

# Transilvania University of Braşov, Romania

## Study program: Engineering and Management of Advanced Materials

Faculty: Materials Science and Engineering  
 Study period: 2 years (master)  
 Academic year structure: 2 semesters (14 weeks per semester)  
 Examination sessions: 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.	Unconventional Technologies and Equipments	SMTEHN	2		1	1	5					
2.	Advanced Methods of Analysis and Characterization of Materials	SMTAAC	2		2	1	5					
3.	Technologies and Equipment for Rapid Prototyping	SMTEPR	2		1	1	5					
4.	Technical English	SMENGT		2			3					
5.	Ethics and Academic Integrity	SMEIA	1			1	2					
6.	Criterial Choosing of Materials	SMAMAT	1		2		5					
7.	Practical Research Activity 1	SMPRC-1			8		5					
8.	Practical Research Activity 2	SMPRC-2								8	6	
9.	Advanced Composite Materials	SMACM						1		1	2	5
10.	Recycling of Materials and Environmental Management	SMRMM						2		1	1	5
11.	Technics for Processing of Biocompatible Materials	SMTPB						1		2		4
12.	Synthesis of Nanomaterials and Specific Methods of Characterization	SMSNMC						2		2	1	5
13.	Thermodynamics and Kinetics of Transformations in Solid State	SMTCTS						2		2		5

### 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.	Expert Software CAD/CAM/CAE	SMSEXP	2		1	1	5					
2.	Modelling, Simulation and Optimization of Processes	SMMSOP	1		2		5					
3.	Total Quality Management	SMMCT	1	2			5					
4.	European Programs and Strategies in the Field of Advanced Materials	SMPESD	1			1	3					
5.	Practical Research Activity 3	SMPRC 3				8	5					
6.	Logistics and Management of Materials	SMLOMM	1			2	4					

