the Second (Master's) level of higher education at ZPSU last for one year and four months for a total of 90 ECTS. According to the Law of Ukraine "On Education" and the Order of Ministry of Education and Science of Ukraine No. 1/9-126 when developing curricula the following rules are taken into consideration:

1/3 hours – class work, 2/3 hours - independent study;

Max 75% - compulsory discipline, Min 25% - free student choice;

The curricula consist of two parts - Obligatory and Selective part.





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Developed and Implemented «DigEco» Curricula at Zhytomyr Polytechnic dig2eco.ztu.edu.ua/results



051 Economics



072 Finance, banking and insurance



073 Management



076 Entrepreneurship, Trade and Stock Exchanges



242 Tourism



292 International Economic Relations



Faculty of Business and Service Sector (FBSS)



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Developed and Implemented «DigEco» Syllabi at Zhytomyr Polytechnic



- ## List of DigEco disciplines:
- 1. Agile project management
 - 2. Big data analytics and business intelligence
 - 3. Big Data Analytics in Finance
 - 4. Big Data Management
 - 5. Big Data Management
 - 6. Blockchain, Innovation management and Disruptive technology
 - 7. Data Analytics for Marketing
 - 8. Data Entrepreneurship in Action
 - 9. Digital Marketing in Action
 - 10. Design thinking
 - 11. Digital Literacy
 - 12. Digital Performance in Business and Economics
 - 13. Fintech in banking





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ECTS credits contribution of DigEco disciplines at Zhytomyr Polytechnic

(OC - obligatory component; SC – selective component)

Code	Components of the educational program (training courses, course papers, practical trainings, qualification work)	ECTS credits	Form of final control
OC	Agile project management	4	Test
OC	Big data analytics and business intelligence	5	Exam
SC	Big Data Analytics in Finance	5	Exam
OC	Big Data Management	5	Exam
OC	Blockchain, Innovation management and Disruptive technology	3	Test
OC	Data Analytics for Marketing	5	Exam
OC	Data Entrepreneurship in Action	4	Exam
OC	Design thinking	4	Test
OC	Digital Business Models	4	Exam
OC	Digital Literacy	4	Test
SC	Digital Marketing in Action	3	Test
OC	Digital Performance in Business and Economics	4	Exam
SC	Fintech in banking, insurance and asset management	4	Exam
Total amount of ECTS credits:		54	



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DigEco Quality Assurance Strategy Introduction at ZPSU

Order of forming DigEco Internal Quality Assurance Control Group at ZPSU.

In accordance with the First Vice Rector's Order № 68/od from 07/02/2021 for monitoring the quality of DigEco project implementation at Zhytomyr Polytechnic State University, it is formed DigEco Quality Assurance Control Group which is led by vice-rector for scientific and pedagogical work – Andrii Morozov.





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DigEco Quality Assurance Strategy Introduction at ZPSU

Developed and Approved DigEco Quality Assurance and Quality Control Plan at ZPSU.

In accordance with the Quality Assurance Plan/Strategy of the DigEco Project, at Zhytomyr Polytechnic State University it is Developed and Approved by First Vice Rector from 23/02/2021 – “Quality Assurance and Quality Control Plan”, which also includes “Plan of measures to ensure the quality of DigEco educational content at ZPSU” and “Monitoring schedule of project activities”.



No	Діяльність / Activities	Термін / Timeline
1	Створення групи забезпечення якості ДУ «Житомирська політехніка» / Development ZPSU Quality Assurance Group (QAG)	07.02.2022
2	Щоденна внутрішня оцінка / Day-to-Day Internal Evaluation	Протягом дії проекту / during the DigEco
3	Звітність про досягнення основних етапів/індикаторів прогресу до ЖСС / reports on achieving the milestones/indicators of progress to JCC	Кожні 6 місяців / every 6 months
4	Експертні оцінки / peer reviews	Протягом дії проекту / during the DigEco
5	Оцінювальні опитування / evaluation surveys	Кожні 6 місяців / every 6 months
6	Внутрішні інституційні оцінювальні комісії / internal institutional evaluation boards	Щорічно / every year
7	Своєчасна робота та результативні показники / timely work and performance indicators	Протягом дії проекту / during the DigEco
8	Індикатори прогресу: - зворотній зв'язок від партнерів з ЄС під час семінарів; - своєчасна робота з організації та проведення навчальних семінарів; - регулярне виконання інформаційних проектів; - своєчасна робота з організації та проведення опитування за розробленими курсами; Indicators of the progress: - Feedback from EU partners during workshops;	Протягом дії проекту / during the DigEco



