



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Internship [S1IZarz1E>PRAK]

### Course

Field of study

Engineering Management

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 (e.g. online)

160

Tutorials

0

Projects/seminars

0

### Number of credit points

4,00

### Coordinators

dr inż. Anna Mazur prof. PP  
anna.mazur@put.poznan.pl

### Lecturers

### Prerequisites

Knowledge about the complexity and multi-faceted functioning of organization management systems and engineering knowledge in relation to broadly understood management engineering issues. Skills to perceive, associate and interpret phenomena occurring in organizations and use them in the area of organization management, with particular emphasis on the engineering area. Ability to work in a team and solve problems together in a team. Awareness of the importance and necessity of raising one's competences. Awareness of taking social responsibility for decisions made in connection with organization management.

### Course objective

The objective of the course is to observe, analyze and evaluate management processes in organizations and to acquire practical skills and freedom in perceiving and elementary handling of management and engineering processes implemented in the enterprise.

### Course-related learning outcomes

Knowledge:

The student selects and uses educational and training centers to develop their skills and competencies

in the area of a knowledge-based economy, and recognizes the need for continuous education in this area [P6S\_KK\_01].

The student analyzes and interprets the importance of a systemic approach to creating products and services in a knowledge-based economy, considering technical, economic, marketing, legal, organizational, and financial aspects [P6S\_KO\_02].

#### Skills:

The student applies the acquired knowledge to resolve real professional dilemmas encountered during internships [P6S\_UW\_03].

The student analyzes and proposes solutions for specific management problems encountered in the enterprise [P6S\_UW\_04].

The student conducts an analysis of the causes and course of processes and social phenomena in the context of professional work [P6S\_UW\_07].

The student applies typical methods of solving problems in the field of construction and operation of machinery in real working conditions [P6S\_UW\_15].

The student demonstrates the ability to work responsibly individually and in a team, adhering to the principles of teamwork [P6S\_UO\_01].

#### Social competences:

The student observes and describes the importance of a systemic approach to creating products and services, based on experiences gained during internships [P6S\_KO\_02].

The student shows professionalism and adheres to the principles of professional ethics, taking into account the diversity of views and cultures in the work environment [P6S\_KR\_02].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

#### Formative assessment:

It consists of answers to the following questions: Has the Student been properly prepared for the internships (has correctly completed the required documents and provided them to the Supervisor in accordance with the deadlines)? Has the Student consulted the Practitioner of any changes regarding the organization and course of internships? Has the Student prepared the Practice Report in accordance with the guidelines? Did the Student refer the Tutor to the internship, particularly emphasizing his own ideas proposed in the company.

Grade of assessment: definitely yes, on average, definitely not.

#### Summative assessment

Appraisal of the tutor based on the prepared report. The report is prepared in accordance with the internship program.

### Programme content

The program content includes topics on the practical aspects of safety and quality engineering in enterprises in accordance with the internship program for the Engineering management study.

### Course topics

#### 1. INTRODUCTION OF THE COMPANY:

- legal form,
- size of the company (number of employees) - determine the category of the company (small, medium, big),
- subject and scope of activity.

#### 2. IDENTIFICATION AND ANALYSIS OF COMPANY'S ORGANIZATIONAL STRUCTURE:

- organizational chart,
- identification of the type of organizational structure (line, line and staff, divisional, matrix, performance, network) with a justification,
- brief characteristics of individual segments of the organization (units, departments).

#### 3. IDENTIFICATION AND ANALYSIS OF OPERATIONAL PROCESSES (production, service):

- product assortment (products, services): breadth (number of product lines) and depth of assortment (types, subtypes of products),
- degree of product customization (adjusting to individual customers' needs),

- annual programs of production, services (items / year), identification of production stabilization (mass, serial, single unit production ),
- batch size (production, service),
- technology of operational processes (production, service): main process stages, level of mechanization, automation and robotization,
- operational structure (production, service): division into departments, branches, lines, brigades -schematic diagram with description,
- quality management system (structure of quality management - units and their tasks),
- diagram and description of the organization of a selected operational position (production, service),
- operational management (procedure of annual production / services planning, monthly and weekly planning, daily planning, operational documentation (production) - guidelines / distribution lists, job sheets, goods received notes, deficiencies charts, etc.).

#### 4. IDENTIFICATION AND ANALYSIS OF COMMERCIAL ACTIVITY

- identification of distribution channels,
- identification of supply channels,
- identification of organizational structure of sales staff (departments, sections and their tasks in the scope of marketing, sales and supplies)
- typical customer service procedure (offer presentation, contracts, supervising the implementation, clearing and settling, after-sales service)

#### 5. IDENTIFICATION AND ANALYSIS OF ECONOMIC ACTIVITY

- rganizational structure of economic services, (diagram, tasks of particular units),
- the structure of the annual business plan of the company ( what it consists, structure of businesses' financial statements

6. Other contents agreed with the supervisor of engineering thesis relevant to its topic.

### Teaching methods

Classical problem method, situational method, exchange of ideas, SWOT, demonstration method, method of production exercises, method of experiments, workshop method.

Information lecture, ongoing consultation of problems with the acquisition and implementation of internships, discussion on the report (on-line / face to face).

### Bibliography

Basic:

1. Regulations of internships for students of fields of study implemented at FEM PP, edition 11
2. Procedures, instructions and descriptions of company processes.
3. Regulations and other company standards.

Additional:

Enterprise' documentation made available during internships.

### Breakdown of average student's workload

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