



Semester number: 4	<b>Creating Digital Tools Using Large Language Models</b>	ECTS credits: ECTS 4
Level of study: Engineering degree		Academic year: 2025/2026

**Department: Department of Visual Arts**

**Instructor: MSc Arch. Kacper Radziszewski**

**Short description of the course:**  
 In the age of digital tools and artificial intelligence, this course enables students to create computer applications without traditional coding knowledge thanks to the support of Large Language Models (LLMs). Students will learn how to generate code, define requirements, design user interfaces, and implement tests, creating tools dedicated to architects and urban planners.

**Course Objective:**

The goal of the course is to provide knowledge and skills necessary for developing digital tools that support architectural and urban design processes.

**Course content and class schedule:**

The course consists of four modules:

**Theoretical module:**

- Introduction to digital tools and the role of LLMs
- Basics of programming languages principles

**Practice module:**

- Workshops on code generation using LLMs
- Practical exercises in creating functional prototypes

**Computational module:**

- Developing software requirements
- Designing user interfaces and implementing tests

**Project module:**



- implementation of a final application project for architects and urban planners
- Preparation of documentation, UI design and application testing