Storage Technologies

Lecturer: Anikin Yury Aleksandrovich.

Semester: 2   **Duration**: 16 weeks

Workload (h): 144   **Presence** (h + CH): 64 (4)   **Self-Study** (h): 80

Contents: The course contains topics about technologies, frameworks and products for Big Data storage.

Background and relations to other courses: Basics of RDBMS.

Main topics and learning objectives:

Themes	Learning objectives
Basic principles of BigData storage	*To know and understand* the current trends in BigData storage technologies (In memory, NoSQL, SQL-like, GraphDb).
NoSQL principles, engines	To know differences between NoSQL and RDBMS solutions.
SQL-like implementations	To be able to use SQL-like tools.
Graph databases, technologies	To understand graph database working principles.

Assessment:

Formative: 5 practice tasks, in interaction with lecturer and tutor during learning period. On site, skype, email are preferable.

Summative:

Number and Type; Connection to Course	Duration	Part of final mark in %
Pass Test (5 tasks)	90 min	100%

Learning outcomes:

Academic: *To know* the current and perspective products to manage large datasets, *to be able* to choose the technology for a specific applied task. *To be able and to get the skill* of using in practice some of the tools to create databases and work with them using cloud technologies and BigData approach.

Prerequisites for Credit Points: The credit points will be granted when the course has been successfully completed, i.e. all parts of the examination are passed.