**Cloud computing (ECTS credits: 8)**

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Language: the course is offered in Serbian.

**Course description:**

This course covers the following topics:

Objectives and concepts of virtualization. Virtualization technologies. Dockers. Server and virtualization platforms. Service-oriented architectures. Cloud computing methods, technologies and applications. Cloud network. Data Center Architecture Topology. Working with the OpenStack system. Cloud application architecture, concept and design. Platform security and infrastructure. Could-specific network security challenges. Cloud data security. Techniques for applying high reliability cloud computing. Backing up data. Service migration. Resource planning. Cloud computing application development.

**Aims:**

Students will be able to use cloud services and virtualization software, to create applications in the cloud, to be acquainted with the security challenges of cloud computing , to be acquainted with possible solutions to security problems of cloud computing.