

# Transilvania University of Braşov, Romania

## Study program: Engineering and Management of Advanced Materials

### Curriculum for ERASMUS + students

Faculty:	Materials Science and Engineering
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	language of instruction	1 <sup>st</sup> Semester					2 <sup>nd</sup> Semester				
				C	S	L	P	Cred	C	S	L	P	Cred
01	Unconventional Technologies and Equipments	SMTEHN	romanian	2		1	1	5					
02	Advanced Methods of Analysis and Characterization of Materials	SMTAAC	romanian	2		2	1	5					
03	Technologies and Equipment for Rapid Prototyping	SMTEPR	romanian	2		1	1	5					
04	Technical English	SMENGT	english		2			3					
05	Ethics and Academic Integrity	SMEIA	romanian	1			1	2					
06	Criterial Choosing of Materials	SMAMAT	romanian	1		2		5					
07	Practical Research Activity 1	SMPRC-1	romanian			8		5					
08	Advanced Composite Materials	SMACM	romanian						1		1	2	5
09	Recycling of Materials and Environmental Management	SMRMM	romanian						2		1	1	5
10	Technics for Processing of Biocompatible Materials	SMTPB	romanian						1		2		4
11	Synthesis of Nanomaterials and Specific Methods of Characterization	SMSNMC	romanian						2		2	1	5
12	Thermodynamics and Kinetics of Transformations in Solid State	SMTCTS	romanian						2		2		5
13	Practical Research Activity 2	SMPRC-2	romanian									8	6

#### 2<sup>nd</sup> Year

No. crt.	Course	Code	language of instruction	3 <sup>rd</sup> Semester					4 <sup>th</sup> Semester				
				C	S	L	P	Cred	C	S	L	P	Cred
01	Expert Software CAD/CAM/CAE	SMSEXP	romanian	2		1	1	5					
02	Modelling, Simulation and Optimization of Processes	SMMSOP	romanian	1		2		5					
03	Total Quality Management	SMMCT	romanian	1	2			5					
04	European Programs and Strategies in the Field of Advanced Materials	SMPESD	romanian	1			1	3					
05	Practical Research Activity 3	SMPRC 3	romanian				8	5					

06	Logistics and Management of Materials	SMLOMM	romanian	1			2	4					
07	Total Productive Maintenance	SMMETP	romanian	1		2		3					
08	Engineering of Thin Films	SMISS	romanian						2		1	1	5
09	Tribological Characterization of Surfaces	SMCTRS	romanian						1		2	1	5
10	Practical Research Activity 4	SMPRC 4	romanian									6	5
11	Practical Activity and/or Scientific Research for Preparing Dissertation	SMPRED	romanian									6	5
12	Drafting of Dissertation Work	SMELPD	romanian									6	10