Name of the module/subject Code Production and Operations Management Code Field of study Profile of study (general academic, practical) Year /Semester Logistics - Full-time studies - First-cycle studies Subject offered in: Polish Course (compulsory, election obligatory) Elective path/specialty - Polish Course (compulsory, election obligatory) Cycle of study: First-cycle studies Form of study (full-time, part-time) No. of credits No. of hours Lecture: 30 Classes: - Laboratory: 15 Project/seminars: 15 6 Status of the course in the study program (Basic, major, other) (university-wide, from another field) Ectrs distribution (number Education areas and fields of science and art Ectrs distribution (number Ectrs distribution (number			
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Education areas and fields of science and art ECTS distribution (numb and %)			
technical sciences 6 100%			
Technical sciences6 100%			
Responsible for subject / lecturer: dr inż. Agnieszka Grzelczak email: agnieszka.grzelczak@put.poznan.pl tel. 61 665 33 69 Faculty of Engineering Management ul. Strzelecka 11, 60-965 Poznań			
Prerequisites in terms of knowledge, skills and social competencies:			
1 Knowledge Student has a fundamental knowledge in the field of process engineering, production and logistics organization.			
2 Skills Student understands and is able to apply the parameters of manufacturing process and systems for designing of production structures.			
3 Social competencies Student understands and is prepared to manage production and services especially in the scope of designing of production systems? structures.			
Assumptions and objectives of the course:			
Students become familiar with methodology and technique applied for designing of production systems? structures and other management aspects.			
Study outcomes and reference to the educational results for a field of study			
 Knowledge: 1. He has a basic knowledge of computer science (information technology), economics and transportation, production management and services, production systems design (industrial design) - [K1A_W09] 2. He is able to explain the relationship between: IT (information technology), economics and organization of transport, production management and services, production systems design (industrial design) and logistics, supply chain management - [K1A_W10] 			
3. Student knows methods and tools for developing manufacturing structures - [K1A_W33]			
Skills:			
1. He can independently develop a set, housed in the subject being studied issue - [T1A_U05]			
2. He can be formulated using analytical methods, simulation or experimental located within the subject being studied design task and solve the task in the field of logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics service,) and supply chain management - [K1A_U09]			
3. He is able to select appropriate tools and methods to solve the problem of falling within the logistics and supply chain management as well as how to use them effectively - [T1A U15]			
management as well as how to use them effectively - [T1A_U15]			

1. He is aware of the need for lifelong learning; inspire and organize the learning process of others in the coming within studied concerning issues - [K1A_K01]

He is willing to cooperate and work in teams to resolve contained within the subject being studied problems - [K1A_K03]
 He is able to see the cause-and-effect relationships in the implementation of the set objectives and importance rangować tasks - [K1A_K04]

4. He is able to plan and manage in an entrepreneurial manner - [K1A_K06]

Assessment methods of study outcomes

Formative assessment:

in project and laboratory: Based on current performance progress assessment

in lectures: on the basis of answers to questions about the material discussed in the previous lectures

Summary summary:

in project and laboratory: presentation of works

in lectures: oral exam

Course description

Enterprises as manufacturing system. Production structure, fundamentals of its model ling. Plant specialization. Similarity and stabilization of production. Types and forms of production organization. Criteria of system optimization. Algorithm for design and reconstruction of manufacturing structures. Technical development of production units with usage of software support. Design of production units layout and surface arrangement. New trends in the field of service and operations management.

DIDACTIC METHODS: information lecture, case study, project method and laboratory exercises.

Basic bibliography:

Additional bibliography:

Result of average student's workload Time (working Activity hours) 1. Participation in lectures 30 30 2. Participation in laboratories and projects 3. Consultation 15 4. Exam 5 5. Literature studiem 30 6. Elaboration of project 15 7. Preparation for exam 15 8. Preparation for project and laboratories 20

Student's workload

Source of workload	hours	ECTS
Total workload	160	6
Contact hours	80	3
Practical activities	30	1