Simon Kuznets Kharkiv National University of Economics

Syllabus of the course
« Cloud Computing»

Specialty	*122 Computer sciences*
Study Programme	*Computer sciences*
Study cycle (Bachelor, Master, PhD)	*second (Master)) level of higher education*
Course status	*mandatory*
Language	*English*
Term	*first year, 2 semester*
ECTS credits	*5*
Workload	*Lectures – 14 hours.*
	Practical studies – 0 hours.
	Laboratory studies – 26 hours.
	Self-study – 100 hours.
Assessment system	*Exam*
Department	*Department of Information Systems* *phone: (057) 702 18 31 (add. 3-16)* *website: https://kafis.hneu.net/*
Teaching staff	*Minukhin Serhii Volodymyrovych, doctor of Technical Sciences, Professor*
Contacts	*Minukhin S.V. serhii.minukhin@@hneu.net*
Course schedule	*Lectures:according to the current class schedule* *Laboratory studies: according to the current class schedule*
Consultations	*At the Department of Information Systems, offline, according to the schedule, individual, PNS chat.*

The purpose of teaching the discipline "Cloud Computing" is to provide higher education students with a system of theoretical knowledge about cloud platform standards, their reflection in the technologies of leading cloud vendors; models of implementation of cloud platforms for the provision of services; acquisition of practical skills in deploying and configuring cloud service software and mastering cloud technologies for working with applications, databases and data warehouses based on the latest information technologies.

Structural and logical scheme of the course

Prerequisites	Postrequsites
Distributed data warehouses	The course work: Development of computer information systems
High-performance systems of processing and analysis of big data	Complex training
	Diploma work

Course content

Module 1: *Basic concepts, standards, classification and technologies for building cloud platforms*

Topic 1. Distributed information systems as systems for collective access and sharing of resources by order

Topic 2. Basic technologies and standards of cloud systems and technologies.

Topic 3. Service models of cloud platforms

Topic 4. Deployment models of cloud platforms

Module 2: *Architecture, principles of operation and construction of modern cloud platforms*

Topic 5. Microsoft Azure Cloud Platform

Topic 6. Amazon Web Services (AWS) Cloud Platform

Topic 7. Cloud platform IBM Cloud

Topic 8. Google Cloud Platform (GCP)

Topic 9. General overview and directions of application of modern cloud platforms

Teaching environment (software)

Distance learning tools: Personalized learning systems website: https://pns.hneu.edu.ua Library: http://library.hneu.edu.ua Repository: http://www.repository.hneu.edu.ua University classrooms (Kharkiv, 9A Nauky Ave.)

Multimedia equipment: projector, laptop / computer, Internet access, software: Microsoft Windows, Microsoft Office, Visual Studio, Microsoft SQL Server, Azure portal

Assessment system

An university uses 100 ball story system of evaluation of results of studies of bread-winners of higher education. Current control comes true during realization of lecture and laboratory employments and has for an object verification of level of preparedness of bread-winner of higher education to implementation of concrete work and estimated by the sum of the c ollected points.

Final control includes semester control that is conducted in a form to examination.

Maximally possible amount of points for current control during a semester for discipline form of control of that examination - 60 and minimum possible amount of points – 35.

More detailed information on assessment and grading system is given in the technological card of the course.

Course policies

Teaching of the academic discipline is based on the principles of academic integrity.

Violation of academic integrity includes academic plagiarism, fabrication, falsification, cheating, deception, bribery, and biased assessment.

Education seekers may be brought to the following academic responsibility for breach of academic integrity: repeated assessment of the corresponding type of learning activity.

More detailed information about competencies, learning outcomes, teaching methods, assessment forms, self-study is given in the Course program