

1. PROFESSIONAL ACADEMIC NAME AND DEGREE TO BE REACHED BY COMPLETING THE STUDY

After completing the four-year studies of the first cycle of studies (240 ECTS) on the study programme: *Renewable energy sources*, academic vocation is **gained graduated in the generic energy and energy efficiency management** and degree of professional training: **VII/1**.

At the end of the second cycle of studies (60 ECTS) lasting one year, the academic vocation of **the Master of Energy And Energy Efficiency Management and** the degree of professional development: **VII/2**.

At the end of the third cycle of studies (180 ECTS) for three years, the academic vocation of the **Doctor of Science** in Energy And **Energy Efficiency Management and** the degree of professional development: **VIII**.

2. CONDITIONS FOR ENROLLING IN THE STUDY PROGRAMME

First cycle of studies:

- Completed four-year high school (IV degree) and passed the entrance exam for the first cycle of study.

Second cycle of studies:

- Completed the first cycle of studies and average ratings over 8.00. In the event that the student has a lower average work Habilitation work in an area determined by the dean of the faculty.

Third cycle of studies:

- Students who have:
 - a) *completed first and second cycle studies or integrated studies, established by the study programme of the third cycle of studies or*
 - b) *academic degree of master/master of the nuke set out in the study programme of the third cycle of studies*
- In the second year of the third cycle of study, students who have completed their first year of study or are missing 7 ECTS points as well as students who gained 360 ECTS points on the first and second cycles of studies can be enrolled. If the first-year curriculum is not fully agreed, the student is obliged to pass differential exams before the start of the academic year. The Doctoral Studies Commission is worth study plans and programmes and determines the number of differential exams.

3. LIST OF MANDATORY AND ELECTORAL CASES AND THE NUMBER OF HOURS NEEDED TO REALISE THEM

View Table 1, 2 and 3.

4. POINTS VALUE OF EACH CASE AND FINAL WORK EXPRESSED IN ECTS POINTS

View Table 1, 2 and 3.

Table 1 First cycle of studies - Study programme: *Energy management and energy efficiency*

Num.	Code	Case Name	Sam.	Guy	Status	Active classes			Else Class	ESPB
						P	V	KV		
FIRST YEAR										
1.	11010	Math 1	1		O	2	2	5		6
2.	11020	Graphic engineering	1		O	2	2	5		6
3.	11030	Technical physics	1		O	2	2	4		6
4.	11040	Business English 1	1		O	2	2	5		6
5.		<i>Elective Subject 1</i>	1		IB	2	2	5		6
	1105AI	<i>Business ethics</i>								
	1105BI	<i>Software tools for statistics</i>								
6.	11060	Technical mechanics 1	2		O	2	2	5		6
7.	11070	Math 2	2		O	2	2	5		6
8.	11080	Informatics	2		O	2	2	5		6
9.	11090	Business English 2	2		O	2	2			6
10.		<i>Elective Case 2</i>	2		IB	2	2	5		6
	1110AI	<i>Sociology</i>								
	1110BI	<i>Management</i>								
Total classes						300	300			60
SECOND YEAR										
1.	12010	Technical mechanics 2	3		O	2	2	5		6
2.	12020	Material resistance	3		O	2	2	4		6
3.	12030	Machine elements	3		O	2	2	4		6
4.	12040	Business English 3	3		O	2	2	5		6
5.		<i>Elective Case 3</i>	3		IB	2	2	5		6
	1205AI	<i>The basis of the economy</i>								
	1205BI	<i>Human Resources Management</i>								
6.	12060	ICT in energy	4		O	2	2	5		6
7.	12070	Ecosystem technologies	4		O	2	2	5		6
8.	12080	Environmental engineering	4		O	2	2	5		6
9.	12090	Business English 4	4		O	2	2	5		6
10.		<i>Elective Case 4</i>	4		IB	2	2	5		6
	1210AI	<i>Renewable energy sources</i>								
	1210BI	<i>Project Management</i>								
Total classes						300	300			60
THIRD YEAR										
1.	13010	Thermodynamics	5		O	2	2	4		6
2.	13020	Fluid mechanics	5		O	2	2	4		6
3.	13030	Thermo technical measurements	5		O	2	2	4		6
4.	13040	Business English 5	5		O	2	2	5		6
5.		<i>Elective Case 5</i>	5		IB	2	2	5		6
	1305AI	<i>Fossil energy</i>								
	1305BI	<i>Heat transfer</i>								
6.	13060	Thermo energy plants	6		O	2	2	5		6
7.	13070	Hydropower plants	6		O	2	2	5		6
8.	13080	Pumps and fans	6		O	2	2	5		6
9.	13090	Business English 6	6		O	2	2	5		6
10.		<i>Elective Case 6</i>	6		IB	2	2	5		6
	1310AI	<i>Cooling devices</i>								
	1310BI	<i>Heat pumps</i>								
Total classes						300	300			60

