

# Transilvania University of Braşov, Romania

## Study program: Optometry

### Curriculum for ERASMUS + students

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)

#### 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	
1.	Mathematical Analysis	MKTAM01	Romanian	2	3			5						
2.	Chemistry	MKTCH01	Romanian	2		1		4						
3.	Technical Drawing and Infographics I	DIDT01	Romanian	2		2		5						
4.	Computer Programming and Programming Languages I	MKTPC01	Romanian	1		2		4						
5.	Medical Optics and Optical Equipements I	OME0-IO1	Romanian	2		3		4						
6.	Materials Science	MKTSM01	Romanian	3		2		5						
7.	Linear Algebra, Analytical Geometry and differential Equations	DIAGAD	Romanian						2	2				4
8.	Technical Drawing and Infographics II	MKTDT02	Romanian						2		2			4
9.	Computer Programming and Programming Languages II	MKTPC02	Romanian						1		2			4
10.	Physics	MKTFZ02	Romanian						2	1				4
11.	Applied Mechanics	MKTMC02	Romanian						3	2				5
12.	Comunication	TDCO	Romanian						1	1				3
13.	Electrotechnics	MKEA02	Romanian						2		1			3
14.	Foreign Languages - English	LE01/ LE02	English	1	1			3	1	1				3
	Foreign Languages - French	LF01/ LF02	French											
	Foreign Languages - German	LG01/LG02	German											
	Foreign Languages - Espanol	LS01/LS02	Spanish											
15.	Physical Training I/II	EF01/EF02	Romanian		1			1		1				1

#### 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	
1.	Special Mathematics	DIMS03	Romanian	2	1			4						
2.	Applied Informatics I	ANUM	Romanian	2		3		5						
3.	Electronics	ELEC	Romanian	2		1		4						
4.	Opto-electronics	OPEL	Romanian	2		2		4						
5.	Biomechanics	BMEC	Romanian	2		2		5						
6.	Anatomy and Physiology	ANA1	Romanian	2		2		6						
7.	Applied Informatics II	DIM3D	Romanian						1		1			2
8.	Mechanisms of Precision Mechanics	DIOM04	Romanian						3		2			5

9.	Processing Technologies	THPL	Romanian							2		1		3
10.	Numerical Methods	MNUM	Romanian							2		1		2
11.	Geometrical Optics	OPGE	Romanian							1	2		1	4
12.	Measure Systems and Instrumentation I	TCDI	Romanian							2		1		3
13.	Physiology Optics	OPFZ	Romanian							3		2		5
14.	Practical Work 90 hours	PRAC1	Romanian											4
15.	Foreign Languages - English	LE03/ LE04	English	1	1			2	1	1				2
	Foreign Languages - French	LF03/ LF04	French											
	Foreign Languages - German	LG03/LG04	German											
	Foreign Languages - Espanol	LS03/LS04	Spanish											
16.	Physical Training I/II	EF03/EF04	Romanian		1				1		1			1

### 3<sup>rd</sup>Year

No. crt.	Course	Code	Language of instruction	5 <sup>th</sup> Semester					6 <sup>th</sup> Semester						
				C	S	L	P	Cred	C	S	L	P	Cred		
1.	CNC Working Machines	MLCN	Romanian	2		1		5							
2.	Medical Informatics	INME	Romanian	2		2		4							
3.	Optical Engineering	INOP	Romanian	2		2		4							
4.	Medical Optics and Optics Equipments II	OME0-II	Romanian	2		2		4							
5.	Medical Optics and Optics Equipments II - project	OME0-IIP	Romanian				2	2							
6.	Training Apparatus and Visual Rehabilitation	AARV	Romanian	2		2		5							
7.	Spectacles Mounting Technology and Optical Processing Devices	TMOD	Romanian	3		2	1	6							
8.	Laboratory Testing Apparatus	APLAc	Romanian						2		1			3	
9.	Medical Apparatus Reliability	FIAM	Romanian						2		2			3	
10.	Medical Apparatus Ergonomics	ERGO	Romanian						2		2			4	
11.	Measurement Systems And Instrumentation II	MASI	Romanian						2		2			3	
12.	Low Vision and Spectacles Prescriptions	VSP0	Romanian						3		2	1		6	
13.	Ocular Pathology	FIZP	Romanian						1		1			3	
14.	Physics Optics	OFOT	Romanian						2		2			4	
15.	Specialty Practical Work 90 hours	PRAC2	Romanian											4	

### 4<sup>th</sup>Year

No. crt.	Course	Code	Language of instruction	7 <sup>th</sup> Semester					8 <sup>th</sup> Semester						
				C	S	L	P	Cred	C	S	L	P	Cred		
1.	Micro and nanosystems Technology	TMNS	Romanian	3		2		5							
2.	Image Processing, Artificial Vision and Medical Imaging	PIVI	Romanian	2		2		3							
3.	Measurement Systems and Instrumentation III (REFRACTION)	SMIR	Romanian	4		4		8							
4.	Optical Material	MATO	Romanian	1	1			2							
5.	Contact Lenses	LECO	Romanian	2		1		4							
6.	Contact Lenses Project	LECO-Pr	Romanian				2	2							
7.	Functional Optometry	OFSC	Romanian	2		2		6							
8.	Vision Psychology	VBAV	Romanian						2		2			3	
9.	Ethics and Deontology of Optometry Engineering	EDIO	Romanian						1	1				2	

10.	Coordinate Measure Machine	MMCO	Romanian						2		2		3
11.	Database and Statistical Processing	BDPS	Romanian						2		2		3
12.	Design and Maintenance of Optometric Equipment	PMEO	Romanian						3		2	1	5
13.	Equipment for Technical Optometry	EOPC	Romanian						2		2		4
14.	Elaboration of the Diploma Project	EPD	Romanian									4	5
15.	Diploma Practical Work 60 hours	PRACD	Romanian										5