



Titel of lecture: Fundamentals of Artificial Intelligence

ECTS Credits: 5 ECTS

Degree Programme:	Digital Innovation and Research (MA)
Semester:	1
Teaching Units:	45
Description:	• Introduction to artificial intelligence ○ Conceptual basics and historical development ○ Distinction from related concepts (e.g., data analytics) • Basics and functioning of AI ○ Overview of key AI approaches ○ Data-based decision-making ○ Limitations of AI systems • AI literacy ○ Understanding data dependency, bias, and model limitations ○ Transparency and traceability of AI results ○ Critical approach to AI-generated content • AI tools in research and development ○ Overview of common AI tools ○ Possible applications to support scientific work ○ Assessment of benefits and risks • Generative artificial intelligence ○ Basic concepts of generative models ○ Fields of application for generative AI ○ Opportunities, challenges, and societal impacts • Ethical, legal, and societal aspects ○ Responsible use of AI ○ Risks, misuse, and abuse ○ Current discussions and guidelines
Assessment:	Presentation
Academic Contact:	Alexander Adrowitzer, Academic Director and Lecturer, Department of Computer Science and Security
Administrative Contact:	<u>Claudia Grötzl</u> , Staff Mobility Coordinator, International Office
Notes:	Prerequisites for Erasmus funding for your stay: • Currently valid partnership agreement (Inter-Institutional Agreement) • At least 8 teaching unit • At least 2 full days spent at USTP • Ukraine: at least 5 days spent at USTP