#### POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

**Internet Technologies and Services** 

**Course** 

Field of study Year/Semester

Engineering Management 2/3

Area of study (specialization) Profile of study

The Enterprise Management of the Future general academic Level of study Course offered in

Second-cycle studies Polish

Form of study Requirements

part-time elective

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

10

Tutorials Projects/seminars

10

**Number of credit points** 

2

**Lecturers** 

Responsible for the course/lecturer: Responsible for the course/lecturer:

Ph.D., Eng. Krzysztof Hankiewicz, Ph.D., Eng.Zbigniew Włodarczak,

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Faculty of Engineering Management Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznan ul. J. Rychlewskiego 2, 60-965 Poznan

**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

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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 two 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. Passing threshold - 50%.

#### **Programme content**

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Lecture: 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.

Exercise: 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

- 1. Włodarczak Z., Technologie i usługi internetowe; PHP, Wydawnictwo Politechniki Poznańskiej, Poznań 2013
- 2. Borucki A., Włodarczak Z., Techniki opracowywania stron WWW, Wydawnictwo Politechniki Poznańskiej, Poznań 2013

#### Additional

- 3. Bendoraitis A., Aplikacje internetowe z Django. Najlepsze receptury, Helion, 2015
- 4. Duckett J., JavaScript i jQuery. Interaktywne strony WWW dla każdego, Helion, Gliwice 2015
- 5. Duckett J., HTML i CSS. Zaprojektuj i zbuduj witrynę WWW. Podręcznik Front End Developera, Helion, Gliwice 2014
- 6. Hankiewicz K., Prussak W., Jakość użytkowa internetowego serwisu biznesowego studium przypadku, Zeszyty Naukowe. Ekonomiczne Problemy Usług / Uniwersytet Szczeciński. 2011, nr 68 (651), s. 39-47
- 7. Lis M., PHP7. Praktyczny kurs, Helion, Gliwice 2017
- 8. Mitchell L. J., API nowoczesnej strony WWW. Usługi sieciowe w PHP, Helion, 2015





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# Breakdown of average student's workload

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

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