Syllabus of the course
"Software quality and testing"

Specialty	*121 "Software engineering"*
Study Programme	*121 "Software engineering"*
Study cycle	*the first (Bachelor) level of higher education*
Course status	*mandatory*
Language	*English*
Term	*second year, sixth semester*
ECTS credits	*5*
Workload	*Lectures - 20 hours*
	Laboratory studies - 40 hour.
	Self-study - 90 hours
Assessment system	*Grading*
Department	*Information Systems Department, auditorium 413 (main building), (057) 702-18-31 (add. 4-37), http://www.is.hneu.edu.ua/*
Teaching staff	*Ushakova Iryna Oleksiivna, PhD in Economics , professor.*
Contacts	*Ushakova I. O. iryna.ushakova@hneu.net ,*
Course schedule	*From a valid class schedule*
Consultations	*According to the consultation schedule https://kafis.hneu.net/*

The purpose of the discipline: mastering the methods and means of ensuring and quality control of software in the process of its development

Prerequisites for training

Prerequisites	Postrequsites
Object-oriented programming Data base System and business analysis in the IT industry Web programming IT project management	Program and data security Designing the interface of software systems Complex training

Course content

Module 1. Fundamentals of software quality and testing.
Topic 1. Introduction to software quality and testing.
Topic 2. Types and directions of testing.
Topic 3. Testing documentation and requirements.
Topic 4. Concepts and properties of checklists, test cases, sets of test cases.
Topic 5. Finding and documenting defects
Module 2. Organization of software testing processes
Topic 6. Planning the testing process
Topic 7. Peculiarities of testing mobile applications.
Topic 8. Fundamentals of test automation.
Topic 9. Performance testing.
Topic 10. Use of various testing techniques.

Teaching environment (software)

S. Kuznets PNS, Corporate Zoom system, Atlassian Jira, Selenium

Assessment system

The system for evaluating the developed competencies takes into account the types of classes that involve lectures, laboratory classes, as well as independent work. Assessment of students' developed competencies is carried out according to a cumulative 100-point system. The current control, which is carried out during the semester during laboratory classes and independent

work, is evaluated by the sum of points scored. The maximum possible number of points for the current and final control during the semester is 100, and the minimum possible number of points is 60.

Current control includes the following control measures: protection of laboratory work; current control works; presentations/

More detailed information on the evaluation and accumulation of points for the academic discipline is given in the work plan (technological discipline) is given in the work plan (technological map) for the academic discipline.

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.

Educational students 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