TECHNICAL UNIVERSITY OF VARNA

Ratified by:
Rector of TU-Varna: .....
/ Prof. PhD Vasilev R. /

CURRICULUM

Proffesional orientation: **Electrical Engineering, Electronics And Automation**

Program: **Electrical Engineering and Renewable Energy Sources**

Proffesional qualification: **Electrical Engineer**

Educational and qualificational degree: **Bachelor**

Form of stady: **Full - Time**

Term of stady: **4 years / 8 semesters**

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Mathematics, part 1	1				15	45			175	115	290	7
2	Physics	1				30		30		175	115	290	7
3	Computer Technologies		1			15		30		150	105	255	6
4	Technical Documentation		1			15		30		150	105	255	6
5	Practical Mathematics, part 1				1			15		30	15	45	1
6	English, part 1				1		30			60	30	90	2
7	Optional Subject				1					30	30	60	1
7a	Specialized Sport Activities, part 1				1						30	30	1
7б	Sport and Social Adaptation, part 1				1						30	30	1
8	Practical Training, part 1				1					30	30	60	1
Total for the 1 semestar:		**2**	**2**		**4**	**75**	**75**	**105**		**800**	**545**	**1345**	**31**
9	Mathematics, part 2	2				30	15		15	160	115	275	7
10	Theoretical Electrical Engineering, part 1	2				30	15	15		150	90	240	6
11	Materials in Electrical Engineering	2				30		15		125	80	205	5
12	Technical Mechanics	2				30	15			150	105	255	6
13	Practical Mathematics, part 2				2			15		30	15	45	1
14	English, part 2				2		30			60	30	90	2
15	Practical Training, part 2				2					60	60	120	2
16	Optional Subject				2					30	30	60	1
16a	Specialized Sport Activities, part 2				2						30	30	1
16б	Sport and Social Adaptation, part 2				2						30	30	1
Total for the 2 semestar:		**4**			**4**	**120**	**75**	**45**	**15**	**765**	**525**	**1290**	**30**
17	MATLAB Introduction		3			15	15	30		150	90	240	6
18	Practical Material Science				3			15		30	15	45	1
19	Theoretical Electrical Engineering, part 2	3				30	15	15		175	115	290	7
20	Electronics	3				30		30		175	115	290	7
21	Electrical Measurements	3				30		30		150	90	240	6
22	Practical Training, part 3				3					30	30	60	1
23	English, part 3		3				30			60	30	90	2

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
24	Optional Subject				3					30	30	60	1
24a	Specialized Sport Activities, part 3				3						30	30	1
24б	Sports Management, part 1				3						30	30	1
Total for the 3 semestar:		**3**	**2**		**3**	**105**	**60**	**120**		**800**	**515**	**1315**	**31**
25	Automated Production Systems	4				30		30		175	115	290	7
26	Thermal Processes in Electrical Engineering		4			15	30	15		175	115	290	7
27	Electrotechnology	4				30		30		175	115	290	7
28	Renewable Energy Sources	4				30		30		175	115	290	7
29	Optional Subject				4					30	30	60	1
29a	Specialized Sport Activities, part 4				4						30	30	1
29б	Sports Management, part 2				4						30	30	1
30	Practical Training, part 4				4					30	30	60	1
Total for the 4 semestar:		**3**	**1**		**2**	**105**	**30**	**105**		**760**	**520**	**1280**	**30**
31	Technical Safety		5			30		15		150	105	255	6
32	Electrical Machines, part 1	5				30		30		175	115	290	7
33	Electrothermics	5				30		30		125	65	190	5
34	Electrical Apparatus, part 1	5				30		30		175	115	290	7
35	Household Electrical Appliances		5			30		30		125	65	190	5
36	Optional Subject	5				30		30		125	65	190	5
36a	Wind Plants and Systems	5				30		30		60	65	125	5
36б	Lighting and Installation Equipment	5				30		30		60	65	125	5
Total for the 5 semestar:		**4**	**2**			**180**		**165**		**875**	**530**	**1405**	**35**
37	Electrical Machines, part 2	6				30		30		175	115	290	7
38	Electrical Apparatus, part 2	6				30		30		175	115	290	7
39	Contactless Devices and Transducers	6				30		30		150	90	240	6
40	Optional Subject	6				30				75	45	120	3
40a	Design of Renewable Energy Sources	6				30				30	45	75	3
40б	Design of Electrical Devices	6				30				30	45	75	3
41	Computer Simulation of Electrical Devices		6			30		30		125	65	190	5
42	Electrical Power Engineering		6			30		30		125	65	190	5
43	Special Practice				6					60	60	120	2
Total for the 6 semestar:		**4**	**2**		**1**	**180**		**150**		**885**	**555**	**1440**	**35**
44	Electrical Micromachines		7			15		30		125	80	205	5
45	Optional Subject	7				30		30		150	90	240	6
45a	Switchgear Apparatus for Renewable Energy Sources	7				30		30		60	90	150	6
45б	Electric Cars	7				30		30		60	90	150	6
46	Optional Subject	7				30		30		150	90	240	6
46a	Photovoltaic Systems and Power Plant	7				30		30		60	90	150	6
46б	Electronic Equipment for Control and Protection	7				30		30		60	90	150	6
47	Optional Subject			7					30	30	30	60	2
47a	Renewable Energy Sources Project			7					30	30	30	60	2
47б	Design of Electrical Devices, project			7					30	30	30	60	2
48	Optional Subject		7			30		15		150	105	255	6
48a	Special Course of Renewable Energy Sources		7			30		15		45	105	150	6
48б	Electrical Systems in Cars		7			30		15		45	105	150	6
49	Electrical Apparatus, part 3	7				30		30		150	90	240	6

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total for the 7 semestar:		**3**	**2**	**1**		**135**		**135**	**30**	**755**	**485**	**1240**	**31**
50	Exploitation and Diagnostics of Electrical Equipment	8				30	15	15		150	90	240	6
51	Reliability in Electrical Engineering	8				30		30		125	65	190	5
52	Electromechanical Systems	8				30		30		150	90	240	6
53	Complex Project			8					60	60	60	120	4
Total for the 8 semestar:		**3**		**1**		**90**	**15**	**75**	**60**	**485**	**305**	**790**	**21**

Total for all corses of education:		**26**	**11**	**2**	**14**	**990**	**255**	**900**	**105**	**6125**	**3980**	**10105**	**244**

Facultative subjects

No	Subject Name	Types of term control				Semester auditorium load incl:					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Types of graduation	Semester	Unsupervised load	ECTS credits
Preparation of Diploma Thesis / Preparation for State Examination	8	300	10
Defence of Diploma Thesis / State Examination	8		

Accepted from AU with

Protokol No 10 / 25.04.2016

Changed with Protokol No 11 / 06.06.2016 г. , No 22 / 26.06.2017 г. , No 30 / 23.04.2018 г.

Valid for 2016 / 2017 г. academic year.

Head of Department EEET:
/ Assoc. Prof. PhD Aprahamyan B. /

Dean of Faculty FEE:
/ Assoc. Prof. PhD Yordanova M. /