COURSE DESCRIPTION CARD - SYLLABUS

Course name
Internship [S1EiT1>PRAK]

Course

Field of study
Electronics and Telecommunications

Year/Semester
3/6

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other (e.g. online)
160

Tutorials
0

Projects/seminars
0

Number of credit points

3,00

Coordinators

dr inż. Janusz Kleban
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Lecturers

Prerequisites

The student has knowledge of basic and major courses (modules) included in the programme for the Electronics and Telecommunications study field. Knows the basic principles of occupational health and safety, understands the need for further training. Knows 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 related to the field of study, in particular regarding the planned diploma thesis. Expanding the knowledge acquired on obligatory and elective courses and developing the skills of using it in professional work. Familiarizing students with the practical aspects of the profession of telecommunications engineer, in particular improving the skills of organizing their own and team work, as well as responsibility for the work performed and decisions made.

Course-related learning outcomes

Knowledge 1. Basic knowledge on running a business.
2. The student has knowledge, together with a necessary practical background, of basic and major courses taught in the Electronics and Telecommunications study field.
3. Basic knowledge on the design, construction and repair of electronic, optical and optical electronic devices.
4. Knowledge on the development and modification of computer programs.
5. Basic knowledge on the design, configuration and use of network devices and measurement of network parameters.
6. In-depth knowledge on data security and network security.
Skills
1. Is able to put into practice the principles of health and safety at work related to the profession of telecommunications engineer and has the necessary preparation to work in business organizations.
2. The student is able to practically apply the knowledge gained during the academic curriculum.
3. Skills in the design, construction and measurement of digital, optical and optical electronic circuits.
4. Skills in the development and testing of IT applications.
5. Skills in the configuration of network devices and measurement of signals in networks.
6. Skills in ensuring data security in a computer network and secure data transfer.
Social competences
1. Demonstrates responsibility and professionalism in solving technical problems. Is able to participate in collaborative projects.
2. Demonstrates responsibility for designed electronic and telecommunication systems. Is aware of the hazards they pose for individuals and communities if they are improperly designed or produced.
3. Correctly interprets and resolves dilemmas related to working in the field of electronics and telecommunications. Is able to think and act in a businesslike 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 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 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 tasks consisted (depending on the specificity of the workplace), among others of:
• performing an independent engineering task relevant to the trainee"s level of knowledge in the field of designing, building or repairing electronic, optical or optoelectronic systems and devices, and set account for this task;
• performing an independent task in the area of writing or modifying computer programs, or to join a team working on design and implementation of IT systems;
• participation in the management of a telecommunication or computer network, which is the subject of activities at the place of internship; in particular in provisioning, configuring and testing data transmission devices and network nodes as well as measuring network parameters;
• participation in the implementation, configuration and supervision of data security procedures and secure 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	3,00
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	3,00