Ordinal Number	Code	Case Name	Sam.	Guy	Status	Active classes			Else Class	ESPB
						P	V	KV		
FOURTH YEAR										
1.	EE14010	Modelling and simulation	7		O	2	2	5		6
2.	EE14020	Automation of processes in energy	7		O	2	2	5		6
3.	EE14030	Energy efficiency of buildings	7		O	2	2	5		6
4.	EE14040	Quality management	7		O	2	2	5		6
5.		<i>Elective Case 7</i>	7		IB	2	2	5		6
	EE1405AI	<i>Energy efficiency in industry and utilities</i>								
	EE1405BI	<i>Water preparation</i>								
6.	EE14060	Energy efficiency of engines and motor vehicles	8		O	2	2	5		6
7.	EE14070	Nuclear power plants	8		O	2	2	5		6
8.	EE14080	Investment projects	8		O	2	2	5		6
9.		<i>Elective Case 8</i>	8		IB	2	2	5		6
	EE1409AI	<i>Cooling towers</i>	8							
	EE1409BI	<i>Heating, air conditioning and ventilation</i>	8							
10.	EE14100	Professional practice	8		O				60	
11.		Graduate work	8		O					6
Total classes						300	300			60

Table 2 Second study cycle

Num.	Code	Case Name	Sam.	Guy	Status	Active classes			Else Class	ESPB
						P	V	KV		
1.	EE21010	Methods and techniques of research	1		O	3	3	5		8
2.	EE21020	Project Management	1		O	2	2	5		4
3.	EE21030	Reengineering	1		O	3	3	5		8
4.	EE21040	Integral quality management systems	1		O	3	3	5		8
5.		<i>Elective Subject 1</i>	2		IB	3	3	5		7
	EE2105AI	<i>Energy Resource Management</i>								
	EE2105BI	<i>Energy and exergic sources</i>								
	EE2105CI	<i>Energy systems</i>								
6.		<i>Elective Case 2</i>	2		IB	3	3	5		7
	EE2106AI	<i>Energy efficiency of buildings</i>								
	EE2106BI	<i>Energy efficiency in traffic</i>								
	EE2106CI	<i>Economic and environmental aspects of energy efficiency</i>								
7.		<i>Elective Case 3</i>	2		IB	3	3	5		7
	EE2107AI	<i>Energy efficiency in industry</i>								
	EE2107BI	<i>Improving the energy efficiency of the KgH system</i>								
	EE2107BI	<i>Improving energy efficiency by using cogenerative plants</i>								
8.	EE21080	Professional practice	2		O				60	
9.		Master's degree	2		O					11
Total classes						300	300			60

Table 3 Third study cycle

Num.	Code	Case Name	Sam.	Status	P	CHEESE	ESPB
FIRST YEAR							
1.	EE31010	Methodology of scientific research work	1	O	4	2	8
2.	EE31020	Knowledge management	1	O	4	2	8
3.		<i>Election Block 1 Subject</i>	1	IB	3	1	7
	EE3103AI	<i>Energy Resource Management</i>					
	EE3103BI	<i>Energy efficiency in modern transport technologies</i>					
	EE3103CI	<i>Global climate change, the importance of cng cycles</i>					
4.	EE31040	<i>Energy efficiency of buildings and comfort of housing</i>	1	O	0	4	8
5.		<i>Election Block 2 Subject</i>	2	IB	3	1	7
	EE3105AI	<i>Energy efficiency of buildings and comfort of housing</i>					
	EE3105BI	<i>Sustainable management of energy resources</i>					
	EE3105CI	<i>Thermal power plants and heat plants</i>					
6.		<i>Elective Block 3 Subject</i>	2	IB	3	1	7
	EE3106AI	<i>Cooling plants for agricultural purposes</i>					
	EE3106BI	<i>Modern wastewater treatment systems</i>					
	EE3106CI	<i>Energy system design, future challenges and strategies</i>					
7.	EE31070	Production and publication of the first scientific work	2	O	0	6	7
8.	EE31080	Doctoral Dissertation - Topic 1 Research	2	O	0	6	8
Total classes					255	345	60
SECOND YEAR							
1.	EE32010	Manage changes	3	O	4	2	8
2.		<i>Election Block Item 4</i>	3	IB	3	1	7
	EE3202AI	<i>Modern ventilation systems and air conditioner.</i>					
	EE3202BI	<i>Zero Emission Network Strategy (MNE)</i>					
	EE3202CI	<i>Modern and utility management systems, industrial and hazardous waste</i>					
3.		<i>Election Block Case 5</i>	3	IB	3	1	7
	EE3203AI	<i>Modern heat exchanger systems</i>					
	EE3203BI	<i>Environmental protection of thermal energy plants</i>					
	EE3203CI	<i>Dryer systems in agriculture and wood processing industries</i>					
4.	EE320 40	Doctoral Dissertation - Topic 2 Research	3	O	0	6	9
5.		<i>Election Block Case 6</i>	4	IB	3	1	7
	EE3205AI	<i>Modern installations for combined electricity and thermal energy production</i>					
	EE3205BI	<i>Regional management of material flows</i>					
	EE3205CI	<i>Dryer systems in agriculture and wood processing industries</i>					
6.	EE32060	Production and publication of other scientific work	4	O	0	6	8
7.	EE32070	Doctoral Dissertation - Topic 3 Research	4	O	0	10	14
Total classes					195	405	60
THIRD YEAR							
1.	EE33010	Doctoral Dissertation - Topic Research 4	5	O	0	10	14
2.	EE33020	Writing doctoral dissertation (processing of doctoral dissertation data)	5	O	0	10	14
3.	EE33030	Production and publication of the third scientific work	6	O	0	6	9
4.	EE33040	Doctoral Dissertation - Topic Research 5	6	O	0	6	12
5.	EE33050	Defence of doctoral dissertation	6	O	0	8	11
Total classes					0	600	60
Total ESPB							180

