

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	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						3		2		5
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			5
13	Artistic Drawing	IDDS								2		3
14	Practical work I (30 hours)	IDPrI										2
15	French Language	LF01/ LF02	1	1			2	1	1			2
16	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	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	Electrical Machines and Actuation	IDMAE03	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					
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	IDMNI						2		2		4
12	Quality Management	IDMC						1	1			3

13	Mechanisms I	IDMECA						3		2	1	5
14	Practical work 90 hours	IDPrO4										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	3	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	Design of Mechatronic Products	IDMPD5	2			2	5					
08	Computer Aided Shape Modelling in Design	ID MAF06						2		2		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	Product Design for Sustainable Development	IDSD						2		3		5
15	Design (semiotics)	IDDS06						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		3		7					
02	Embodiment Design	DC07	2				3					
03	Embodiment Design - project	DC07Pr				2	2					
04	Design of Mechatronic Products	IDMDP7	2			2	4					
05	Product Design for Solar Energy Conversion	CESID	2		1		4					
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	Object Design	ODID	1		2		3					
16	Eco-design and Products Recycling	RP07	2		2		4					
17	Package Design (10 weeks)	IDDA08						1		2		3