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STUDY MODULE DESCRIPTION FORM					
Name of the module/subject Internship		Code 011101261011100749			
Field of study	Profile of study (general academic, practical)	Year /Semester			
Engineering Management - Full-time studies -	(brak)	3/6			
Elective path/specialty	Subject offered in:	Course (compulsory, elective)			
-	Polish	obligatory			
Cycle of study:	Form of study (full-time,part-time)				
First-cycle studies	First-cycle studies full-time				
No. of hours		No. of credits			
Lecture: - Classes: - Laboratory: -	Project/seminars: 16	60 4			
Status of the course in the study program (Basic, major, other) (university-wide, from another field)					
(brak) (br		orak)			
Education areas and fields of science and art		ECTS distribution (number and %)			
technical sciences	4 100%				
Technical sciences		4 100%			

### Responsible for subject / lecturer:

dr inż. Anna Mazur

email: anna.mazur@put.poznan.pl

tel. 616653365

**Engineering Management** 

ul. Strzelecka 11, 60-965 Poznań

### Prerequisites in terms of knowledge, skills and social competencies:

1	Knowledge	Knowledge about the complexity and multifacetedness of organizational management systems and engineering knowledge in relation to engineering management.
2	Skills	Skills of noticing, associating and interpreting phenomena occurring in organizations and their use in the area of organization management with particular emphasis on the engineering area.
3	Social competencies	The ability to work together and solve problems in a team. The student understands and is prepared to bear social responsibility for decisions made in connection with the management of the organization

## Assumptions and objectives of the course:

The aim of the course is to observe, analyze and evaluate the effects of management processes in organizations and acquire practical skills and freedom in perceiving and basic management and engineering processes

### Study outcomes and reference to the educational results for a field of study

# Knowledge:

- 1. Knows the typical organizational structures of enterprises and knows how to recognize and analyze the organizational structure in the company during internship. [K1A\_W04]
- 2. Has knowledge of the appropriate tools necessary to collect, process and distribute information collected during student internship. [K1A\_W11]
- 3. He knows the methods and tools that can be used while modeling the phenomena observed in the enterprise in which he is practicing. [K1A\_W12]
- 4. Has basic knowledge about the life cycle of socio-technical systems in the company analyzed during the internships. [K1A\_W23]
- 5. He knows the basic methods, techniques, tools and materials used in solving simple engineering problems in the enterprise selected to implement the practice [K1A\_W24]

## Skills:

### **Faculty of Engineering Management**

- 1. Is able to analyze source data made available by the company during internships, e.g. documents, procedures, instructions, regulations. [K1A\_U02]
- 2. 2. Is able to properly analyze the causes and course of management processes and operational processes in the enterprise in which he or she is practicing. [K1A\_U03]
- 3. 3. Has the ability to observe the rules of linguistic correctness in the editing of documents and during the preparation of the report on practices. [K1A\_U09]
- 4. 4. Is able to make a preliminary technical and economic analysis of the engineering actions taken during the internship. -[K1A\_U15]

### Social competencies:

- 1. Is aware of the need to solve selected tasks with the help of team work and reports to the team during the internship. [K1A\_K02]
- 2. Is aware of the importance of behavior in a professional manner while respecting the rules of professional ethics. [K1A\_K04]
- 3. The student is able to act in an entrepreneurial manner at the stage of searching for internships and passing them. [K1A\_K09]

## Assessment methods of study outcomes

Assessment by the supervisor of the internship, whether the student was enterprising when looking for internship, during the internship and during passing.

Preparing a report on the internship.

Presentation of the practice report to the tutor.

### **Course description**

#### 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 ANALISIS 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 ANALISIS 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

- Organizational structure of economic services, (diagram, tasks of particular units)
- the structure of the annual business plan of the company ( what it consists of ), structure of businesses? financial statements
- 6. Other contents agreed with the supervisor of engineering thesis relevant to its topic.

# Basic bibliography:

- 1. General Terms and Conditions of Student Internships for students of studying fields at Faculty of Engineering Management of Poznan University of Technology.
- 2. Procedures, instructions and descriptions of company processes.
- 3. Regulations and other company standards.

# Additional bibliography:

1. Regulations of Studies

# Result of average student's workload

Activity	Time (working hours)
1. Participation in practice	160
2. Preparation and presentation of the practice report	5

#### Student's workload

Source of workload	hours	ECTS
Total workload	165	4
Contact hours	5	1
Practical activities	160	3