5. CONDITIONS FOR SWITCHING FROM OTHER STUDY PROGRAMMES UNDER THE SAME OR RELATED STUDIO

Students transitioning from another study programme will be recognised as the number of certified semesters, up to six, and the exams passed will be summoned from those teaching subjects that, according to their curriculum, overlap at least 50% with the curriculum of the appropriate subject being studied at the University.

6. HOW TO SELECT SUBJECTS FROM OTHER STUDY PROGRAMMES

Based on a written request, students can choose other teaching subjects that are not in the subjects of their study programs, with the total burden of students not crossing 30 hours a week. The choice can only be made by those subjects studied at the University.

7. CONDITIONS OF ENROLLMENT IN THE NEXT SEMESTER, I.E. THE FOLLOWING YEAR OF STUDY AND COMPLETION OF STUDI

Students enroll the next semester of the same year provided that they lay more than half of the subjects of the previous semester, and if in the previous semester there are subjects covering one part of the material and in the second semester the other part of the material is then obliged to take subjects from the second semester. Students enroll next year if they passed all exams the previous year or have one subject left or 6 ECTS points.

Students complete the first cycle of study by defending **final work**.

Students complete the second cycle of studies by taking exams provided for in the curriculum and program and defending **the master 's thesis**.

Students complete the third cycle of studies by taking exams provided for in the curriculum and program and defending **doctoral dissertation**.

8. WAY TO PERFORM STUDIES AND HOW TO VERIFY KNOWLEDGE FOR EACH SUBJECT

The way studies are performed on all cycles (I, II and III) is performed by semetry where students attend and actively participate in lectures and exercises, and the active fund of lecture and exercise classes is shown in Tables 1, 2 and 3.

The way knowledge is checked for each subject is continuously monitored during the teaching and processing of these teaching subjects. When determining the final assessment for teaching subjects or the activity of students to be evaluated, the evaluator is obliged to evaluate the results of the total work of the student during the processing of teaching subjects, i.e. the not only the knowledge and skills that students have acquired and learned during the processing of teaching subjects, but also the results of students achieved in all forms of educational and pedagogical work, which are planned and performed for teaching subjects including the assessment of students' activities and interactions in lectures, exercises, colloquiums, seminars, workshops round tables and other forms of teaching and pedagogical work.

The height of the score depends on the points collected that are collected throughout the course of lectures and exercises, and as follows:

- | | |
|---|------------------|
| 1. TEST 1 - first colloquium (first 50% material): | 20 points |
| 2. TEST 2 - second colloquium (other 50% material): | 20 points |
| 3. TEST 3 - final exam (total material): | 20 points |
| 4. LECTURE - presence: | 5 points |
| 5. LECTURE - active participation: | 5 points |
| 6. EXERCISES - presence: | 5 points |
| 7. EXERCISES - seminar work: | 10 points |
| 8. EXERCISE - oral presentation of another topic: | 5 points |
| 9. EXERCISE - essay or case study: | 10 points |
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TOTAL: 100 points

The assessment of students is carried out in accordance with the number of points collected, as follows:

RATINGS	RATING	NUMBER OF POINTS	DESCRIPTORY ASSESSMENT
F	5	0-54	Insufficient
E	6	55-64	Enough
D	7	65-75	Nice one
C	8	75-84	Very good
B	9	85-94	Great
And	10	95-100	Exceptional-excellent

Exams are taken successfully, in writing or orally and in writing, i.e. practically.

If provided for in the Curriculum, due to the specificity of the subject, knowledge verification is organized in several partial tests during the processing of the teaching subject. In this case, the final assessment of the student is formed on the basis of the results of all partial tests and other knowledge checks or points collected.

9. OTHER ISSUES OF IMPORTANCE FOR THE PERFORMANCE OF THE STUDY PROGRAMME

The curriculum also determines the category of exercises (KV). The exercise categories will be marked with a number of 1-5:

Rb.	Type - structure of exercises	Number of students
1.	For art academies in teaching subjects in the arts.	3
2.	For clinical teaching subjects in faculties/higher schools of medical sciences, certain teaching subjects in faculties of technical sciences, professional subjects in art academies and teaching subjects of teaching methods in faculties/higher schools of humanities and social sciences.	5
3.	For preclinical curricula of medical sciences (sectional-autopsy exercises; anatomy, pathology, forensic medicine): teaching subjects with field exercises that require supervision of the student and instructions of an expert associate.	10
4.	For teaching subjects with laboratory and experimental exercises.	15
5.	For teaching subjects with auditory and field exercises.	25