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DigEco Quality Assurance Strategy Introduction at ZPSU

Quality Assurance of DigEco Key Performance Indicators (KPI) and expected tangible results from the project at ZPSU

Planned for DigEco Project at ZPSU	Reached
13 DigEco curricular implemented in study process	Full Implemented
Teaching/learning materials, e-learning courses inc. PIE components developed	Full Implemented
Digitalization work material of 13 MA courses inc. PIE component. 13 virtual courses inc. PIE component downloaded to the VPLP	Full Implemented
VIDEL Lab incl. PIE components created	Full Implemented
1 guideline inc. PIE components developed (according National Law) in Ukrainian and English	Ongoing
9 teachers retrained at P1-P3 on Digital Economic Courses, incl. PIE component.	Full Implemented
45 teachers retrained on Digital Economic Courses inc. PIE at home basis at P4	Full Implemented





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DigEco Quality Assurance Strategy Introduction at ZPSU

Quality Assurance of DigEco Key Performance Indicators (KPI) and expected tangible results from the project at ZPSU

Planned for DigEco Project at ZPSU	Reached
Digital Economic Courses inc. PIE component methodologies developed with the focus on regional stakeholders demand and directions of P6 and implemented in study process.	Full Implemented
Min. 40 students participated in pilot teaching using created leaning environment on new curricular	Ongoing
Min 20 students created 5 joint Master's projects using digital economic methodology and PIE component	Full Implemented
4 surveys of students/teachers conducted according QP at P4	Ongoing
no less 40 students/ 21 teachers participated in surveys	Ongoing
Min 3 interval evaluation reports	Ongoing



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DigEco Quality Control Plan reached within 24 months for ZPSU

Title	051 «Economics»
Level of study	MA
List of subjects and credits (ECTS or comparable credit system) for each of them	Data Analytics for Marketing - 3 ECTS Data Entrepreneurship in Action - 3 ECTS Digital Marketing in Action - 3 ECTS Digital Business Models - 5 ECTS Big Data Management - 6 ECTS Agile project management - 4 ECTS
Estimated date of accreditation and accreditation body	October 2023
% of the modernized subjects compared to total subjects included in the course	30%
Number of students to be accepted in the first year/ second year	28/44
Number of teaching staff to be trained	3 at EU HEIs / 12 at home basis



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DigEco Quality Control Plan reached within 24 months for ZPSU

Title	072 “Finance, banking and insurance”
Level of study	MA
List of subjects and credits (ECTS or comparable credit system) for each of them	Blockchain, Innovation management and Disruptive technology - 3 ECTS Fintech in banking, insurance and asset management - 5 ECTS Big Data Analytics in Finance - 5 ECTS Digital Literacy - 5 ECTS
Estimated date of accreditation and accreditation body	October 2023
% of the modernized subjects compared to total subjects included in the course	25
Number of students to be accepted in the first year/ second year	62/84
Number of teaching staff to be trained	1 at EU HEIs / 10 at home basis



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DigEco Quality Control Plan reached within 24 months for ZPSU

Title	073 «Management»
Level of study	MA
List of subjects and credits (ECTS or comparable credit system) for each of them	Digital literacy - 4 ECTS Digital Business Models - 4 ECTS Big Data Management - 5 ECTS Agile project management – 4 ECTS
Estimated date of accreditation and accreditation body	October 2023
% of the modernized subjects compared to total subjects included in the course	25%
Number of students to be accepted in the first year/ second year	60/114
Number of teaching staff to be trained	3 at EU HEIs / 12 at home basis



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DigEco Quality Control Plan reached within 24 months for ZPSU

Title	073 «Entrepreneurship, trade and stock exchanges»
Level of study	MA
List of subjects and credits (ECTS or comparable credit system) for each of them	Digital literacy - 4 ECTS Data Analytics for Marketing - 5 ECTS Digital Marketing in Action - 3 ECTS Design Thinking - 4 ECTS
Estimated date of accreditation and accreditation body	October 2023
% of the modernized subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	11/47
Number of teaching staff to be trained	1 at EU HEIs / 7 at home basis



