

## Description of the program (specialization)

### CLOUD COMPUTING

**Cloud Computing** is the latest environment of data processing based on using services delivered by the service Provider through computer networks, mainly through the Internet. It is a specific model of delivering computing services that come from very powerful and remote data processing centers, which shares versatile systems and services from efficient databases to versatile sector software aimed at offering all innovative Solutions on an ongoing basis, including full and continuous flexibility of their usage.

Within the Master degree program (second-cycle studies) the students will become familiar with the latest Solutions and trends in the development of cloud services of key leaders such as AMAZON, MICROSOFT and GOOGLE.

The program of studies provides four following thematic blocks within cloud Solutions:

1. **CLOUD COMPUTING IN THE CONTENT OF AMAZON WEB SERVICES.**
2. **CLOUD COMPUTING IN THE CONTENT OF MICROSOFT AZURE.**
3. **EXAMPLES OF CLOUD COMPUTING IMPLEMENTATION (Microsoft Office 365).**
4. **ASPECTS OF CLOUD COMPUTING IMPLEMENTATION ON THE BASIS OF SOLUTIONS OFFERED BY AZURE, AWS, GOOGLE CLOUD, ALIBABA CLOUD.**

The main goal of this specialization is to make students familiar with the issues of the computer systems architecture and ICT systems using cloud computing environment on the basis of such Solutions as AMAZON WEB SERVICES (AWS), MICROSOFT AZURE and using integrated services on the basis of additional solutions such as: Microsoft Office 365, Google Cloud and Alibaba Cloud. During classes the students will become familiar with advanced methods and techniques of designing computer systems and computer networks using cloud Solutions, including models of data processing in cloud, from basic methods to advanced methods considering Artificial Intelligence mechanisms and the Internet of Things. Moreover, students will become familiar with the issues of security and cybersecurity, computer networks and services in data processing from the cloud computing point of view.

Within the program classes particular lectures, exercises and laboratories will be provided by certified experts of particular cloud Solutions exercises and laboratories will be realized on the basis of prepared task-based plans shared in cloud solutions of the above mentioned cloud solutions providers.

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