

**CURRICULUM**  
**Bachelor's degree program in Engineering Design**  
**as of 2021/2022 academic year**

ECTS Subject code T IDE No													
- T – type of course: B for BEng, M for MEng;													
- I - IV semester – fundamental subjects - professional field 5.13.General Engineering													
- IDE – specialty “Engineering Design”													
- No – number of the subject;													
Lectures (L), Tutorials (Tut.), Labs (Lab.), Auditorium Total (AT), Self-Study (SS), Exam (E),													
Continuous Assessment (CA), Semester Project (SP), Semester Assignment (course work) (SA).													
№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
<b>SEMESTER I</b>													
1	<b>MAT12</b>	Mathematics I	30	30	0	<b>60</b>	150	<b>210</b>	1				<b>7</b>
2	<b>PHY01</b>	Physics	45	15	30	<b>90</b>	120	<b>210</b>	1				<b>7</b>
3	<b>CHE01</b>	Chemistry	30	0	15	<b>45</b>	105	<b>150</b>		1			<b>5</b>
4	<b>CCE23</b>	Information and Communication Technologies	30	0	45	<b>75</b>	165	<b>240</b>	1			1	<b>8</b>
5	<b>LNG01</b>	Foreign Language I	0	30	0	<b>30</b>	30	<b>60</b>		1			<b>2</b>
6	<b>SPR01</b>	Sport	0	0	0	<b>0</b>	30	<b>30</b>		1			<b>1</b>
<b>Total</b>			<b>135</b>	<b>75</b>	<b>90</b>	<b>300</b>	<b>600</b>	<b>900</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>30</b>
<b>SEMESTER II</b>													
7	<b>MAT22</b>	Mathematics II	30	30	0	<b>60</b>	120	<b>180</b>	1				<b>6</b>
8	<b>ENG02</b>	Engineering Graphics	30	0	45	<b>75</b>	105	<b>180</b>		1		1	<b>6</b>
9	<b>MEC12</b>	Technical Mechanics	45	15	15	<b>75</b>	135	<b>210</b>	1			1	<b>7</b>
10	<b>EEA27</b>	Basics of Electrical Engineering and Electronics	30	0	30	<b>60</b>	120	<b>180</b>	1				<b>6</b>
11	<b>LNG02</b>	Foreign Language II	0	30	0	<b>30</b>	30	<b>60</b>		1			<b>2</b>
12	<b>PRC01</b>	Practicum	0	0	0	<b>0</b>	60	<b>60</b>		1			<b>2</b>
13	<b>SPR02</b>	Sport	0	0	0	<b>0</b>	30	<b>30</b>		1			<b>1</b>
<b>Total</b>			<b>135</b>	<b>75</b>	<b>90</b>	<b>300</b>	<b>600</b>	<b>900</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>30</b>
<b>SEMESTER III</b>													
14	<b>MAT32</b>	Quantitative Methods and Statistics	30	30	0	<b>60</b>	120	<b>180</b>	1				<b>6</b>
15	<b>MEC13</b>	Machine Elements	30	0	30	<b>60</b>	120	<b>180</b>	1			1	<b>6</b>
16	<b>MEC14</b>	Manufacturing Technologies	30	0	30	<b>60</b>	120	<b>180</b>		1		1	<b>6</b>
17	<b>ENG03</b>	Material Science	45	0	30	<b>75</b>	135	<b>210</b>	1			1	<b>7</b>
18	<b>CCE25</b>	Internet Technologies	15	30	0	<b>45</b>	75	<b>120</b>		1			<b>4</b>
19	<b>SPR03</b>	Sport	0	0	0	<b>0</b>	30	<b>30</b>		1			<b>1</b>
<b>Total</b>			<b>150</b>	<b>60</b>	<b>90</b>	<b>300</b>	<b>600</b>	<b>900</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>30</b>
<b>SEMESTER IV</b>													
20	<b>BIDE01</b>	Analytis Drawing	15	0	45	<b>60</b>	90	<b>150</b>		1		1	<b>5</b>
21	<b>BIDE02</b>	Form Shaping	15	0	45	<b>60</b>	90	<b>150</b>		1		1	<b>5</b>
22	<b>BIDE03</b>	Colour Theory	15	0	45	<b>60</b>	90	<b>150</b>	1				<b>5</b>
23	<b>BIDE04</b>	Design Theory	30	0	30	<b>60</b>	90	<b>150</b>	1				<b>5</b>
24	<b>BIDE05</b>	Modelling	15	0	45	<b>60</b>	90	<b>150</b>		1			<b>5</b>
25	<b>BIDE06</b>	Design Theory- course project	0	0	0	<b>0</b>	60	<b>60</b>			1		<b>2</b>
26	<b>PRC02</b>	Practicum	0	0	0	<b>0</b>	60	<b>60</b>		1			<b>2</b>
27	<b>SPR04</b>	Sports	0	0	0	<b>0</b>	30	<b>30</b>		1			<b>1</b>
<b>TOTAL</b>			<b>90</b>	<b>0</b>	<b>210</b>	<b>300</b>	<b>600</b>	<b>900</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>30</b>

