STUDY MODULE DESCRIPTION FORM							
	f the module/subject anization of engi	^{nde} 11104441011120877					
Field of study Logistics - Part-time studies - First-cycle Elective path/specialty -			Profile of study (general academic, practical) (brak) Subject offered in: Polish	Year /Semester 2 / 4 Course (compulsory, elective) elective			
Cycle o	f study:		Form of study (full-time,part-time)				
First-cycle studies			part-time				
No. of h			Project/seminars: 10	No. of credits			
Lecture: 12 Classes: - Laboratory: - Project/seminars:				5			
Status of the course in the study program (Basic, major, other) (brak)			(university-wide, from another field) (brak)				
Educati	on areas and fields of sci	ence and art		ECTS distribution (number and %)			
Resp	onsible for subj	ect / lecturer:	Responsible for subject /	lecturer:			
prof. dr hab. inż. Aleksandra Kawecka-Endler email: aleksandra.kawecka-endler@put.poznan.pl tel. 61- 6653370 Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań			dr inż. Roma Marczewska-Kuźma email: roma.marczewska-kuzma@put.poznan.pl tel. 61-6653364 Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań				
Prere	equisites in term	s of knowledge, skills an	d social competencies:				
1	Knowledge	Student has knowledge of business processes, design, organization and implementation of the production processes, as well as in the area of design, evaluation, verification and implementation of production					
2	Skills	Student is able to use knowledg	ge acquired during courses of other subjects				
3	Social	Student is responsible and can interact with others and work in a team					
5	competencies	Student understands the need f	or lifelong learning and acting in ac	cordance with the rules			
Assu	mptions and obj	ectives of the course:					
	nting knowledge of the ed methods applied in		onnected with organization of produ	iction preparation and			
	Study outco	mes and reference to the	educational results for a	field of study			
Knov	vledge:						
1. Has 2. Kno	the basic knowledge		ocessing and selecting data within	range of processes occurring			
			cesses and phenomena taking plac	ce in production - IW211			
		• ·	ical product preparation and system				
Skills	s:	•		<u> </u>			
1. Coll	ects data on the basis	of the literature to show problem	concerning product production pre	paration - [U01]			
		blem concerning technical product		-			
3. Applies experimental techniques and computer simulations to solve problems in product preparation - [U08]							
4. Elaborates system description of the problem concerning technical product preparation - [U10]							
		nically production processes and p					
		pearing in production preparation	as an engineering task - [U14]				
20018	al competencies:						

1. Is able to complete and improve own knowledge - [K01]

2. Is willing to collaborate and work in a team - [K2]

3. Can extend his knowledge taking into account other aspects and effects of engineering activity and its influence on environment - [K03]

4. Is determined to think and act in an enterprising and effective way - [K06]

Assessment methods of study outcomes

Forming assessment:

a) Classes: Current assessment of activity during classes

b) Lecture: basing on questions asked during the lecture, which refer to previous lectures on the subject

Final assessment:

a) Classes: colloquium

b) Lectures: final test

Course description

Production process components, range of tasks. Production process management, technical humanization and economical aspects. Product traits, quality and reliability. Objectives, tasks and functions of product production preparation in industrial company. Constructive, technological and organizational preparation of the production? planning and designing, far-reaching and current activity. Notion and significance of technology of products construction. Technological processes of assembly. Computer aid CAD and CAD/RAM. Curve of product life cycle. Costs of the production preparation. Documentation of production preparation and flow. Organization structure of product preparation units. Designing unit, serial and mass production; group technology, Flexible Manufacturing System. Starting new production. Innovative processes in activity of industrial company.

Basic bibliography:

1. Organizacja technicznego przygotowania produkcji prac rozwojowych, Kawecka-Endler A., Politechniki Poznańskiej, Poznań, 2004

2. Inżynieria produkcji, Karpiński T., WNT, Warszawa, 2007

Additional bibliography:

1. Inżynieria zarządzania. Strategia i projektowanie systemów produkcyjnych cz.2, Durlik I., Agencja Wydawnicza Placet, Warszawa, 2005

Result of average student's workload

Activity	Time (working hours)			
1. Lecture	12			
2. Classes	10			
3. Preparation for classes	30			
4. Consultations	40			
5. Preparation for final test	28			
6. Final test	5			

Student's workload

Source of workload	hours	ECTS
Total workload	100	5
Contact hours	50	2
Practical activities	40	1