



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Internet technologies and services

### Course

Field of study

Engineering Management

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/3

Profile of study

general academic

Course offered in

polish

Requirements

elective

### Number of hours

Lecture

15

Laboratory classes

Other (e.g. online)

Tutorials

15

Projects/seminars

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

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Responsible for the course/lecturer:

### Prerequisites

Knowledge and skills in computer science subjects of 1st degree studies. Awareness of the need to constantly update and expand their knowledge and skills.

### Course objective

Students should understand the way the Internet works and the modern concept of network services to the extent that it enables informed selection and use of available technologies. Deepening knowledge of issues of technology and internet services.



## Course-related learning outcomes

### Knowledge

Has knowledge of connections occurring in network organizations (concerns, holdings, clusters, etc.) and in-depth knowledge of organizational dependencies occurring between organizational units of an enterprise as well as virtual units in the context of internet technologies and services (P7S\_WG\_06)

Knows in-depth methods of obtaining data using internet technologies and services about the behavior of market participants (P7S\_WG\_07)

Has in-depth knowledge of ethical standards, their sources, nature, changes and ways of influencing organizations in connection with internet technologies and services (P7S\_WK\_01)

Knows and understands the basic concepts and principles in the field of industrial property protection and copyright as well as the need to manage intellectual property resources in the context of internet technologies and services (P7S\_WK\_02)

### Skills

Has the ability to use the acquired knowledge of internet technologies and services in various areas and forms, extended by a critical analysis of the effectiveness and usefulness of applied knowledge (P7S\_UW\_03)

Has the ability to understand and analyze social phenomena, extended by the ability to deepen theoretical assessment of these phenomena in selected areas, using the research method and internet technologies and services (P7S\_UW\_05)

Is able to correctly interpret and explain social, cultural, political, legal, economic phenomena) and mutual relations between social phenomena in connection with technologies and internet services (P7S\_UW\_06)

Efficiently uses normative systems, norms and rules (legal, professional, ethical) or is able to use them to solve specific problems of internet technologies and services, has extended skills in relation to the selected category of social bonds or the selected type of norms (P7S\_UW\_08)

### Social competences

Is able to see the cause-and-effect relationships in achieving the set goals and rank the importance of alternative or competitive tasks in the context of internet technologies and services (P7S\_KK\_02)

Is able to initiate activities for social projects in the field of internet technologies and services (P7S\_KO\_02)

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The lecture grade is based on the percentage of the colloquium. Questions and tasks checking understanding of the issues. Passing threshold - 50%.

Exercise grade is the average of individual tasks performed during classes. The assessment takes into account the correctness and completeness of the results obtained.

## Programme content

Static and dynamic web site technologies with various scripting languages. Multilayer applications. The role of XML and XSLT in electronic document exchange. The concept of network service and associated



protocols. Cryptographic foundations of network security. Design of a simple application based on examples of forms in HTML and scripts cooperating with them on the browser and server side. PHP scripts saving data to oak databases, data validation rules and creating simple reports.

### Teaching methods

Lectures: informative lecture, problem lecture, seminar lecture, case method.

Classes: laboratory (experiment) method, workshop method, project method.

### Bibliography

#### Basic

Włodarczak Z., Technologie i usługi internetowe; PHP, Wydawnictwo Politechniki Poznańskiej, Poznań 2013

Borucki A., Włodarczak Z., Techniki opracowywania stron WWW, Wydawnictwo Politechniki Poznańskiej, Poznań 2013

#### Additional

Duckett J., JavaScript i jQuery. Interaktywne strony WWW dla każdego, Helion, Gliwice 2015

Duckett J., HTML i CSS. Zaprojektuj i zbuduj witrynę WWW. Podręcznik Front End Developera, Helion, Gliwice 2014

Lis M., PHP7. Praktyczny kurs, Helion, Gliwice 2017

### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for tutorials, preparation for tests) <sup>1</sup>	20	1,0

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<sup>1</sup> delete or add other activities as appropriate