# Transilvania University of Braşov, Romania

# Study program: Industrial Design (in English)

Faculty: Product Design and Environment

Study period: 4 years (bachelor)

Academic year structure: 2 semesters (14 weeks per semester) Examination sessions (two): winter session (January/February)

summer session (June/July)

Courses per years (C= course; S = seminar; L = laboratory; P = project)

#### 1 Year

No.	Course	1 st Semester				er	2 <sup>nd</sup> Semester					
crt.	Course	Code	U	S	L	Р	Cred	2 nd Semes C S L P	Р	Cred		
01	Mathematical Analysis	MAT1	2	2			4					
02	Chemistry	CHIM	2		1		4					
03	Technical Drawing and Computer Graphics I	DTIF	2		2		4					
04	Computer Programming and Programming Languages I	IDPC1	2		2		4					
05	Descriptive Geometry	GEOD	2		1		4					
06	Physics	FIZ1	2		2		4					
07	Industrial Design Fundamentals I	IDDI	1	1			3					
08	Materials Science and Engineering I	STMA						4		2		6
09	Linear Algebra, Analytical and Differential Geometry	MAT2						2	2			4
10	Technical Drawing and Computer Graphics II	DTI2						2		2		4
11	Computer Programming and Programming Languages II	IDPC2						2		2		4
12	Mechanics	MEC1						3	2			6
13	Artistic Drawing	IDDS								2		3
14	French Language	LF01/ LF02	1	1			3	1	1			3
15	Sports	EF01/EF02		1			1		1			1

### 2 Year

No.	Course	Code		3 <sup>r</sup>	Sen	neste	r	4 <sup>th</sup> Semester					
crt.	Course	Code	U	S	L	Р	Cred	C	S	L	Р	Cred	
01	Special Mathematics	MASP	2	2			4						
02	Measurement Techniques and Systems	TOCD	2		2		4						
03	Strength of Materials I	REZ1	2	2	1		5						
04	Electrotechnics	ELEA	2		2		5						
05	Industrial Design Fundamentals II	BDP	1		1		3						
06	Technical Drawing and Computer Graphics III	IDMODE	2		2		4						
07	Communication skills - Ethics	IDCOM	1	1			2						
80	Strength of Materials II	REZ2						3	1	1		4	
09	Fluid Mechanics	MEFM						2		2		3	
10	Machine Elements I	IDORM1						2		1	1	4	
11	Numerical Methods	IDMNI						2		2		4	
12	Quality Management	IDMC						1	1			3	

13	Mechanisms I	IDMECA					3		1	2	5
14	Practical work 90 hours	IDPr04									4
15	French Language	LF03/LF04	1	1		3	1	1			3
16	Sports	EF03/EF04		1		1		1			1

#### 3<sup>rd</sup> Year

No.	Course	Codo		5 <sup>t</sup>	<sup>h</sup> Sen	neste	er	6 <sup>th</sup> Semester					
crt.	Course  Manufacturing Technologies and Cutting Tools	Code	С	S	L	Р	Cred	С	S	L	Р	Cred	
01	Manufacturing Technologies and Cutting Tools	IDTASA	2		1		3						
02	Machine Elements II	IDORM2	2	1	1	2	6						
03	Heat Engineering and Thermal Machines	TERM	2		1		3						
04	Materials Science and Engineering II (Special Materials)	IDMS05	1		2		3						
05	Conceptual Design I	IDSPD5	2			2	5						
06	Finite Element Analysis	IDMEF5	2		2		5						
07	Aesthetics and Ergonomics	IDEE05	2			2	5						
08	Computer Aided Shape Modelling in Design	ID MAF06						2		1	1	4	
09	Mechanisms II (Computer Aided Modelling)	MAS06						З		2	1	6	
10	Form-giving in Design I (Mock-up making)	IDMa06						2		1		3	
11	Conceptual Design II	IDDC06						2		1		3	
12	Conceptual Design II project	IDDC06P									2	2	
13	Practical Work 90 hours	IDPr06										4	
14	Study of Colour for Design	IDCDP6						2		3		5	
15	Design (semiotics)	IDDS06						2		1		3	

## 4<sup>th</sup> Year

No.	C	Code	7 <sup>th</sup> Semester						8 <sup>th</sup> Semester					
crt.	Course	Code	С	S	L	Р	Cred	С	S	L	Р	Cred		
01	Actuation, command and control of mechanical	IDACC7	3		3		7							
01	systems	ID/(CC/					,							
02	Embodiment Design	DC07	2				3							
03	Embodiment Design - project	DC07Pr				2	2							
04	Design of Mechatronic Products	IDMDP7	2			2	4							
05	Form-giving in Design II	CFD07	1		2		3							
06	Graphic Design	IDDG7	2			1	3							
07	Creativity and Innovation in Design (10 weeks)	CID08						2		1		3		
08	Innovation Management in Product Design (10 weeks)	MINOVID						2			2	3		
09	Virtual Prototyping (10 weeks)	PV08						2		1	2	4		
10	Web-design (10 weeks)	CDP08						2		1		3		
11	Project Management (10 weeks)	MP08						1	1			2		
12	Detail Design (10 weeks)	PD08						2			2	4		
13	Diploma Project (14 weeks x 4 hours)	IDPrD									4	4		
14	Practical work for diploma project (4 weeks x 24 hours)	Pr08										4		
15	Product Design for Solar Energy Conversion	CES07	2		1		4							
16	Eco-design and Products Recycling	RP07	2		2		4							
17	Package Design	IDDA08						1		2		3		