COURSE DESCRIPTION CARD - SYLLABUS

Course name

Computer Science

Course

Field of study

Safety Engineering

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

1/1

Profile of study

general academic

Course offered in

Polish

Requirements

Number of hours

Lecture

15

Laboratory classes

15

Other (e.g. online)

Tutorials

Projects/seminars

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

Krzysztof Hankiewicz, Ph.D. Eng.

krzysztof.hankiewicz@put.poznan.pl

phone +48 61 665 3408

Faculty of Engineering Management

2 Jacka Rychlewskiego Str.

60-965 Poznan

Responsible for the course/lecturer:

Prerequisites

Student has knowledge of the subjects of Information Technology.

Student can use previously learned applications.

Student is active and participate in the discussion on a given topic.

Course objective

The aim of the course is to prepare for using application programs as well as learning information useful in the specification, implementation and operation of IT systems.

Course-related learning outcomes

Knowledge

1. He knows the development trends and best practices in the field of security engineering. He knows the development trends and best practices in the field of security engineering [P6S_WK_03].

2. He knows the basic methods, techniques, tools and materials used in preparation for conducting scientific research and solving simple engineering tasks with the use of information technology, information protection and computer support [P6S_WK_04].

Skills

1. Can properly select sources and information derived from them, make an evaluation, critical analysis and synthesis of this information [P6S_UW_01].

2. Can use various techniques in order to communicate in a professional environment and in other environments [P6S_UW_02].

3. Can use analytical, simulation and experimental methods to formulate and solve engineering tasks, also with the use of information and communication methods and tools [P6S_UW_04].

Social competences

1. He can see the cause-and-effect relationships in the implementation of set goals and rank the importance of alternative or competitive tasks [P6S_KK_01].

2. Is aware of the understanding of non-technical aspects and effects of engineering activities, including its impact on the environment and the related responsibility for decisions made [P6S_KK_03].

3. He can initiate activities related to the formulation and transfer of information and cooperation in the society in the field of security engineering [P6S_KO_02].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The knowledge presented in the lecture is verified by assessing the students' activity during the lectures and one 45-minute colloquium carried out during the last lecture. The test consists of 5-6 open questions. Final issues on the basis of which questions are prepared will be given to students during lectures.

Skills achieved in the laboratory are verified based on the tasks performed during the class and a test verifying the ability to create a program algorithm.

Programme content

The main presented issues include: history of computer science, the basics of information technology, operating systems, the Windows operating system, network components and structure, computer network services, history of Internet , Web services, essential tools of MS Office, computer graphics, word processing , spreadsheets, collecting and processing of data.

Teaching methods

1. Lecture: multimedia presentation, illustrated with examples.

2. Laboratory exercises: practical tasks performed by students based on the presented instructions.

Bibliography

Basic

1. Silberschatz A., Galvin P.B., Gagne G., Podstawy systemów operacyjnych, Wydawnictwa Naukowo-Techniczne WNT, 2006

2. Krysiak K., Sieci komputerowe. Kompendium, Helion, 2005

3. Murray K., Microsoft Word 2010 PL. Praktyczne podejście, Helion, 2011

4. Masłowski K., Excel 2010 PL, Helion, 2010

Additional

1. Poradnik Webmastera http://webmaster.helion.pl, Paweł Wimmer

Breakdown of average student's workload

	Hours	ECTS
Total workload	60	2
Classes requiring direct contact with the teacher	30	1
Student's own work (literature studies, preparation for laboratory classes, preparation for tests)	30	1