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
<b>SEMESTER V</b>													
28	<b>BIDE07</b>	Design Sketches	15	15	15	<b>45</b>	75	<b>120</b>		1			<b>4</b>
29	<b>BIDE08</b>	Decriptive Geometry	15	0	15	<b>30</b>	90	<b>120</b>		1			<b>4</b>
30	<b>BIDE09</b>	Srtuctures by Design	15	15	30	<b>60</b>	90	<b>150</b>		1			<b>5</b>
31	<b>BIDE10</b>	History of Art and Design	30	30	0	<b>60</b>	90	<b>150</b>	1				<b>5</b>
32	<b>BIDE11</b>	Ergonomic	30	15	0	<b>45</b>	105	<b>150</b>	1			1	<b>5</b>
33	<b>BIDE12</b>	Computer 3D Design	30	0	30	<b>60</b>	90	<b>150</b>	1				<b>5</b>
34	<b>BIDE13</b>	Srtuctures by Design - course project	0	0	0	<b>0</b>	60	<b>60</b>			1		<b>2</b>
<b>ОБЩО</b>			<b>135</b>	<b>75</b>	<b>90</b>	<b>300</b>	<b>600</b>	<b>900</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>30</b>
<b>SEMESTER VI</b>													
35	<b>BIDE14</b>	Ergonomic Design	15	15	30	<b>60</b>	120	<b>180</b>		1			<b>6</b>
36	<b>BIDE15</b>	Art Technics	15	15	30	<b>60</b>	120	<b>180</b>		1			<b>6</b>
37	<b>BIDE16</b>	Typography	15	15	30	<b>60</b>	90	<b>150</b>		1			<b>5</b>
38	<b>BIDE17</b>	Additive Technologies	30	0	15	<b>45</b>	75	<b>120</b>	1				<b>4</b>
39	<b>BIDE18</b>	Heuristics in Design	30	30	0	<b>60</b>	90	<b>150</b>	1				<b>5</b>
40	<b>BIDE19</b>	Ergonomic Design - course project	0	0	0	<b>0</b>	60	<b>60</b>			1		<b>2</b>
41	<b>PRC03</b>	Practicum	0	0	0	<b>0</b>	60	<b>60</b>		1			<b>2</b>
<b>TOTAL</b>			<b>105</b>	<b>75</b>	<b>105</b>	<b>285</b>	<b>615</b>	<b>900</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>30</b>
<b>SEMESTER VII</b>													
42	<b>BIDE20</b>	Model Making	15	15	30	<b>60</b>	90	<b>150</b>	1				<b>5</b>
43	<b>BIDE21</b>	Computer Modelling in Design	15	0	30	<b>45</b>	75	<b>120</b>	1				<b>4</b>
44	<b>BIDE22</b>	Graphic Design	15	30	15	<b>60</b>	90	<b>150</b>		1			<b>5</b>
45	<b>BIDE23</b>	Industrial Design	30	15	15	<b>60</b>	90	<b>150</b>		1			<b>5</b>
46	<b>BIDE24</b>	Optional Subject (List1)	30	0	0	<b>30</b>	90	<b>120</b>	1				<b>4</b>
47	<b>BIDE25</b>	Compulsory Optional Subject (List2)*	15	45	0	<b>60</b>	90	<b>150</b>		1		1	<b>5</b>
48	<b>BIDE26</b>	Industrial Design - Project	0	0	0	<b>0</b>	60	<b>60</b>			1		<b>2</b>
<b>TOTAL</b>			<b>120</b>	<b>105</b>	<b>90</b>	<b>315</b>	<b>585</b>	<b>900</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>30</b>
<b>SEMESTER VIII</b>													
49	<b>BIDE27</b>	PrepressProcessing	20	40	0	<b>60</b>	90	<b>150</b>		1			<b>5</b>
50	<b>BIDE28</b>	Compulsory Optional Subject (List3)*	20	40	0	<b>60</b>	90	<b>150</b>		1			<b>5</b>
51	<b>BIDE29</b>	Compulsory Optional Subject (List4)*	20	0	30	<b>50</b>	100	<b>150</b>	1				<b>5</b>
52	<b>BIDE30</b>	Industrial Management	15	15	0	<b>30</b>	60	<b>90</b>	1				<b>3</b>
53	<b>PRC04</b>	Practicum	0	0	0	<b>0</b>	60	<b>60</b>		1			<b>2</b>
54	<b>BIDE31</b>	Diploma project	0	0	0	<b>0</b>	300	<b>300</b>	Defense of diploma thesis			<b>10</b>	
<b>Total</b>			<b>75</b>	<b>95</b>	<b>30</b>	<b>200</b>	<b>700</b>	<b>900</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>30</b>

