		STUDY MODULE DE	ES				
Name of the module/subject Proseminar				Code 1010612221010614114			
Field of	study			Profile of study	Year /Semester		
Tran	sport			(brak)	1/2		
Elective	path/specialty			Subject offered in:	Course (compulsory, elective)		
<u> </u>	Food Industry	Machines and Refrigeration	on -	Polish	obligatory		
Cycle of study: F				orm of study (full-time,part-time)			
Second-cycle studies				full-time			
No. of hours					No. of credits		
Lectu	re: 1 Classes	s: - Laboratory: -		Project/seminars:	- 1		
Status o	of the course in the study	program (Basic, major, other)	(university-wide, from another fie	eld) Is and Lab		
E du ca e f		(Drak)					
Educali	on areas and neids of sci	ence and an			and %)		
prot. dr hab. inz. Stanisław Nosal email: stanislaw.nosal@put.poznan.pl tel. 665-5852 MRiT ul. Piotrowo 3, 60-695 Poznań							
Prerequisites in terms of knowledge, skills and social competencies:							
1	Knowledge	Has knowledge of scientific and t with ethical principles applicable	nd technical information sources and how to use them. Familiar ble when writing a master's thesis (plagiarism).				
2	Skills	Know how to use different source	es o	f information.			
3	Social competencies	Social Understand the need for continuing training. competencies					
Assu	mptions and obj	ectives of the course:					
In addition to the knowledge and skills in the field of research and presentation of their results. Preparation for implementation of the thesis.							
	Study outco	mes and reference to the	ed	ucational results for	a field of study		
Knov	vledge:						
1. Has a basic knowledge of research methods. Know the criteria correctly formulated the research hypothesis, verification and rules of inference [K2A_W20]							
Skills	3:						
1. Can collect the literature sources necessary for the implementation of the master's thesis [K2A_U08]							
2. Know how to determine the purpose and the way of its implementation [K2A_U08]							
Social competencies:							
1. Understand the need for lifelong learning. Is aware of the role of the social engineer [K2A_01]							
Assessment methods of study outcomes							
Deduc	tion on the basis of a	written test and a preliminary plan t	for t	he thesis.			
Course description							

The objectives of scientific cognition. The classification of the sciences. Research methods. Observation and experiment. Models and modeling. Formulation and verification of hypotheses. The formulation of conclusions. Scientific language: regularity, law, theories. Rules for writing scientific papers. Exam preparation master's degree.

Basic bibliography:							
1. Leszek W. Badania empiryczne. Wyd. ITE, Radom 1997.							
2. Pytkowski W., Organizacja badań i ocena prac naukowych, PWN, Warszawa 1985							
3. Such J., Szcześniak M., Filozofia nauki, Wyd. Naukowe UAM, Poznań 2000.							
Additional bibliography:							
Result of average student's workload							
Activity	Time (working hours)						
1. Participation in the lecture		15					
2. Consultation	2						
3. Preparing to pass.	6						
4. Preparation for assessment	2						
Student's workload							
Source of workload	hours	ECTS					
Total workload	25	1					
Contact hours	19	1					
Practical activities	0	0					