		STODT MODULE DE		-	
Name of the module/subject Technology of Gaseous Fuels Utilization			Code 1010635231010630544		
Field of study			Profile of study	Year /Semester	
Mechanical Engineering			general academi	ic 2/3	
Elective path/specialty			Subject offered in:	Course (compulsory, elective)	
Cycle o	f study:	ching and Kenewable Ener	Form of study (full-time,part-tim	ne)	
	Second-cy	ycle studies	part-time		
No of hours			• No. of credits		
Lecture: 18 Classes: - Laboratory: -			Project/seminars:	- 2	
Status o	of the course in the study	program (Basic, major, other)	(university-wide, from another field)		
		other	uni	versity-wide	
Educati	on areas and fields of sci	ence and art		ECTS distribution (number and %)	
technical sciences				2 100%	
Resp dr ir ema tel. Fac	onsible for subje nž. Rafał Ślefarski ail: rafal.slefarski@put. 616652218 ulty of Transport Engir	poznan.pl			
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Lecture: the written examination

The evaluation of student knowledge will be held based on an answers on 5 questions from the material presented during the lectures.

Course description

Methods and apparatus for syngas, biogas and pyrolysis gas production, advanced gas turbine cycles, new ignition systems for gas engines, low emission combustion processes of gaseous fuels in furnace and boilers, thermal neutralization of VOCs, reduction systems for toxic compounds, energy storage processes, power to X

Basic bibliography:

1. Dobski, T.: Combustion Gases in Modern Technologies, 2scd Ed., Wydawnictwo Politechniki Poznańskiej, 3. 4. Vademecum Gazownika, praca zbiorowa

2. Molenda J.: Gaz ziemny. Paliwo i surowiec, WNT, Warszawa

3. P. Basu: Biomass Gasification and Pyrolysis: Practical Design and Theory

4. Vademecum Gazownika, praca zbiorowa

Additional bibliography:

1. P. Jansohn. Modern Gas Turbine Systems

Result of average student's workload

Activity	Time (working hours)	
1. Participation in the lecture	30	
2. Fixing the lecture	15	
3. Participation in consulatation of materials	5	
4. Preparing to pass the lecture	15	
5. Participation in the completion of the lecture	2	
Student's wo	rkload	
Source of workload	hours	ECTS
Total workload	67	2
Contact hours	37	1
Practical activities	30	1