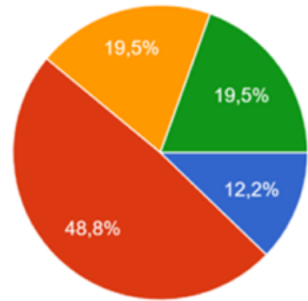
Co-funded by the
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DigEco Quality Assurance Surveys for Students, Teachers and Partners (Stakeholders)

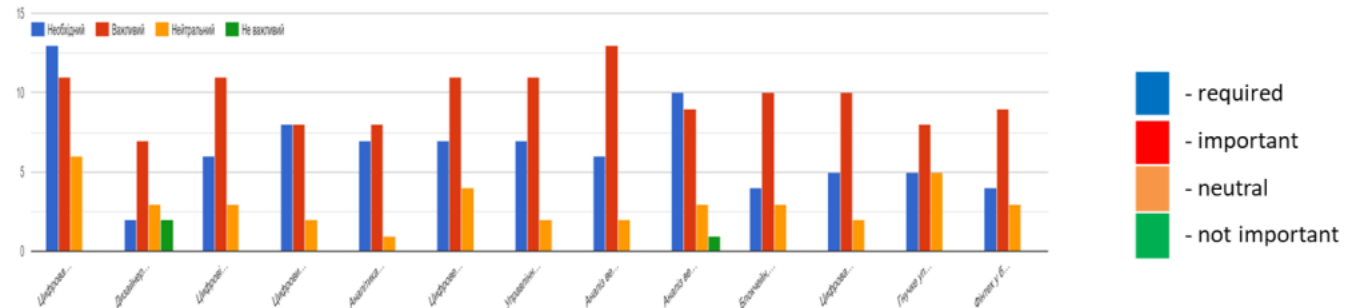
Visual interpretation of the Quality Assurance Students Surveys Results

Students Applicants distribution by Specialties:



- 051 «Економіка»
- 072 «Фінанси, банківська справа та страхування»
- 073 «Менеджмент»
- 076 «Підприємництво, торгівля та біржова діяльність»

General Students' Level of Satisfaction of the DigEco MP Course Quality:



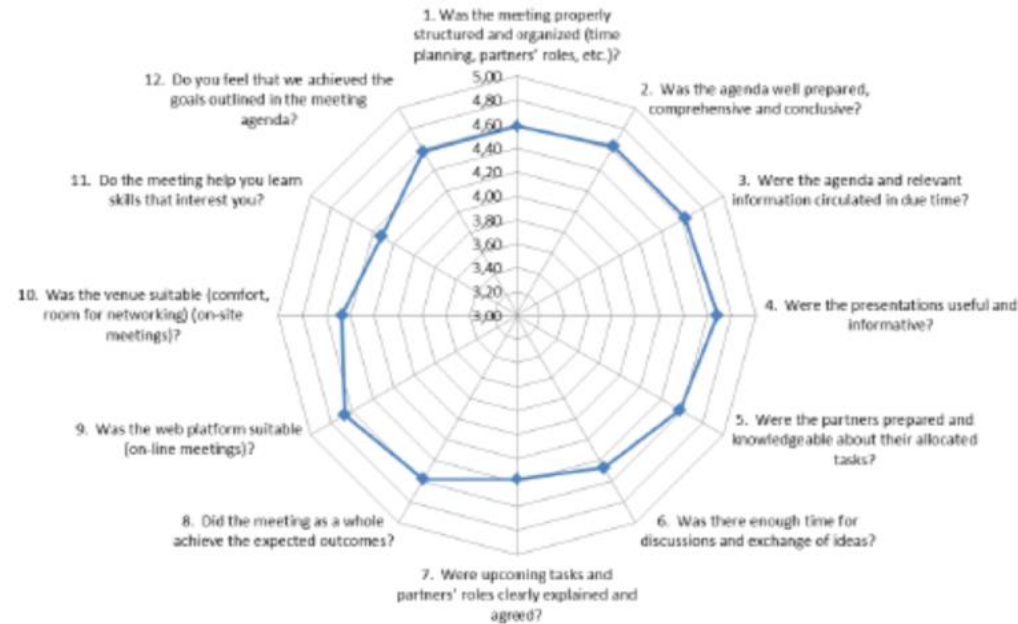


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DigEco Project Meeting Quality Reports

