

Course title: Agentic Computer Science

Course code: 63767B

ECTS: 3

Professor: Asst. Prof. Blaž Meden

Undergraduate / master program

Prerequisite knowledge:

Prior knowledge assumes basic knowledge of the software development process or knowledge of at least one type of popular programming language (Python, C#, JavaScript).

Short course description:

The course introduces students to the use of modern software development tools based on the use of artificial intelligence assistant agents. We will explore open source and freely available solutions for AI-powered automated assistance in software development. Course participants will transform from developers into agent orchestrators, learning to automate simple and complex tasks in the software development process using large language models in the form of agents. By setting up their own development environment, designing a problem and their own software solution using agents, and gradually interacting with and evaluating different programming agents, students will get a feel for working with these tools, and understand what these tools currently enable and what assumptions they need to pay attention to when creating calls for automating the implementation of functionality in their project solutions. The course will focus on open solutions, but we will also mention commercial products for the so-called "vibe coding" – and we will run most of these locally without using any subscriptions.