



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Vocational internship [S1S1E>PRAKT]

Course

Field of study

Artificial Intelligence

Year/Semester

3/6

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

English

Form of study

full-time

Requirements

compulsory

Number of hours

Lecture

0

Laboratory classes

0

Other

160

Tutorials

0

Projects/seminars

0

Number of credit points

4,00

Coordinators

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Lecturers

Prerequisites

Students starting this course should have essential competencies acquired during the earlier years of studies, which allow them to do the internship. The students should also understand the necessity to expand their competences / be ready to cooperate within the team. When it comes to social competencies, the students must present honesty, responsibility, perseverance, cognitive curiosity, creativity, personal culture, and respect for other people. The student has knowledge of compulsory and elective subjects in accordance with the implementation of the curriculum for the Artificial Intelligence. The student knows the basic principles of occupational safety and health, understands the need for further training. The student knows the rules of organization and implementation of internships contained in the following documents: (1) Regulations of student internships at Poznań University of Technology; (2) The procedure for crediting student internships included in the educational program of the Faculty of Computing and Telecommunications of Poznań University of Technology; (3) Procedure for crediting student internships included in the educational program of the Faculty of Computing and Telecommunications of Poznań University of Technology on the basis of work experience. All documents on internships can be downloaded from the website: <https://cat.put.poznan.pl/harmonogramy/praktyki-i-staze/procedura-i->

Course objective

The purpose of the student internship is to familiarize students with the practical aspects of the IT/AI profession and to get to know a potential future employer.

Course-related learning outcomes

Knowledge

The student knows and understands the basic techniques, methods, algorithms and tools used in the process of solving IT tasks with particular emphasis on artificial intelligence, including but not limited to discovering patterns from various types of data and their synthesis into knowledge and inferences. The student has a basic knowledge of the life cycle and processes of software and hardware information systems with particular emphasis on artificial intelligence systems.

Skills

The student has the necessary preparation to work in a business environment, including an industrial environment, and knows the safety rules related to the profession of information technology - artificial intelligence specialist.

The student is able to critically analyze and evaluate how information systems function and how artificial intelligence methods work.

The student has the ability to simply adapt existing and formulate and implement new algorithms, including algorithms typical of different strands of artificial intelligence, using at least one of the popular tools.

The student is able to acquire, analyze and process data of various types, protect it from unauthorized access, and synthesize it into knowledge and conclusions useful for solving a wide range of problems arising in the work of a computer scientist, a specialist in artificial intelligence, including problems of industrial, business and administrative specificity.

The student is able to plan and organize work in the implementation of engineering tasks - individually and in a team.

Social competences

The student is able to function and cooperate in a group, assuming various roles in it, and is able to appropriately determine priorities for the implementation of a task defined by himself or others.

The student is able to think and act in an entrepreneurial manner, including finding commercial applications for the created artificial intelligence systems, bearing in mind not only economic benefits, but also legal and social aspects.

The student is ready to responsibly perform professional functions, cultivate and disseminate patterns of proper conduct in the conducted activity, as well as correctly identify and resolve dilemmas related to the performance of the profession of a computer scientist - a specialist in artificial intelligence.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Summative assessment:

The achievement of learning outcomes is verified by the practice supervisor on the basis of the following documents:

- (1) a report on the completion of the internship, in which the achievement of the assumed learning outcomes is confirmed by the internship supervisor from the company;
- (2) a certificate of completion of the internship - if issued by the institution hosting the student for the internship.

If the student passes the internship on the basis of work experience, the following documents provided by the student are analyzed:

- (1) a report on the completion of the internship - completed and signed by a representative of the Company,
- (2) the original document confirming employment.

The professional work performed must guarantee the achievement, assumed for student internships, of the learning outcomes.

Programme content

Tasks of the student:

1. to receive OHS training according to the company regulations.
2. perform tasks from the internship program in the following thematic scope:
 - learning the principles of work organization: organizational structures, division of competences, procedures, work planning, control, including: getting acquainted with the structure of the company and functions of individual departments;
 - acquaintance with the ISO-900x certificate, if the company has it;
 - completing an independent engineering task appropriate to the apprentice's level of training and accounting for completion of this task;
 - joining in the collaborative design and implementation of systems being addressed at the internship site;
 - becoming familiar with the construction, programming methods, assembly, commissioning, or testing of systems operated, designed, assembled, or commissioned at the site;
 - involvement in the development, testing, documentation, and implementation of software used in the company.
3. Preparation of a report on the implementation of the practice.

Course topics

Topics closely related to the company's profile:

1. Receiving health and safety training according to the company's regulations.
2. Performance of tasks assigned by the employer related to larger projects of the enterprise or tasks individually prepared for apprentices - teamwork preferred.
3. Preparation of a report on the implementation of the internship.

Teaching methods

Depending on the place of internship and the tasks carried out, the following teaching methods may be used: (1) problem or conversation lecture; (2) brainstorming; (3) project.

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 (<https://put.poznan.pl/regulaminy>)
2. Regulations of student internships at Poznan University of Technology.
- 3 The procedure for crediting student internships included in the educational program of the Faculty of Faculty of Computing and Telecommunications of Poznań University of Technology
- 4 Procedure for crediting student internships included in the educational program of the Faculty of Computing and Telecommunications of Poznań University of Technology on the basis of work 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