COURSE DESCRIPTION CARD - SYLLABUS

Course name

Internship

Course

Field of study

Electronics and Telecommunications

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

I/I

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

dr inż. Janusz Kleban

janusz.kleban@put.poznan.pl

Responsible for the course/lecturer:

Prerequisites

Students have knowledge of obligatory and elective subjects in accordance with the implementation of the study program for the field of Teleinformatics. Know occupational health and safety principles.

Are able to carry out tasks tailored to the skills of students of Teleinformatics, in accordance with the implementation of the study program in the field of basic and major subjects.

Are aware of the need for a professional approach to solved technical problems and a sense of responsibility for the work done, know the limitations of own knowledge and skills, understand the need for further training.

Course objective

To develop the knowledge acquired at university courses and to learn how the theoretical knowledge can be used in solving practical problems with a research component. The tasks performed by the student should be related to the diploma profile. To develop interests in areas where students intend to write their master's theses.

Course-related learning outcomes

Knowledge

1. Has an in-depth and practically developed knowledge in the field of requirements analysis, implementation, testing and use of teleinformatic systems.

2. Knows the tools and techniques of work at the workplace related to the teleinformatic activity.

3. Understands the threats to data security in teleinformatic networks and knows the methods of their protection.

4. Has basic knowledge in the field of management, protection of intellectual property, running and development of business activity.

Skills

1. The student is able to practically apply the knowledge gained during the academic curriculum, in particular on major subjects.

2. Has the ability to self-educate in order to supplement his knowledge and expand professional competences.

3. Can use the known methods for the analysis and design of teleinformatic systems, as well as formulate a design specification taking into account technical and non-technical aspects, using appropriate standards and recommendations.

4. Can work in a team and implement a schedule ensuring meeting deadlines for the task and properly document his work.

5. Can effectively implement the occupational health and safety principles.

Social competences

1. Understands the necessity of active participation in the work of the team and taking responsibility for the implementation of assigned tasks.

2. Is aware of the need to act in a professional manner and obey the rules of professional ethics, sees and solves problems related to the performance of the profession.

3. He behaves in a way worthy of a student, follows the supervisor's instructions, can think in an entrepreneurial way.

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 Coordinator on the basis of the following documents: (1) Internship Certificate issued by the institution accepting the student for the internship, (2) Internship Diary confirmed by the internship supervisor from the company, with particular emphasis on the internship supervisor opinion's, (3) Internship Self-Evaluation – survey form of usefulness and satisfaction with the completed internship.

If the student apply for obtaining credit for internship on the basis of work performed as part of employment the documents submitted by the student, e.g. copy of an employment contract or certificate of employment at a given post or relevant documents confirming the compliance of their business activities with the internship programme, are subject to analysis. Professional work carried out in these modes must guarantee the achievement of the learning outcomes assumed for student internships.

Programme content

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 consisted (depending on the specificity of the workplace), among others of:

a) performing an independent task (or part of a team task) in the field of software related to teleinformatics problems, in particular related to the networking and network services;

b) performing an independent project, research or simulation task (or part of a team task), e.g. with the use of programmable digital circuits in the area of multimedia systems and services as well as computer networks;

c) performing an independent design and/or executive task in the field of electronic, optical or optoelectronic systems, microprocessor control, etc. and accounting for the performance of this task;

d) performing independent tasks in the field of security systems, in particular network security and safe data transfer, e.g. configuring network equipment and protocols;

e) performing independent tasks related to programming and/or configuration of network nodes, virtualization and computing clouds;

f) performing research tasks in the field of optimization, signal processing and simulation.

5. Preparation of the Internship Diary.

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. Organisational Regulations of Student Internship for students of Electronics and Telecommunications, and Teleinformatics at the Faculty of Computing and Telecommunications of the Poznan University of Technology

Additional

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

Breakdown of average student's workload

	Hours	ECTS
Total workload	160	2,0
Classes requiring direct contact with the teacher		
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	160	2,0

[1] delete or add other activities as appropriate