

Course title: Fog Computing for Smart Services

Course code: 63546H

ECTS: 6

Professor: dr. Vlado Stankovski

Master's program

Prerequisite knowledge:

Undergraduate software engineering skills

Short course description:

Students taking this course learn how to combine five technology types, the Internet of Things, Artificial Intelligence, Blockchain, Cloud-to-Edge Computing and Digital Twins into new smart applications. Various examples and ready to use technologies and approaches are provided from a portfolio of ongoing research and innovation projects, such as the Horizon 2020/Europe projects DECENTER, ONTOCHAIN, TRUSTCHAIN, BUILDCHAIN, ExtremeXP, Swarmchestrator, EBSI-VECTOR and similar. Rather than looking into the details of each of the underlying technologies, the students develop understanding how these technologies synergetically contribute to the development of new decentralized, trustworthy, privacy-preserving and scalable applications. The course requirements include a seminar software engineering work, which is matched to the skills of the attending students to guarantee a smooth execution. The students taking this course develop an in-depth understanding of the future of the field of software engineering including ongoing research and innovation directions.