

Табела 5.1.b. Course specification by semesters and years of study for basic academic studies

– NEW SOURCES OF ENERGY

N	Code	Course name	S	Type	Course status	Active learning classes			Other classes	ECTS
						L	P	OTC		
FIRST YEAR										
1.	NIE-01	Applied Mathematics 1	1	AGE	C	3	3	0		9
2.	NIE-02	Business Information Technology	1	PA	C	3	3	0		9
3.	NIE-03	Electrotechnics and Electronics	1	TM	C	3	3	0		9
4.	NIE-04	Management	2	AGE	C	3	2	0		8
5.	NIE-05	Mechanics	2	TM	C	3	3	0		9
6.	NIE-06	Materials	2	TM	C	3	3	0		9
7.	NIE-07	English Language 1	2	AGE	C	2	3	0		4
8.	NIE-08	Internship 1	2	PA	C	0	0	0	6	3
Total number of active classes = 40										60
SECOND YEAR										
9.	NIE-09	Applied Mathematics 2	3	AGE	C	3	3	0		7
10.	NIE-10	Machine Elements	3	TM	C	3	2	0		7
11.	NIE-11	Thermodynamics	3	TM	C	3	2	0		8
12.	NIE-12	Hydraulics and Pneumatics	3	TM	C	3	2	0		7
13.	NIE-13	Fundamentals of Construction	4	PA	C	3	2	0		8
14.	NIE-14	English Language 2	4	AGE	C	1	3	0		4
15.	NIE-15	Internship 2	4	PA	C	0	0	0	6	3
OPTIONAL COURSES 1										60
16. 17.	NIE-30	Hydropower Plants	4	SP	O - 1	2	3	0		8
	NIE-31	Heating Plants	4	SP	O - 1	2	3	0		8
	NIE-32	Ecology and Environmental Protection	4	PA	O - 1	2	3	0		8
	NIE-39	Material Resistance	4	SP	O - 1	2	3	0		8
Total number of active classes = 40										
THIRD YEAR										
18.	NIE-16	Mechanical Engineering Technology	5	PA	C	3	3	0		8
19.	NIE-17	Renewable Sources of Energy	5	SP	C	3	2	0		7
20.	NIE-18	Wind Energy	5	PA	C	3	2	0		7
21.	NIE-19	Hydropower	5	PA	C	3	2	0		8
22.	NIE-20	Solar Energy	6	PA	C	3	2	0		7
23.	NIE-21	English Language 3	6	AGE	C	1	3	0		4
24.	NIE-22	Internship 3	6	PA	C	0	0	0	6	3
OPTIONAL COURSES 2										
25. 26.	NIE-33	Energy System Engineering	6	SP	O - 2	2	3	0		8
	NIE-34	Hydraulic Machines	6	SP	O - 2	2	3	0		8
	NIE-35	Contemporary Energy Technologies	6	PA	O - 2	2	3	0		8
	NIE-40	Managing Energy	6	SP	O - 2	2	3	0		8
Total number of active classes = 40										60
FOURTH YEAR										
27.	NIE-23	Small Hydropower Plants	7	SP	C	3	3	0		7
28.	NIE-24	Designing Power Plants	7	SP	C	3	3	0		7
29.	NIE-25	Designing Thermal Power Plants	7	SP	C	3	3	0		7
30.	NIE-26	Wind Power Plant	7	PA	C	3	3	0		6
31.	NIE-27	English Language 4	8	AGE	C	2	2	0		4
32.	NIE-28	Internship 4	8	PA	C	0	0	0	6	3
OPTIONAL COURSES 3										
33. 34.	NIE-36	Measurement Instruments and Techniques	8	SP	O - 3	3	3	0		8
	NIE-37	Hydro-mechanical Equipment	8	SP	O - 3	3	3	0		8
	NIE-38	Energy Efficiency	8	SP	O - 3	3	3	0		8
	NIE-41	Heat and Mass Transfer	8	SP	O - 3	3	3	0		8
35.	NIE-29	Final Thesis	8	PA	C	-	-	-		10
Total number of active classes = 40										60
									Total ECTS	240

Note: Optional courses 1 - a student chooses 2 out of 4 optional courses in the 4th semester
Optional courses 2 - a student chooses 2 out of 4 optional courses in the 6th semester
Optional courses 3 - a student chooses 2 out of 4 optional courses in the 8th semester

S - semester

L - lecture

P - practice

C - compulsory

O - optional

OTC - other types of classes

TM -Theoretical and methodological

PA - Professional and applicable

AGE - Academic general education

SP - Scientific and professional