



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Internship [S1Mech2>PRA]

Course

Field of study
Mechatronics

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
elective

Number of hours

Lecture
0

Laboratory classes
0

Other
160

Tutorials
0

Projects/seminars
0

Number of credit points

6,00

Coordinators

dr inż. Krzysztof Wałęsa
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Lecturers

Prerequisites

Knowledge: structured theoretical knowledge in the field of study. Skills: The ability to search for necessary information in literature, databases, catalogs. The ability to learn independently. Using information and communication techniques appropriate to the implementation of engineering tasks. Social Competence: Understanding the need for lifelong learning. Understanding the societal impact of engineering activities. Understanding the need for team collaboration.

Course objective

Awareness of the possibility of using theoretical knowledge in the conditions of a market economy. Paying attention to the complexity of processes taking place in industrial plants. Acquainting with interdisciplinary issues occurring in industrial practice. Understanding the functioning of the enterprise as an organization.

Course-related learning outcomes

Knowledge:

1. The student has knowledge of the principles of development of individual entrepreneurship forms.
2. The student has knowledge of the life cycle of technical devices and systems.
3. The student has knowledge of non-technical conditions of engineering activities.

Skills:

1. The student is able to obtain information from literature, databases and other appropriately selected sources to formulate and solve engineering problems.
2. The student is able to work individually and in a team on an assigned problem (also of an interdisciplinary nature).
3. The student is able to develop and present documentation from the implementation of an engineering task.
4. The student is able to work in an industrial environment with particular consideration of safety rules, ethics and other non-technical aspects.

Social competences:

1. The student is aware of the need for lifelong learning due to the development of technology.
2. The student is aware of the importance of knowledge in solving practical problems and seeking expert opinions in the event of difficulties in solving a problem independently.
3. The student is aware of the social role of a technical university graduate, understands the need to formulate and convey information and opinions regarding technological achievements.
4. The student is able to think and act in a creative and entrepreneurial manner.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Detailed report of completed internships or available work experience, questionnaires

Programme content

The scope of program content is variable and determined individually with the supervisor or internship supervisor.

Course topics

Recommended scope of practice:

General characteristics of the business entity: formal and legal status, organizational structure, employment, scope of activity. Characteristics of the production process: assortment of production, applied technologies, forms of production organization. Analysis of the production process on the example of a selected final product: design (cooperation with the sales department, methods and tools supporting design), material development, technological processes (technological operations, standardization of working time, production equipment), auxiliary processes (supply, storage and transport operations within the plant), quality control processes. Organization of work at the workstation: tasks performed at the workstation (types, number), spatial development plan of workstations, organization of work at the workstation (supply of materials and tools, transport, maintenance, repairs, quality control, issuing works to the workstation and settlement of completed tasks. Organization of maintenance services and analysis of operational problems of production machines (description of failures, actions taken, repair). Project of improving work at the workstation. Performing activities in terms of the topic of the engineering diploma thesis.

Teaching methods

Practical exercises in a selected company, case study

Bibliography

Basic:

1. Regulamin studenckich praktyk zawodowych na Wydziale Inżynierii Mechanicznej (WIM) Politechniki Poznańskiej (<https://wim.put.poznan.pl/wnioski-i-regulaminy>)

Additional:

1. Zarządzenie Nr 11 Rektora Politechniki Poznańskiej z dnia 29 marca 2023r. w sprawie wprowadzenia Regulaminu studenckich praktyk zawodowych w Politechnice Poznańskiej

Breakdown of average student's workload

	Hours	ECTS
Total workload	160	6,00
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	6,00