

SYLLABUS

Name: Implementation of Web Applications: PHP, Python, JavaScript (InfAAu>SM2PPJava19z)

Name in Polish:

Name in English: Implementation of Web Applications: PHP, Python, JavaScript

Information on course:

Course offered by department: Faculty of Automatic Control, Electronics and Computer Science

Course for department: Silesian University of Technology

Default type of course examination report:

ZAL

Language:

English

Course homepage:

<https://platforma.polsl.pl/rau2/course/view.php?id=1036>

Short description:

As part of the course, students will learn the mechanisms of creating web applications using the most popular server-side solutions PHP, Python and Javascript

Description:

Lecture:

The subject is to familiarize with the mechanisms of creating web applications available through browsers using Python, PHP and Javascript.

The lectures will cover the following issue

Designing an internet database application. Multi-layer architecture. Design pattern Model-View-Driver.

Web application development languages. Introduction to PHP. Server scripts in PHP.

Python technology

User authentication techniques.

Client-side data validation, JavaScript language.

Security of internet applications. Code injection attacks.

Review of templates (framework) for creating internet database applications.

Laboratory:

Framework Django

Node - REST API

Angular

CSS, Bootstrap

Number of ECTS credits: 4

Total hours: 120h (contact 60h / own work 60h)

Lecture 30h

Laboratory 30h

Student's own work: preparation for classes

including the number of points obtained in classes conducted with the direct participation of academic teachers or other persons conducting classes and students: 2

Bibliography:

P. Morville, L. Rosenfeld, Architektura informacji w serwisach internetowych. Gliwice 2003 M. Pearrow, Funkcjonalność serwisów internetowych. Gliwice 2003

J. Nielsen, Projektowanie funkcjonalnych serwisów internetowych. Gliwice 2003

J. Cohen, Serwisy WWW. Projektowanie, tworzenie i zarządzanie. Gliwice 2004.

David M. Beazley: Programowanie: Python. Read Me 2002, ISBN 83-7243-218-X.

Chris Fehily: Po prostu Python. Helion 2002, ISBN 83-7197-684-4.

Mark Lutz: Python. Leksykon kieszonkowy. Helion 2001, ISBN 83-7197-467-1.

Marian Mysior (tłum.): Ćwiczenia z... Język Python. Mikom 2003, ISBN 83-7279-316-6.

N. Matthew, R. Stones, Zaawansowane programowanie w systemie Linux, Helion, Gliwice, 2002 M. Pilgrim, Dive Into Python (wersja papierowa oraz wersja online: <http://diveintopython.org/>)

Learning outcomes:

The student can create the web application (K2A_W02, K2A_W06)

Student can prepare well documented report in Polish and English of the completed task (K2A_U06)

Assessment methods and assessment criteria:

Lecture and laboratory: Covering all laboratory topics (submission of a written report), creating a final project.

The syllabus is valid from the academic year 2024/2025 and its content is not subject to change during the semester.

Course credits in various terms:

Informatics, full-time master degree studies 3 sem. (InfAAu-SM3)			
Type of credits	Number	First term	Last term
European Credit Transfer System (ECTS)	4	2020/2021-Z	