



Syllabus of the course
«Internet Programming»

Specialty	<i>121 Software Engineering</i>
Study Programme	<i>Software Engineering</i>
Study cycle (Bachelor, Master, PhD)	<i>the first (Bachelor) level of higher education</i>
Course status	<i>mandatory</i>
Language	<i>English</i>
Term	<i>third year, sixth semester</i>
ECTS credits	<i>5</i>
Workload	<i>Lectures – 24 hours.</i>
	<i>Practical studies – 0 hours.</i>
	<i>Laboratory studies – 24 hours.</i>
	<i>Self-study – 102 hours.</i>
Assessment system	<i>Grading including Exam</i>
Department	<i>Department of Information Systems, 61166, Kharkiv, Nauky Av., 9a, Simon Kuznets KhNUE, main building, office 413 phone. +38(057)702-18-31 (add. 4-37) website: https://kafis.hneu.net/</i>
Teaching staff	<i>Yurii Eduardovich Parfonov, PhD (Information technology), Senior Researcher</i>
Contacts	<i>Y. E. Parfonov yurii.parfonov@hneu.net</i>
Course schedule	<i>Lectures: according to the schedule Laboratory studies: according to the schedule</i>
Consultations	<i>At the Information Systems Department, offline, according to the schedule, individual, PNS chat.</i>

Learning objectives and skills:

mastering modern Internet programming tools and server side web technologies

Structural and logical scheme of the course

Prerequisites	Postrequisites
Architecture of computers and computer networks Databases Object-oriented programming	Distributed and parallel computing Designing the interface of software systems Program and data security Diploma project

Course content

Module 1: *Using Internet programming tools in Python*

Topic 1. Introduction to the course

Topic 2. Using Internet protocols in Python

Topic 3. Using Web Scraping in Python

Module 2: *The fundamentals of developing the server side of Django-based web applications*

Topic 4. The basics of Django framework

Topic 5. Models and object-relational data representation

Topic 6. Views and Templates in Django

Topic 7. Forms

Topic 8. Class-based Views



Topic 9. Using Django admin site

Topic 10. Sessions

Topic 11. Authentication and Authorization

Topic 12. Internationalization and localization

Teaching environment (software)

Multimedia projector, S. Kuznets PNS, Corporate Zoom system

Assessment system

The maximum amount during the *fourth* semester – 60 points; the minimum amount required is 35 points. Final control is carried out at the end of the semester in the form of an exam (the maximum amount is 40 points, the minimum amount required is 25 points).

Current control includes the following assessment methods: assignments on a particular topic; testing; presentations.

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.

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