



## TECHNICAL UNIVERSITY OF VARNA

**Ratified by:**  
**Rector**.....

/Prof. Rosen Vasilev, DSc/

## CURRICULUM

Professional orientation: **ENERGETICS**

Educational and qualification degree: **MASTER**

Programme: **ELECTRIC POWER SUPPLY AND ELECTRICAL EQUIPMENT IN INDUSTRY**

Professional qualification: **MASTER - ENGINEER**

Mode of study: **FULL - TIME**

Length of study: **1,5 years / 3 semesters**

For holders of educational and qualificational degree "Bachelor" and "Master" in specialities of professional orientation 5.2.Electrical Engineering, Electronics and Automation and 5.4 Energetics (with professional qualification "Electrical Engineer") and in speciality "Electrical Equipment Of Ships" from 5.5 Transport, Navigation and Aviation.

Number	Subject Name	Forms of assessment				Weekly auditorium load						Unsupervised load	Whole load of students	ECTS credits
		Exams	Inter-semester Evaluation	Course project	Accepted	Lectures	Seminars			Laboratory Exercises	Total load			
							Seminar Exercises	Course project	Assignment					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Specialized Course in Theoretical Electrical Engineering	*				30	15			15	60	105	165	6
2	CAD Systems in Electrical Power Supply and Electrical Equipment		*			30				30	60	90	150	5
3	Measurement and Control in Electric Power Supply Systems	*				30				30	60	120	180	6
4	Transient Processes in Electrical Equipment of Industrial Enterprises	*				30				30	60	135	195	7
5	Lighting Systems Control	*				30				30	60	105	165	6
<b>Total for the 1 semester:</b>		<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>150</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>135</b>	<b>300</b>	<b>555</b>	<b>855</b>	<b>30</b>
6	Electrical Energy Efficiency	*				30				30	60	135	195	7
7	Quality of Electrical Power Supply	*				30	15			15	60	135	195	7
8	Reliability and Optimization of Electric Power Supply	*				30	15			15	60	150	210	8
9	Electromagnetic Compatibility in Industrial Enterprises	*				30	15			15	60	150	210	8
<b>Total for the 2 semester:</b>		<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>240</b>	<b>570</b>	<b>810</b>	<b>30</b>
10	Pre-graduation Practice				*						0	120	120	4
<b>Total for the 3 semester:</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>120</b>	<b>4</b>
<b>Totals for the whole course of education</b>														
		<b>8</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>270</b>	<b>60</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>540</b>	<b>1245</b>	<b>1785</b>	<b>64</b>

Number	Subject Name	Forms of assessment				Weekly auditorium load						Unsupervised load	Whole load of students	ECTS credits
		Exams	Inter-semester Evaluation	Course project	Accepted	Lectures	Seminars			Laboratory Exercises	Total load			
							Seminar Exercises	Course project	Assignment					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Facultative Subjects</b>														
1	Nanostructures and Nanotechnologies	3				30				30	60	120	180	6
2	Generalized Theory of Electrical Machines	3				30				30	60	120	180	6

Types of graduation		Semester	Unsupervised load	ECTS credits
Preparation of Diploma Thesis		<b>3</b>	<b>450</b>	<b>15</b>
Defense of Diploma Thesis				

**Note:**

The study of optional subjects is a prerequisite for applying in The Chamber of Engineers in the Investment Design, to acquire designer competence.

**Approved by the Academic Board of TU-Varna:**

Protocol № 29 / 26.03.2018

Modified with Protocols: № 34 / 29.10.2018

**Valid from 2018/2019 academic year**

The weekly plan of the lessons is fixed according to the Academic Board "Structure of the Learning Process" adopted for the current academic year.

Head of Department:  
/Assoc. Prof. V. Gyurov/

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