

# Transilvania University of Braşov, Romania

## Study program: Sustainable Product Design and Environment Protection

Faculty: Product Design and Environment  
 Study period: 2 years (master)  
 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<sup>st</sup> Year

No. crt.	Course	Code	1 <sup>st</sup> Semester					2 <sup>nd</sup> Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1	Energy and environment	D01.TC.01.1	1	1			5					
2	Advanced engineering design	D01.TC.01.2	2	1		2	5					
3	Eco-Design	D01.TC.01.3	1			1	5					
4	RES Design	D01.TC.01.4	3	1		1	6					
5	Applied English language	D01.TC.01.5	1	1			5					
6	Engineering modelling and simulation	D01.TC.02.6						2		2	1	7
7	Advanced materials for design	D01.TC.02.7						2		1		5
8	Advanced computer aided animation	D01.PD.02.8						2		1	1	7
9	Graphic design	D01.PD.02.9						2		1	1	7
10	Renewables for thermal energy production I (geothermal and biomass systems)	D01.RE.02.8						2		1	1	7
11	Renewables for electrical energy production I (wind and micro-hydro systems)	D01.RE.02.9						2		1	1	7
12	Advanced materials and processes for water treatment	D01.ED.02.8						2		1	1	7
13	Advanced environmental chemistry	D01.ED.02.9						2		2		7
14	Practice 140 hours/sem.	D01.TC.02.8					4					4

2<sup>nd</sup> Year

No. crt.	Course	Code	3 <sup>rd</sup> Semester				4 <sup>th</sup> Semester					
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Valorisation of the research results	D01.TC.04.1						1			2	4
2.	Research project management	D01.TC.04.2						1			2	4
3.	Industrial project management	D01.TC.04.3						1			1	4
4.	Academic ethics and integrity	D01.TC.04.4						1	1			3
5.	Advanced mechanical engineering design	D01.PD.03.1	2			1	5					
6.	Control engineering	D01.PD.03.2	2			1	5					
7.	Integrated product design	D01.PD.03.3	2			1	5					
8.	Advanced aesthetics and ergonomics	D01.PD.03.4	2			1	5					
9.	Design of RES-based products	D01.PD.03.5	2			2	5					
10.	Product testing	D01.PD.04.1						2		2		5
11.	Tracking systems for solar energy convertors	D01.RE.03.1	2			1	5					
12.	Renewables for electrical energy production II (photovoltaic and hybrid systems)	D01.RE.03.2	3		1	1	7					
13.	Renewables for thermal energy production II (solar thermal and hybrid systems)	D01.RE.03.3	3		1	1	7					
14.	Renewable energy systems in the built environment	D01.RE.03.4	2			1	6					
15.	RES implementation, operation and maintenance	D01.RE.04.1						2		2		5
16.	Environmental monitoring and impact assessment	D01.ED.03.1	2			2	6					
17.	Advanced materials and processes for wastewater treatment	D01.ED.03.2	2			2	6					
18.	Wastes recycling	D01.ED.03.3	2			1	5					
19.	Biomass conversion	D01.ED.03.4	2		1		4					
20.	Atmospheric pollution and treatment	D01.ED.03.5	1		1		4					
21.	Emerging pollutants: sources, advanced treatment processes	D01.ED.04.1						2		2		5
22.	Practice for research 140 hours/sem.	D01.TC.04.5					5					5
23.	Practice for elaboration of dissertation thesis 60 hours/sem.	D01.TC.04.6										5