Visual interpretation of the Meeting Quality Report Results
(University of Applied Sciences Hamburg (Germany), May 28 - June 03, 2022)



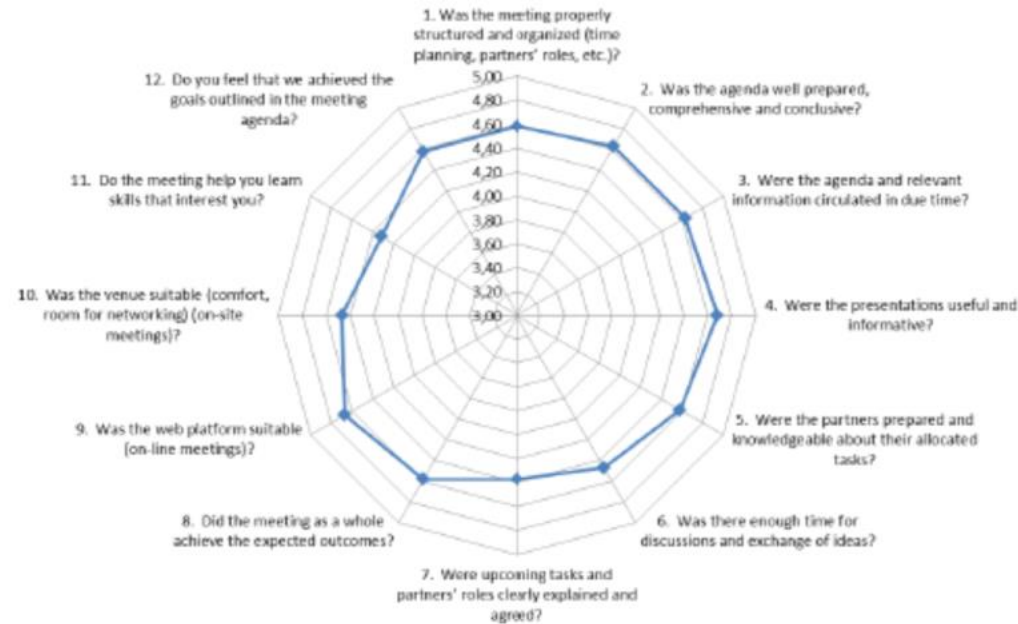


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DigEco Project Meeting Quality Reports

Visual interpretation of the Meeting Quality Report Results University of Maribor (Slovenia), October 03 - 07, 2022





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Introduction of DigEco Project at Zhytomyr Polytechnic in numbers

49

Number of teachers involved so far

360

Number of students involved so far

16

Number of inclusive students involved so far

50%

Percentage of budget used

Involvement of industrial, economic, social partners:

8

- round tables with stakeholders

6

- conferences

18

- partnership Agreements with local Companies





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Modern DigEco Lab with new equipment and software





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Modern DigEco Lab with new equipment and software

<https://docs.ztu.edu.ua/?mdocs-file=1752>





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Equipment bought at Zhytomyr Polytechnic within DigEco Project

Group of Equipment	Elements	System Parameters	Quantity
Computers	a. OFFICE COMPUTERS Vinga 5009 Intel Core i3/8Gb DDR4/500Gb SSD		15
	b. LAPTOPS ASUS X515JP-BQ031		4
Multimedia equipment	INTERACTIVE DISPLAY PANEL iBoard 86"		1
Technical training	PHOTOCAMERA	Sony Alpha A7 Mark III body	1
	PORTABLE ELECTRONIC MAGNIFIER	Explore 8 HD	2
	DESKTOP BRAILLE PRINTER	VP EmBraille	1
	PORTABLE BRAILLE DISPLAY	Brailliant BI 40X	1
Software	Adobe Creative Cloud		1
Peripherals	MULTI-FUNCTIONAL DEVICE	Canon i-Sensys MF237w	1





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DigEco lecturers participation in inclusive education trainings

CERTIFICATE confirms that
TETIANA ZAVALII
from Zhytomyr Polytechnic State University (Ukraine)
completed

DigEco Project Inclusive Education training for teachers and stakeholders
27-29 of January 2022
provided under Erasmus+ project: 618270-EPP-1-2020-1-LT-EPPKA2-CBHE-OP
Digitalization of economic as an element of sustainable development
of Ukraine and Tajikistan / DigEco

