

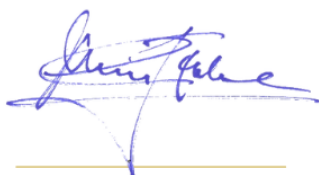
CERTIFICATE

Yevhenii Sarancha

has participated in the
Wildau-Kharkiv IT Bridge II
in the DAAD programme
"Digital Ukraine: Ensuring academic success in times of crisis (2023)"
in summer semester 2023
and achieved the following grade:
(details on the rear side)

NoSQL databases (Master)

87% %



Prof. Dr. Marcus Frohme



Prof. Dr. Igor Grebennik



Prof. Dr. Alina Nechyporenko

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About the Wildau-Kharkiv-IT-Bridge (WKITB)

Wildau-Kharkiv-IT-Bridge (WKITB) is a project in the DAAD programme "Ukraine digital: Ensuring academic success in times of crisis (2023)". WKITB aims to support Ukrainian lecturers and students by providing a digital teaching and learning platform. It brings together 60 lecturers from eight universities in Kharkiv in the field of IT with thousands of students from all over Ukraine.

NoSQL databases

Credit Points: 5 ECTS

Study program(s): 121 Software Engineering,
122 Computer science,
123 Computer Engineering, 124 System analysis,
125 Cyber security, 126 Information systems
and technologies

Course objectives: Expanding the student's knowledge in databases through familiarization with the NoSQL (non-relational) database MongoDB. Learning outcomes: 1) MongoDB installation and administration, creating of the database; 2) inserting data into the database; 3) selecting data from the database; 4) updating data in the database; 5) deleting data from the database; 6) using links in the database; 7) using cursors in the database; 8) using different types of indexes; 9) practice work with MongoDB Compass, MongoDB Atlas, MongoDB Charts, Studio 3T services; 10) software developing using MongoDB data storage.

associate professor Ilona Shevchenko
National Aerospace University "Kharkiv Aviation Institute"

The lecturer is responsible for grading and module content.

This certificate is valid without signature the lecturer.