



ViMaCs

Virtual Master Cooperation
Data Science

Winter School on Advanced Perspectives on Data Science

15.11.2021 – 19.11.2021

Dortmund University of Applied Sciences and Arts
Emil-Figge-Str. 42, Room B.1.20

The project "**Virtual Master Cooperation Data Science**" (**ViMaCs**) aims to build a virtual learning and lab infrastructure for a digital teaching and module portfolio in the field of "Data Science".

The Winter School, based on the ViMaCs project funded by DAAD, is covering such topics as:

- Artificial Intelligence and Data Analytics
- Business Intelligence and Decision Making
- Cloud Based Data Processing Systems
- Data Acquisition and Processing.

Students will have a possibility to apply their knowledge by solving the case study provided by Luxoft company, at the end of the week the results of the teams will be presented to the company's representatives.

The **Winter School** addresses Master Students from Dortmund University of Applied Sciences and Arts (FH Do), National University "Zaporizhzhia Polytechnic" (NU-ZP), West Ukrainian National University (WUNU), Kyiv National University of Construction and Architecture (KNUCA) and Lviv Polytechnic National University (LPNU). The master student from other universities are also welcomed to take part in the event.

Lectures and workshops **will be taught in English**. The Winter School 2021 is **free of charge**.

The Winter School will be held at **Dortmund University of Applied Sciences and Arts**, Dortmund, Germany – on-site participation.

ATTENTION! In order to be able to participate in the on-site Winter School all students must be either vaccinated by one of the recognized in Germany vaccines or be recovered from COVID-19 during the last 6 months.

The **schedule** and some **additional information** are available via the following link: <https://go-study-europe.de/vimacs/winter-school-2021/>



Deutscher Akademischer Austauschdienst
German Academic Exchange Service

**Fachhochschule
Dortmund**

University of Applied Sciences and Arts

IDiAL Institute for the Digital Transformation
of Application and Living Domains



**Federal Ministry
of Education
and Research**

Programme of the Winter School on “Advanced Perspectives on Data Science”

Location: Emil-Figge-Str. 42, Room B.1.20 (see the info guide for more information)
CET Time Zone

Time	Monday, 15 Nov	Lecturer
09:15 - 09:30	Kick-off and some Organisational Questions (Announcement of the Team Members)	Stephan Recker
09:30 - 11:00	Workshop in Python for Data Analytics	Galyna Tabunshchuk
11:00 - 12:00	Case-study presentation from the company DXC Luxoft	DXC Luxoft
12:00 - 13:00	Lunch	
13:00 - 16:00	Teamwork (working on the Case-study)	
Time	Tuesday, 16 Nov	Lecturer
09:00 - 10:30	Application of AI in medicine, agriculture and banking. IBM practice	Yaroslav Vylyuk
10:30 - 10:40	Coffee break	
10:40 - 12:10	Lecture "Hashing transformations for automatic classification"	Sergey Subbotin
12:10 - 13:00	Lunch	
13:00 - 16:00	Teamwork (working on the Case-study)	
Time	Wednesday, 17 Nov	Lecturer
09:00 - 10:30	The game theory	Olena Verenyuk
10:30 - 10:40	Coffee break	
10:40 - 11:25	Lecture "Concept of Data Acquisition"	Anatoliy Sachenko, Mykhailo Dombrovskiy
11:25 - 12:10	Practice "Working with Open Data"	Pavlo Bykovyy
12:10 - 13:00	Lunch	
13:00 - 16:00	Teamwork (working on the Case-study)	
16:00 - 17:00	Q&A session for the case-study Mandatory for all teams!	
Time	Thursday, 18 Nov	Lecturer
09:00 - 10:30	Lecture on the “Introduction into Apache Spark”	Natalia Myronova
10:30 - 10:40	Coffee break	
10:40 - 12:10	Lecture on the “Introduction into Amazon EMR”	Natalia Myronova
12:10 - 13:00	Lunch	



Deutscher Akademischer Austauschdienst
 German Academic Exchange Service

**Fachhochschule
 Dortmund**

University of Applied Sciences and Arts

IDiAL Institute for the Digital Transformation
 of Application and Living Domains



**Federal Ministry
 of Education
 and Research**

13:00 - 16:00	Teamwork (working on the Case-study)	
Time	Friday, 19 Nov	Lecturer
09:00 - 10:30	The game theory	Olena Verenych
10:30 - 10:40	Coffee break	
10:40 - 12:10	Lecture "Big Data Acquisition: SCADA systems approach"	Anatoliy Sachenko, Mykhailo Dombrovskiy
12:10 - 13:00	Lunch	
13:00 - 16:00	Presentation of the case-study results (10-15 minutes for each team + feedback) Mandatory for all teams!	
16:00 - 16:15	Closing	