The training consists of the following topics:

1. Psychological readiness of teachers to work with people with disabilities	(3 hours)
2. The visual and practical orientation of the inclusive educational process	(3 hours)
3. Formation of positive motivation of people with disabilities	(3 hours)
4. Methods of teaching the digital economy in the context of inclusive education	(3 hours)
5. Networking on Project Inclusive Education	(3 hours)

In total 15 hours (0.5 credits)

IRYNA SARANCHA
Chairperson of the Board
Vinnytsia City Organization for
Social Development of Certain
Vulnerable Categories of Young
People "Parostok" (Ukraine)

ZANETA SIMANAVICIENE
Prof. habilit. Project Coordinator
Doctor of Social Sciences,
habilitated professor in Academy
of Social Security Republic of
Lithuania

MRU
MIGULAS G. RYKAS
RESEARCHER

No P812-2022

CERTIFICATE confirms that
HALYNA TARASIUK
from Zhytomyr Polytechnic State University (Ukraine)
completed

DigEco Project Inclusive Education training for teachers and stakeholders
27-29 of January 2022
provided under Erasmus+ project: 618270-EPP-1-2020-1-LT-EPPKA2-CBHE-OP
Digitalization of economic as an element of sustainable development
of Ukraine and Tajikistan / DigEco

The training consists of the following topics:

1. Psychological readiness of teachers to work with people with disabilities	(3 hours)
2. The visual and practical orientation of the inclusive educational process	(3 hours)
3. Formation of positive motivation of people with disabilities	(3 hours)
4. Methods of teaching the digital economy in the context of inclusive education	(3 hours)
5. Networking on Project Inclusive Education	(3 hours)

In total 15 hours (0.5 credits)

IRYNA SARANCHA
Chairperson of the Board
Vinnytsia City Organization for
Social Development of Certain
Vulnerable Categories of Young
People "Parostok" (Ukraine)

ZANETA SIMANAVICIENE
Prof. habilit. Project Coordinator
Doctor of Social Sciences,
habilitated professor in Academy
of Social Security Republic of
Lithuania

MRU
MIGULAS G. RYKAS
RESEARCHER

No P815-2022

CERTIFICATE confirms that
YULIYA BOGOYAVLENSKA
from Zhytomyr Polytechnic State University (Ukraine)
completed

DigEco Project Inclusive Education training for teachers and stakeholders
27-29 of January 2022
provided under Erasmus+ project: 618270-EPP-1-2020-1-LT-EPPKA2-CBHE-OP
Digitalization of economic as an element of sustainable development
of Ukraine and Tajikistan / DigEco

The training consists of the following topics:

1. Psychological readiness of teachers to work with people with disabilities	(3 hours)
2. The visual and practical orientation of the inclusive educational process	(3 hours)
3. Formation of positive motivation of people with disabilities	(3 hours)
4. Methods of teaching the digital economy in the context of inclusive education	(3 hours)
5. Networking on Project Inclusive Education	(3 hours)

In total 15 hours (0.5 credits)

IRYNA SARANCHA
Chairperson of the Board
Vinnytsia City Organization for
Social Development of Certain
Vulnerable Categories of Young
People "Parostok" (Ukraine)

ZANETA SIMANAVICIENE
Prof. habilit. Project Coordinator
Doctor of Social Sciences,
habilitated professor in Academy
of Social Security Republic of
Lithuania

MRU
MIGULAS G. RYKAS
RESEARCHER

No P831-2022





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DigEco disciplines classes

<https://www.youtube.com/watch?v=1zxp4rAazvA>

Лекція на тему: «Цифрові сервіси України. «Дія»» | Житомирська політехніка | DigEco

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Digitalization of economic as an element of sustainable development of Ukraine and Tajikistan

Co-funded by the Erasmus Programme of the European Union

Базова термінологія для лекції

Digital	Цифровий
Digitization	Оцифрування, оцифрування, діджиталізація
Digitalization	Діджиталізація, цифровізація
Digital transformation	Цифрова трансформація
Digital economy	Цифрова економіка

Підготувала Ph.D. Тетяна ЗАВАЛІЦЬ

1:36 / 30:00

Прокрутіть екран вниз, щоб подивитися детальну інформацію





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DigEco disciplines classes in English

