

Transilvania University of Braşov, Romania

Study program: Product Design Engineering (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 (not available in the academic year 2020-2021)

No. crt.	Course	Code	1 st Semester					2 nd Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1	Mathematical Analysis	ANM1	2	2			5					
2	Linear Algebra, Analytical and Differential Geometry	ALG1	2	2			5					
3	Technical Drawing and Computer Graphics I	DTI1	2		2		4					
4	Computer Programming and Programming Languages I	PCL1	2		2		4					
5	Descriptive Geometry	GED1	2		1		3					
6	Physics	FIZ1	2		2		4					
7	Materials Science and Engineering	SIM2						4		2		6
8	Special Mathematics	MSP2						2	2			5
9	Technical Drawing and Computer Graphics II	DTI2						2		2		4
10	Computer Programming and Programming Languages II	PCL2						2		2		4
11	Mechanics	MCN2						3	2			6
12	Product Design in Engineering	DPI2						1		1		2
13	Communication	COM2	1		1		2					
14	English Language French Language German Language Spanish Language	LBE1/ LBE2 LBF1/ LBF2 LBG1/ LBG2 LBS1/ LBS2	1	1			3	1	1			3
15	Physical Education and Sports	EFS1/ EFS2		1			1		1			1

2nd Year (not available in the academic year 2020-2021)

No. crt.	Course	Code	3 rd Semester					4 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Chemistry	CHM3	2		1		4					
2.	Tolerances and Dimensional Control	TCD3	2		2		5					
3.	Strength of Materials I	REZ3	2	2	1		5					
4.	Electrotechnics	ELT3	2		2		4					
5.	Applied Electronics	ELA3	2		2		4					
6.	Computer Aided Design	PAC3	2		2	1	5					
7.	Strength of Materials II	REZ4						3	1	1		5
8.	Fluid Mechanics	MFL4						2		1		3
9.	Machine Elements I	ORM4						2		1	1	4
10.	Numerical Methods	MNM4						2		2		4
11.	Basics of Product Design and Development	BPD4						2			1	3
12.	Mechanisms I	MEC4						3		1	2	5
13.	Practical work 90 hours	PRA4										4
14.	English Language French Language German Language Spanish Language	LBE3/ LBE4 LBF3/ LBF4 LBG3/ LBG4 LBS3/ LBS4	1	1			3	1	1			2
15.	Physical Education and Sports	EFS3/EFS4		1			1		1			1

3rd Year (not available in the academic year 2020-2021)

No. crt.	Course	Code	5 th Semester					6 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Machine Elements II	OMC5	2	1	1		4					
2.	Machine Elements II - Project	OMP5				2	2					
3.	Thermodynamics and Heat Engines	TMT5	2		1		4					
4.	Processing Technologies	TPR5	2		3		5					
5.	Ecological Materials	MEC5	1		2		3					
6.	Product Design Specifications	CPP5	2			2	4					
7.	Finite Element Method	MEF5	2		2		4					
8.	Mechatronics	PRM5	2		1		4					
9.	Mechanisms II	MAS6						3		2	1	6
10.	Sustainable Development	BDD6						2		1		3
11.	Shape Design and Modelling	CMF6						2		2		4
12.	Conceptual Design	DCO6						2				2
13.	Conceptual Design - Project	DCP6									2	2
14.	Recycling Technologies	TRC6						2		2		4
15.	Management	MNG6						1	2			2
16.	Practical Work 90 hours	PRA6										3
17.	Tribology	TRB6						1		2		3

4th Year (not available in the academic year 2020-2021)

No. crt.	Course	Code	7 th Semester					8 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Aesthetics and Ergonomics	ESE7	2		2		4					
2.	Embodiment and Detail Design I	PCD7	2			2	4					
3.	Automatics	AUT7	3		2	2	7					
4.	Renewable Energy Systems	SER7	4		3		7					
5.	Clean Technologies	THC7	2			1	4					
6.	Eco-design	ECD7	2		1		4					
7.	Quality Management (10 weeks)	MCP8						2		1		3
8.	Virtual Prototyping (10 weeks)	PRV8						2		1	2	4
9.	Project Management (10 weeks)	MPR8						1	1			2
10.	Embodiment and Detail Design II (10 weeks)	PCD8						2			2	4
11.	Product Prototyping and Optimisation (10 weeks)	POP8									3	2
12.	Development of diploma project	EPD8									4	4
13.	Practical work for diploma project (4 weeks x 24 hours)	PPD8										4
14.	Law and Intellectual Property (10 weeks)	LPI8						1	1			2
15.	Product Maintenance (10 weeks)	MTP8						1		1		2
16.	Production and Sustainable Consumption (10 weeks)	PCD8						2	1			3