\*Remark:

Optional subjects (No 47, 50, 51) make module:

- \* Subjects BIDE25.1, BIDE27.1, BIDE28.1 - formed Module " Product Design"
- \* Subjects BIDE25.2, BIDE27.2, BIDE28.2 - formed Module "Fashion Design"
- \* Subjects BIDE25.3, BIDE27.3, BIDE28.3 - formed Modul "Graphic Design"
- \* Subjects BIDE25.4, BIDE27.4, BIDE28.4 - formed Module "Interior Design"

## LIST OF THE OPTIONAL SUBJECTS

<b>List 1 BIDE24</b>		<b>ECTS =4</b>
1	Corporate Culture	<b>BIDE24.1</b>
2	Aestehics	<b>BIDE24.2</b>
3	Legal Protection of Intellectual Property	<b>BIDE24.3</b>
<b>List 2 BIDE25</b>		<b>ECTS =5</b>
1	Product Design	<b>BIDE25.1</b>
2	Textile Design	<b>BIDE25.2</b>
3	Design of Advertising Products	<b>BIDE25.3</b>
4	Interior & Design in Architecture	<b>BIDE25.4</b>
<b>List 3 BIDE27</b>		<b>ECTS = 5</b>
1	Conceptual & Sustainable Design	<b>BIDE27.1</b>
2	Apparel & Accessoiaries Design	<b>BIDE27.2</b>
3	Publishing Design	<b>BIDE27.3</b>
4	Visualization in Interior Design	<b>BIDE27.4</b>
<b>List 4 BIDE28</b>		<b>ECTS = 5</b>
1	Mechatronics	<b>BIDE28.1</b>
2	Clothing Modelling & Construction	<b>BIDE28.2</b>
3	Software Ergonomics	<b>BIDE28.3</b>
4	Technical Documentation in Interior Design	<b>BIDE28.4</b>

**LIST OF THE FACULTATIVE SUBJECTS**

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
<b>SEMESTER V</b>													
1	<b>FaSPR05</b>	Sport	0	0	0	<i>0</i>	30	<i>30</i>		1			<b>1</b>
2	<b>FaBIDE 01</b>	Virtual and Augmented Reality Technologies	30	0	30	<i>60</i>	90	<i>150</i>		1			<b>5</b>
<b>SEMESTER VI</b>													
1	<b>FaSPR06</b>	Sport	0	0	0	<i>0</i>	30	<i>30</i>		1			<b>1</b>
2	<b>FaBIDE 02</b>	3D Game Engine Architecture	30	0	30	<i>60</i>	90	<i>150</i>		1			<b>5</b>
<b>SEMESTER VII</b>													
1	<b>FaSPR07</b>	Sport	0	0	0	<i>0</i>	30	<i>30</i>		1			<b>1</b>
2	<b>FaBIDE 03</b>	Social Science	30	30	0	<i>60</i>	90	<i>150</i>		1			<b>5</b>
<b>SEMESTER VIII</b>													
1	<b>FaSPR08</b>	Sport	0	0	0	<i>0</i>	30	<i>30</i>		1			<b>1</b>