**COURSE DESCRIPTION**

* Course name: **Cloud & Network Storage Technologies**

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| *Form of course* | ***Lecture*** | ***Laboratory*** |
| *Total number of hours* | ***15*** | ***15*** |

* Name, surname, title of teacher:

PhD, Eng. Marcin Markowski

* Nowadays, most of the world’s data is stored in the clouds or datacenters. Such data-centralized model allows for better resource utilization, guarantees better data availability and security, allows for comfortable access to information by many users at the same time. Storing the data away from the user systems brings also some challenges: first, how to store the data in efficient and secured manner and second, how to ensure the effective and unconstrained access for users.
* The course ‘*Cloud & Network Storage Technologies’* gives the knowledge about the current storage solutions and practical skills in configuring own network storage. The lecture covers issues of data organization on data servers, access protocols and technologies, datacenter/cloud technologies for data availability, integrity and security. During the laboratory classes students install, configure and manage own network storage based on the popular open-source solution. The laboratory program includes: installing and configuring data server and access technologies; configuring workstations for data access; configuring data security and reliability mechanisms; testing; and performing common management tasks. After completing the course students become familiar with the modern storage technologies and are able to independently build and manage the network storage for home/small office environment.