

**ENDORSED: .....**

**Rector of EPU: Prof. Marin Marinov**

## **A C A D E M I C   C U R R I C U L U M**

programme “**Engineering Design**”

Professional Field: **5.13. General Engineering**

Educational qualification:

**Bachelor**

Professional qualification:

**Engineer designer**

Term of training:

**4 years**

Form of training:

**full-time**

**I. Time Schedule:**

<b>Number of weeks</b>										
<b>Year</b>	<b>Auditoria Workload</b>	<b>Examination sessions</b>	<b>Practical Training</b>	<b>Industrial/Field Placement</b>	<b>Specialized Practice</b>	<b>Pre-graduation practice</b>	<b>Diploma Thesis Design</b>	<b>State Examination</b>	<b>Vacations</b>	<b>Total</b>
<b>I</b>	30	9	2						11	52
<b>II</b>	30	9		3					10	52
<b>III</b>	30	9			3				10	52
<b>IV</b>	25	7				2	7	3	8	52

## II. CURRICULUM:

ECTS Code **BIDE №**:

**B** – educational qualification degree “Bachelor”;

**IDE** – “Engineering Design”;

**№** – serial number of the course.

Weekly Workload: Lectures (**L**), Seminar Exercises (**SE**), Lab Exercises (**LE**).

Exam (**E**), Continuous Assessment (**CA**), Course Project (**CP**), Course Work (**CW**).

№	COURSE	Weekly Workload						Assessment				Code	ECTS
		L	SE	LE	AW	SS	TOTAL	E	CA	CP	CW		

### SEMESTER I

1	Basic Concepts in Design	1	0	2	3	5	8		1		1	BIDE01	5
2	Mathematics	2	2	0	4	4	8	1				BIDE02	5
3	Engineering Graphics and Descriptive Geometry	1	0	2	3	3	6		1			BIDE03	4
4	Constructive Perspective	1	0	2	3	4	7	1			1	BIDE04	4
5	Theory of Colours	2	0	2	4	4	8	1				BIDE05	5
6	Physics	2	0	1	3	4	7	1				BIDE06	4
7	Elective Humanitarian Course (List 1)	2	1	0	3	3	6		1			BIDE07	3
8	Physical education/Sport	0	(3)	0	0	0	0					BIDE08	-
	<b>Total:</b>	<b>11</b>	<b>3</b>	<b>9</b>	<b>23</b>	<b>27</b>	<b>50</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>2</b>		<b>30</b>

### SEMESTER II

9		2	0	2	4	5	9		1		1	BIDE09	6
10	Chemistry	2	1	0	3	4	7	1				BIDE10	5
11	Visual/Pictorial analysis	2	1	1	4	5	9	1				BIDE11	5
12	Metal Materials and Technologies	2	0	2	4	4	8		1		1	BIDE12	5
13	Stylistics in Fine Arts	2	0	3	5	6	11	1				BIDE13	6
14	Plastic anatomy	1	1	0	2	4	6		1			BIDE14	3
15	Physical education/Sport	0	(3)	0	0	0	0					BIDE15	-
	<b>Total:</b>	<b>11</b>	<b>3</b>	<b>8</b>	<b>22</b>	<b>28</b>	<b>50</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>2</b>		<b>30</b>

### SEMESTER III

16	Visual/Pictorial synthesis	2	1	1	4	4	8	1			1	BIDE16	5
17	Form-formation II	2	0	2	4	5	9		1		1	BIDE17	5
18	Plastic phenomena I	2	0	2	4	5	9		1			BIDE18	5
19	Machine engineering	2	0	1	3	4	7	1				BIDE19	5
20	History of Art and Design	1	1	0	2	3	5	1				BIDE20	4
21	Non-metal materials and Technologies	2	0	1	3	3			1			BIDE21	4
22	Stylistics in Design	2	1	0	3	3	6	1				BIDE22	2
23	Physical education/Sport	0	(3)	0	0	0	0					BIDE23	-
	<b>Total:</b>	<b>13</b>	<b>3</b>	<b>7</b>	<b>23</b>	<b>27</b>	<b>50</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>2</b>		<b>30</b>

### SEMESTER IV

24	Economics and Management	2	1	0	3	4	7		1			BIDE24	4
25	Plastic phenomena II	2	0	3	5	6	11	1			1	BIDE25	6
26	2D Visualization in Design	2	0	2	4	5	9	1				BIDE26	5
27	Visual Art Methods and Techniques	2	0	3	5	6	11	1			1	BIDE27	6
28	Letters type and Calligraphy	1	2	0	3	4	7		1			BIDE28	5
29	Aesthetics	1	1	0	2	3	5		1			BIDE29	4

30	Physical education/Sport	0	(3)	0	0	0	0					BIDE30	-
	<b>Total:</b>	<b>10</b>	<b>4</b>	<b>8</b>	<b>22</b>	<b>28</b>	<b>50</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>2</b>		<b>30</b>
№	COURSE	Weekly Workload						Assessment				Code	ECTS
		L	SE	LE	AW	SS	TOTAL	E	C A	C P	CW		

