

### POZNAN UNIVERSITY OF TECHNOLOGY

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

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Internship [S1Teleinf1>PZ]

Course

Field of study Year/Semester

Teleinformatics 3/6

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other (e.g. online)

0 0 160

Tutorials Projects/seminars

0 0

Number of credit points

4,00

Coordinators Lecturers

dr inż. Janusz Kleban

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# **Prerequisites**

Students have knowledge of obligatory and elective courses in accordance with the implementation of the study program for the field of Teleinformatics. Know the basic principles of occupational health and safety, understand the need for further training. Know the principles of organization and implementation of internships contained in the following documents: (1) Rules and regulations for student internships at Poznan University of Technology; (2) Credit Awarding Procedure for Student Internships under the Curriculum of the Faculty of Computing and Telecommunications of PUT; (3) Credit Awarding Procedure for Student Internships under the Curriculum of the Faculty of Computing and Telecommunications of PUT on the Basis of Professional Experience. All internship documents can be downloaded from: https://cat.put.poznan.pl/harmonogramy/praktyki-i-staze/procedura-i-dokumenty

### Course objective

Acquisition of practical skills and practical knowledge of the field of study. Expanding the knowledge acquired in obligatory and elective subjects and developing the ability to use it in professional work. Familiarizing students with the practical aspects of performing the profession of an ICT engineer, in particular improving the skills of organizing own and team work, as well as responsibility for the work performed and decisions made.

# Course-related learning outcomes

#### Knowledge

- 1. The student has knowledge, together with a necessary practical background, of basic and major courses (modules) taught in the Teleinformatics study field.
- 2. Knows the basic techniques, methods and tools that are used in the process of solving problems related to the construction, operation and functionality of network applications, devices and systems.
- 3. Has a basic knowledge of running a business.
- 1. Has basic skills in analyzing, designing, configuring and evaluating parameters of: networks, network equipment, transmission media and IT applications, especially network ones.
- 2. Can use in practice the knowledge gained during studies.
- 3. Can apply in practice the principles of occupational health and safety related to the profession of ICT engineer and has the necessary preparation to work in different companies. Social competences
- 1. Is aware of the need for professional work, proper resolution of dilemmas related to the performance of the profession and adhere to professional ethics. Is able to think and act in a businesslike way.
- 2. Has a sense of responsibility for the designed ICT systems and is aware of social risks in the event of inadequate design or implementation.
- 3. Understands the importance of shaping the information society for the development of the country.

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Achievement of learning outcomes is verified by the internship supervisor on the basis of the following documents: (1) report on internship completion, in which the achievement of the assumed learning outcomes was confirmed by the internship supervisor in the enterprise; (2) certificate of internship completion - if it was issued by the institution hosting the student for the internship.

If the student completes the internship on the basis of professional experience, the following documents provided by the student are analyzed: (1) report on internship completion - completed and signed by a representative of the enterprise, (2) original document confirming employment. The professional work performed must guarantee the achievement of the learning outcomes assumed for student internships.

### Programme content

The course covers the following issues: health and safety training, familiarization with the company's activities, familiarization with the company's IT infrastructure, active participation in solving practical problems, performing an independent task adapted to the trainee's knowledge, preparation of the report on internship completion.

### Course topics

The basic tasks of the trainee should include:

- 1. Completing health and safety training according to the regulations applicable to the employees of the department in which the student is taking up the internship.
- 2. Acquaintance with the profile of activities and principles of work organization in the enterprise, organizational structures, division of competences, work planning and control procedures as well as document circulation and information flow.
- 3. Getting to know the company's IT infrastructure, how is used the Internet techniques in the company's operations, and technical data protection problems.
- 4. Active participation in solving practical problems consisting in (depending on the specificity of the workplace) performing an independent task related to the subject of internships.
- a) Performing an independent task in the field of creating or modifying computer programs, with particular emphasis on programs that perform network functions and services, or joining the team designing and implementing of IT systems.
- b) Performing an independent task related to the design, construction, operation or configuration of computer networks, in particular fiber optic networks.
- c) Performing an independent task in the field of measurement of network parameters and analysis of the operation of computer networks.
- d) Performing an independent engineering task, adapted to the level of knowledge of the trainee, in the

field of designing or evaluating electronic, optical or optoelectronic systems and devices, taking into account the evaluation of various types of signals.

- e) Participating in introducing, configuring and supervising data security procedures and protecting the network against external attacks.
- 5. Preparation of the report on internship completion.

## **Teaching methods**

Depending on the location of the internship and the tasks carried out, the following teaching methods can be used: (1) problem or conversation lecture; (2) exchange of ideas (brainstorming); (3) project method or expert tables; (4) observation, measurement in the field.

### **Bibliography**

#### Basic:

- 1. Study regulations of full-time and part-time first and second cycle and long-cycle studies adopted by the Academic Senate of Poznań University of Technology
- 2. Rules and regulations for student internships at Poznan University of Technology
- 3. Credit Awarding Procedure for Student Internships under the Curriculum of the Faculty of Computing and Telecommunications of PUT
- 4. Credit Awarding Procedure for Student Internships under the Curriculum of the Faculty of Computing and Telecommunications of PUT on the Basis of Professional Experience

Documents [2, 3, 4] can be downloaded from the website: https://cat.put.poznan.pl/harmonogramy/praktyki-i-staze/procedura-i-dokumenty).

#### Additional:

1. B. Rączkowski, BHP w praktyce. Gdańsk: ODDK, 2014

## Breakdown of average student's workload

	Hours	ECTS
Total workload	160	4,00
Classes requiring direct contact with the teacher	0	0,00
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	160	4,00