

# Transilvania University of Braşov, Romania

## Study program: Optometry

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	1 <sup>st</sup> Semester					2 <sup>nd</sup> Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
1.	Mathematical Analysis	MKTAM01	2	3			5					
2.	Chemistry	MKTCH01	2		1		4					
3.	Technical Drawing and Infographics I	DIDT01	2		2		5					
4.	Computer Programming and Programming Languages I	MKTPC01	1		2		4					
5.	Medical Optics and optical equipments I	OME0-I01	2		2		4					
6.	Materials Science	MKTSM01	3		2		5					
7.	Linear Algebra, Analytical Geometry and diferential	DIAGAD						2	2			4
8.	Technical Drawing and Infographics II	MKTDT02						2		2		4
9.	Computer Programming and Programming Languages II	MKTPC02						1		2		4
10.	Physics	MKTfZ02						2	1			4
11.	Applied Mechanics	MKTMC02						3	2			5
12.	Comunication	TDCO						1	1			3
13.	Electrotechnics	MKEA02						2		1		3
14.	Foreign Languages-English	LE01/ LE02	1	1			3	1	1			3
15.	Foreign Languages-French	LF01/ LFO2	1	1			3	1	1			3
16.	Foreign Languages-German	LG01/LG02	1	1			3	1	1			3
17.	Foreign Languages-Espanol	LS01/LS02	1	1			3	1	1			3
18.	Physical Training I/II	EF01/EF02		1			1		1			1

### 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.	Special Mathematics and Mathematical Statistics	DIMS03	2	1			4					
2.	Applied Informatics I	ANUM	2		3		5					
3.	Electronics	ELEC	2		1		4					
4.	Opto-electronics	OPEL	2		2		4					

5.	Physiology Optics	OPFZ	3		2		6						
6.	Biomechanics	BMEC	2		2		5						
7.	Applied Informatics II	DIM3D						1		1			2
8.	Mechanisms of precision mechanics	DIOM04						3		2			5
9.	Processing Technologies	THPL						2		1			3
10.	Numerical Methods	MNUM						2		1			2
11.	Geometrical Optics	OPGE						1	2		1		4
12.	Measure systems and instrumentation I	TCDI						2		1			3
13.	Anatomy and physiology	ANA1/ ANA2						3		2			5
14.	Practical Work 90 hours	PRAC1											4
15.	Foreign Languages-English	LE03/ LE04	1	1			2	1	1				2
16.	Foreign Languages-French	LF03/ LF04	1	1			2	1	1				2
17.	Foreign Languages-German	LG03/LG04	1	1			2	1	1				2
18.	Foreign Languages-Espanol	LS03/LS04	1	1			2	1	1				2
19.	Physical Training III/IV	EF03/EF04		1			1		1				1

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

No. crt.	Course	Code	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	2		1		5						
2.	Medical Informatics	INME	2		2		4						
3.	Optics Engineering	INOP	2		2		4						
4.	Medical Optics and Optics equipments II	OMEO-II	2		2		4						
5.	Medical Optics and Optics equipments II - project	OMEO-IIP				2	2						
6.	Training Apparatus and visual rehabilitation	AARV	2		2		5						
7.	Spectacles Mounting Technology and Optical Processing Devices	TMOD	3		2	1	6						
8.	Laboratory Testing Apparatus	APLAc						2		1			3
9.	Medical Apparatus Reliability	FIAM						2		2			3
10.	Medical Apparatus Ergonomics	ERGO						2		2			4
11.	Measurement systems and Instrumentation II	MASI						2		2			3
12.	Low Vision and Spectacles Prescriptions	VSPO						3		2	1		6
13.	Ocular pathology	FIZP						1		1			3
14.	Physics Optics	OFOT						2		2			4
15.	Specialty Practical Work 90 hours	PRAC2											4

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

No. crt.	Course	Code	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	3		2		5						
2.	Image Processing, Artificial Vision and Medical Imaging	PIVI	2		2		3						
3.	Measurement Systems and Instrumentation III (REFRACTION)	SMIR	4		4		8						

4.	Optical material	MATO	1	1			2					
5.	Contact lenses or	LECO	2		1		4					
	<i>Contactology</i>	<i>CONT</i>										
6.	Contact lenses project or	LECO-Pr				2	2					
	<i>Contactology project</i>	<i>CONT-Pr</i>										
7.	Scholar Functional Optometry or	OFSC	2		2		6					
	<i>Pediatric Optometry</i>	<i>OPED</i>										
8.	Vision Psychology	VBAV						2		2		3
9.	Ethics and deontology of optometry engineering	EDIO						1	1			2
10.	Coordinate Measure Machine	MMCO						2		2		3
11.	Database and Statistical Processing	BDPS						2		2		3
12.	Design and maintenance of optometric equipment	PMEO						3		2	1	5
	<i>Equipments for Functional Intervention</i>	<i>EPIF</i>										
13.	Equipment for technical optometry	EOPC						2		2		4
	<i>Optometric Components and Medical Devices</i>	<i>COPM</i>										
14.	Elaboration of the Diploma Project	EPD									4	5
15.	Diploma practical work 60 hours	PRACD										5
16.	Presentation of diploma project	SPDP										10