### SEMESTER V

31	Prototyping	2	0	2	4	4	8		1			BIDE31	5
32	Electrical Engineering and Electronics	2	0	2	4	4	8		1			BIDE32	4
33	Visual Methods and Techniques in Design	2	0	2	4	5	9	1			1	BIDE33	6
34	Industrial Design	2	0	3	5	6	11	1			1	BIDE34	6
35	3D Visualization in Design	2	0	2	4	4	8	1				BIDE35	5
36	Classical ergonomics	1	0	2	3	3	6		1			BIDE36	4
	<b>Total:</b>	<b>11</b>	<b>0</b>	<b>13</b>	<b>24</b>	<b>26</b>	<b>50</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>2</b>		<b>30</b>

### SEMESTER VI

37	Advertising Products Design	2	0	2	4	5	9	1			1	BIDE37	5
38	Methodology of the Design Process	2	1	1	4	4	8		1			BIDE38	5
39	Computer Modeling in Design	1	0	3	4	5	9	1				BIDE39	5
40	Smart Materials and Technologies	2	0	1	3	4	7		1			BIDE40	5
41	Spatial Environment	1	0	3	4	5	9	1		1		BIDE41	6
42	Elective Engineering Course I (List 2)	2	0	2	4	4	8		1			BIDE42	4
	<b>Total:</b>	<b>10</b>	<b>1</b>	<b>12</b>	<b>23</b>	<b>27</b>	<b>50</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>		<b>30</b>

### SEMESTER VII

43	Advertisement	2	0	1	3	4	7	1				BIDE43	4
44	Legal protection of intellectual property	2	2	0	4	4	8		1			BIDE44	4
45	Marketing and Advertising	2	2	0	4	4	8	1				BIDE45	5
46	Fashion design	2	0	2	4	5	9	1				BIDE46	5
47	Elective Designer Course I (List 3)	2	0	2	4	5	9		1		1	BIDE47	6
48	Animation	2	0	2	4	5	9		1	1		BIDE48	6
	<b>Total:</b>	<b>12</b>	<b>4</b>	<b>7</b>	<b>23</b>	<b>27</b>	<b>50</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>		<b>30</b>

### SEMESTER VIII – 10 weeks of study

49	Package	3	0	1	4	5	9	1				BIDE49	5
50	Elective Engineering Course II (List 4)	2	0	2	4	5	9	1				BIDE50	4
51	Elective Designer Course (List 5)	2	0	3	5	6	11		1		1	BIDE51	6
52	Reproduction Technique	2	0	3	5	6	11		1			BIDE52	5
	Diploma Thesis											BIDE53	10
	<b>Total:</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>18</b>	<b>22</b>	<b>40</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>		<b>30</b>

### NOTES:

1. Elective Courses ( position 5) are updated annually.
2. Elective Courses (positions 42, 47, 50 and 51) form directions.
3. Eighth semester consists of ten weeks of study and seven weeks Diploma Thesis development.

### III. BASIC PARAMETERS OF THE CURRICULUM:

1. **Term of training:** 4 years, 8 semesters.

2. **Auditoria Workload:**

**Total:** 2505 hours;  
**Lectures:** 1245 hours;  
**Seminar Exercises:** 250 hours;  
**Lab Exercises:** 1010 hours.

3. **Total number of courses: 52.**

3.1. Compulsory: 39  
3.2. Elective: 5  
3.3 Foreign Language: 4  
3.4 Physical education: 4

4. **Assessment:**

4.1. Exams: 25  
4.2. Continuous Assessment: 21  
4.3. Course Projects: 2  
4.4. Course Works: 13

5. **Practical training:** 10 weeks.

### LIST OF GROUPS OF ELECTIVE COURSES

<b>ELECTIVE HUMANITARIAN COURSES (LIST 1) (CODE BIDE05)</b>		Code
1.	Psychology	BIDE05.1
2.	Sociology	BIDE05.2
3.	History of the technique	BIDE05.3
4.	Professional Ethics	BIDE05.4

  

<b>GROUP OF ELECTIVE COURSES 1 (<u>Machine Design</u>)</b>		Code
1.	Methodology of construction	BIDE42a
2.	Design of production systems and household appliances	BIDE47a
3.	Mechatronics	BIDE50a
4.	Electrical and Electronic Products Design	BIDE51a

  

<b>GROUP OF ELECTIVE COURSES 2 (<u>Clothing/Fashion Design</u>)</b>		Code
1.	Textile and Clothing Technique and Technology	BIDE42b
2.	Design of textile products	BIDE47b
3.	Modeling and design of clothing	BIDE50b
4.	Clothing Design II	BIDE51b

  

<b>GROUP OF ELECTIVE COURSES 3 (<u>Advertising Design</u>)</b>		Code
1.	Software Ergonomics and Web Design	BIDE42c
2.	Advertising Products Design	BIDE47c
3.	Prototyping techniques and technologies	BIDE50c
4.	Design of Information Systems and Environment	BIDE51c

  

<b>GROUP OF ELECTIVE COURSES 4 (<u>Furniture Design</u>)</b>		Code
1.	Theory of composition	BIDE42d
2.	Furniture technology	BIDE47d
3.	Furniture construction	BIDE50d
4.	Interior design	BIDE51d