LITHUANIA BUSINESS COLLEGE

DESCRIPTION OF STUDY MODULE (FOR ERASMUS+ STUDENTS)

ARTIFICIAL INTELLIGENCE (AI)

Volume of subject	**6.0 ECTS**
Lecturer in charge	Lect. Ingrida Kazėnaitė
Annotation	The goal of this course is to introduce students to modern artificial intelligence (AI) technologies and their practical applications — from the fundamentals of NLP to large language models (LLMs), embeddings, semantic search, and Retrieval-Augmented Generation (RAG) architectures. Students will learn how to build a complete AI solution: data preparation, model querying via API, use of vector databases, creation of an interactive interface (Gradio), containerization (Docker), and implementation of CI/CD deployment.
Topics	• Introduction to AI • NLP with NLTK • Transformers and Hugging Face • APIs and Model Deployment • Introduction to LLMs and Prompt Engineering • Databases for AI Applications • Embeddings and Semantic Search • RAG + Gradio UI • Deployment and CI/CD
Procedure for assessment of knowledge and competences	✓ 20 percent – midterm tests. ✓ 20 percent – individual work. ✓ 60 percent – final exam.