<https://www.youtube.com/watch?v=jSPgi4jLRrw>

Лекція на тему: «Ensuring digital safety» | Житомирська політехніка | DigEco

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DigEco

ZHYTOMYR
POLYTECHNIC
STATE UNIVERSITY

Lecture plan

1. Protect yourself from phishing
2. Communicate safely online
3. Create strong passwords
4. The best practices for sharing information online
5. Importance of managing your digital footprint

Serhii Lehenchuk

0:24 / 14:59

Прокрутите экран вниз, чтобы посмотреть подробную информацию



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Cooperation with stakeholders

Signed Partnership Agreements with Local and Regional Stakeholders and State Bodies





Publications within DigEco project framework

Articles:

1.	Богоявленська Ю. В., Прокопчук М. Б., Владімірцев В. Л. (2021). Розвиток цифрових компетенцій як підпроцес для розробки бізнес-стратегій методом дизайн-мислення [<i>The development of digital competences as a sub-process for the development of business strategies by the method of design thinking</i>]. Причорноморські економічні студії. № 71. С. 82–87.
2.	Бондарчук В. В., Шиманська К. В., Бондарчук Л. С. (2021). Використання інфлюенс-маркетингу для просування товару в соціальних мережах [<i>Use of influence marketing for product promotion in social networks</i>]. Економіка, управління та адміністрування. Вип. 4 (98). С. 49–53.
3.	Ткачук В. О., Мельник Т. Ю., Богоявленська Ю. В. (2021). Електронний бізнес: переваги та ризики в період цифрової трансформації [<i>Electronic business: advantages and risks in the period of digital transformation</i>]. Економіка, управління та адміністрування. Вип. 4 (98). С. 28–36.
4.	Ткачук В. О., Обіход С. В. (2022). Структура та класифікація моделей електронного бізнесу [<i>Structure and classification of E-business models</i>]. Економіка, управління та адміністрування. Вип. 1 (99). С. 11–17.
5.	Тарасюк Г. М. (2021). Логістичні рішення та управління постачаннями в компанії: виклики часу [<i>Logistics solutions and supply management in the company: challenges of time</i>]. Економіка, управління та адміністрування. 2021. № 4(98). С. 42-48.



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Publications within DigEco project framework

Articles:

6.	Легенчук, С. Ф., Городиський М. П., Майстренко Н. М. (2021). Захист бухгалтерських даних в умовах використання Інтернету речей: проблеми і перспективи діджиталізації обліку [<i>Protection of accounting data under conditions of using the Internet of Things: problems and prospects of digitization of accounting</i>]. Облік і фінанси. Вип. 1(91). С. 12-19.
7.	Lehenchuk S., Vygivska I., Hryhorevska O. (2022). Protection of accounting information in the conditions of cyder security. Problems of Theory and Methodology of Accounting, Control and Analysis. Вип. 2(52). (Прийнято до публікації).
8.	Завалій Т. О., Пащенко О. П., Виговський В. Г. (2022). Принципи цифрового етикету в маркетингових комунікаціях [<i>Principles of digital etiquette in marketing communications</i>]. Маркетинг і цифрові технології, [S.l.]. V. 6, n. 2. Pp. 21-37.
9.	Zavaliy, T. O. (2022). Intangible value drivers of technology companies in the epoch of digitalization: the necessity for further research. Problems of Theory and Methodology of Accounting, Control and Analysis. Vol. 3(50). Pp. 23-28.
10.	Завалій Т. О. (2022). Безоплатні інструменти діджитал-маркетологів: Google Alerts. Проблеми системного підходу в економіці. Вип. 2(88). С. 131-140.



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Publications within DigEco project framework

DigEco Textbook: 3 Chapters developing, editing and publishing.

Conferences materials	
1.	Богоявленська Ю. В., Владімірцев В. Л. (2021). Підходи до аналізу ефективності організації віддаленої зайнятості та розвитку цифрової грамотності [<i>Approaches to the analysis of the effectiveness of the organization of remote employment and the development of digital literacy</i>]. Облік, аналіз, аудит та оподаткування: сучасна парадигма в умовах інформаційного суспільства : Зб. матер. VII Міжнар. наук.-практ. конф., присв. 115-річчю «Київського національного економічного університету ім. В. Гетьмана» (09–10 грудня 2021 р.). К.: КНЕУ. С. 369–371.
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