

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)

1st Year

No. crt.	Course	Code	1 st Semester					2 nd Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Mathematical Analysis	MAT1	2	2			4					
02	Linear Algebra, Analytical and Differential Geometry	MAT2	2	2			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	Special Mathematics	MASP						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

2nd Year

No. crt.	Course	Code	3 rd Semester					4 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Chemistry	CHIM	2		1		4					
02	Measurement Techniques and Systems	TOCD	2		2		4					
03	Strength of Materials I	REZ1	2	2	1		5					

04	Electrotechnics and Applied Electronics	ELEA	3		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	IDCOM	1	1			2					
08	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 in Engineering	IDMNI						2		2		4
12	Industrial Management	IDMANF						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

3rd Year

No. crt.	Course	Code	5 th Semester					6 th Semester				
			C	S	L	P	Cred	C	S	L	P	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						3		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	Colour in Product Design <i>or</i> Sustainable Product Design	IDCDP6/ IDDD06						2		3		5
15	Design History and Culture <i>or</i> Intelligent Products and Technologies	IDICD6/ IDPTI06						2		1		3

4th Year

No. crt.	Course	Code	7 th Semester					8 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Actuation, command and control of mechanical systems	IDACC7	3		1	2	7					
02	Embodiment Design	DC07	2			2	5					
03	Design of Mechatronic Products	IDMDP7	2			2	5					
04	Form-giving in Design	CFD07	1		2		3					
05	Graphic Design	IDDG7	2			1	3					
06	Creativity and Innovation in Design (10 weeks)	CID08						2		1		3
07	Innovation Management in Product Design (10 weeks)	MINOVID						2			2	4
08	Virtual Prototyping (10 weeks)	PV08						2		1	2	5
09	Web-design (10 weeks)	CDP08						2		1		3
10	Project Management (10 weeks)	MP08						1	1			2
11	Detail Design (10 weeks)	PD08						2			2	4
12	Project (10 weeks x 2 hours + 4 weeks x 26 hours)	IDPrII									2	3
13	Practical work (10 weeks x 6 hours)	Pr08										3
14	Product Design for Solar Energy Conversion <i>or</i> Object Design	CES07/DO07	2		1		3					
15	Eco-design and Products Recycling <i>or</i> Quality in Product Design	RP07/WD07	2			2	4					
16	Package Design <i>or</i> Mechanical Testing and Tribology (10 weeks)	IDDA08/IMT08						1			2	3