VIZJA UNIVERSITY

AKADEMIA
EKONOMICZNO-HUMANISTYCZNA
w Warszawie
01-043 Warszawa, ul. Okopowa 59
REGON: 017280390, NIP: 525-22-08-719
- 8 -

No. 01 / August 25, 2025

CERTIFICATE OF COMPLETION OF THE PROFESSIONAL TRAINING PROGRAMME

This certifies that

Serhii Kiurchev,
Doctor of Technical Sciences, Professor

has successfully completed the professional training programme titled:

"AI and Digital Engineering for Technical Education and Research (ESPERIDTA)"

conducted under the auspices of the ESPERIDTA project
(Grant Agreement 101172710 — ESPERIDTA — ERASMUS-JMO-2024-HEI-TCH-RSCH),
funded by the European Commission, and implemented at VIZJA University (Warsaw, Poland)

The training lasted **180 hours**
(80 contact hours and 100 hours of individual work)
(equivalent to **6 ECTS credits**)
between **March 01, 2025,** and **April 30, 2025**.

This certificate is awarded by **VIZJA University (Warsaw, Poland)** under the ESPERIDTA project (Grant Agreement 101172710 — ESPERIDTA — ERASMUS-JMO-2024-HEI-TCH-RSCH), funded by the European Commission.

For further information, please get in touch with us via email at y.kapranov@vizja.pl Dr. Habil. Yan Kapranov, VIZJA University Professor, Project Coordinator of the ESPERIDTA project.

Prof. Yan KAPRANOV,
Doctor of Philological Sciences, Professor (Ukraine),
Habilitated Doctor (Linguistics) (Republic of Poland),
Coordinator of the ESPERIDTA Project,
VIZJA University (Warsaw, Poland)
y.kapranov@vizja.pl
+48 791 849 261

AKADEMIA
EKONOMICZNO-HUMANISTYCZNA
w Warszawie
01-043 Warszawa, ul. Okopowa 59
REGON: 017280390, NIP: 525-22-08-719
- 8 -

AKADEMIA
EKONOMICZNO-HUMANISTYCZNA
w Warszawie
01-043 Warszawa, ul. Okopowa 59
REGON: 017280390, NIP: 525-22-08-719

PROFESSIONAL TRAINING PROGRAM STRUCTURE

Module	Topic	Hours	Key Content	Individual Work
1	*European Frameworks of Digital Transformation*	10	EU policies and standards: AI Act (overview), FAIR, GDPR; academic integrity; open data	5
2	*Scientific Programming for Engineers*	10	Python/Notebooks; environment management; reproducibility; Git	15
3	*Data Processing and Visualization*	10	Data analytics (pandas/SQL); dashboards (Power BI/Tableau); reporting	10
4	*Machine Learning for Applied Engineering Tasks*	10	Classification/regression; validation; MLOps (overview); interpretability	15
5	*NLP for Technical Terminology and Documentation*	10	Corpora, terminology extraction, NER; CAT/NMT; post-editing of technical texts	20
6	*Terminology and Ontology Management*	10	Termbanks (TBX), SKOS, OntoLex-Lemon; localization; quality assurance of terminology	10
7	*Digital Twins and Simulation*	10	Basics of simulation (MATLAB/Simulink or Python); data-driven integration	10
8	*Pedagogical Design for Engineering Education*	10	LMS, online laboratories, competence assessment, EdTech integration	15
TOTAL		**80**		**100**

ACHIEVED COMPETENCES

Competence	Description
Data & Code Literacy	Ability to conduct reproducible research, manage datasets, and use version control systems (Git).
Applied Machine Learning	Competence in designing and evaluating ML pipelines for engineering and applied research tasks.
NLP & Terminology	Skills in terminology extraction, termbank creation, technical documentation processing, and CAT/NMT post-editing.
Visualization & Reporting	Ability to design dashboards, visualize data, and prepare analytical reports for decision-making.
Simulation Literacy	Foundational skills in simulation and digital twin technologies for education and research.
Research Data Management & Compliance	Proficiency in FAIR principles, GDPR compliance, copyright, and ethical standards.
EdTech Integration	Ability to design and implement digital tools and platforms in technical and engineering education.
Technical Communication	Proficiency in standardized terminology, localization, and quality assurance of technical texts.