

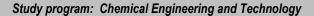
Syllabus

per week

outline

UNIVERSITY OF EAST SARAJEVO

Faculty of Technology Zvornik



CYCLE I YEAR IV



Course title	ENERGY	'EFFICIE	NCY IN	INDUS	TRIAL I	PROCI	ESSES	
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Department Department for Process Engineering-Faculty of Technology Zvornik

Course	code	Course status	Semester	ECTS
		Elective	VII	3
Teacher	Mitar Perusic, P	hD, full professor		
Teaching				

Teaching assistant	Dusko Kostic, MSc,	teaching assistant

Teaching work	kload/Number of	hours (weekly)	Indiv	idual	work (hours per	semester)	Student's work coefficient, S _o
Lectures	Auditory exercises	Laboratory Exercises	Lecture	es	Auditory exercises	Laboratory Exercises	So
2	1	0	30		15	0	1,00
	2*15 + 1*15 + 0	*15 =45 h			2*	15 + 1*15 + 0*15	=45 h

Total course workload (hours per semester, teacher + student): 45+ 45 = 90

Learning outcomes	After finishing the course, students will be able to: 1. find and use literature data on processes, energy and energy efficiency; 2. demonstrate and utilize the knowledge of the concept and forms of energy; 3. understand the importance of energy efficiency and efficiency of process devices; 4. plan energy needs; 5. demonstrate and utilize the knowledge of the role and importance of regulators in the field of energy production and consumption.
Prerequisites	None.

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Teaching methods	Lectures, class exercises and individual work
	4 Life Life Desire Constitution

- Introduction. Basic terms of the process.
 - 2. Technological processes.
 - 3. Energy consumption, the notion of energy efficiency and technological development.
 - 4. Energy classification.
 - 5. Energy balances.
 - 6. Primary energy sources.
 - 7. Energy technologies.
 - 8. Power (energy) accumulation. Mid-term test/Colloquium 1.
 - Renewable energy sources.
 - Energy consumption indicators. 10.
 - 11. Evaluating rational use of energy and investment.
 - 12. Energy-efficient processing devices.
 - 13. Planning for energy needs.
 - 14. Regulations in the field of energy production and use.

	15.	Managing energy systems. Mid-term test/Colloquium 2.			
		Obligatory literature			
Author/s		Title, publisher	Year		Page
D. S. Markov	rić	Process and energy efficiency, Singidunum, Belgrade, first edition	2010		1-515
		Additional reading			
Author/s		Title, publisher	Year		Page
M. Lambić, D.Tolr Stojićević, V. N	•	Energy efficiency, AGM Book, Belgrade	2004		1-232
D. Y. Goswami, F.	. Kreith	Energy Efficiency and Renewable Energy Handbook, Second Edition, CRC Press	2015		1-690
S. Fawkes, K. Oung,	D. Thorpe	Best Practices and Case Studies for Industrial Energy Efficiency Improvement, Copenhagen Centre on Energy Efficiency	2016		1-150
Obligations, assessment		Type of student evaluation		Grade points	Percentage

methods and	Pre-exam obligation			
grading system		Attendance	6	6 %
		Mid-term test I	25	25 %
		Mid-term test II	25	25 %
		Seminar paper	14	14 %
	Final exam			
		Final exam	30	30 %
	TOTAL		100	100 %
Web page	www.tfzv.ues.rs.ba			
Date	2023			