

# Transilvania University of Braşov, Romania

## Study program: Traffic and Transport Engineering

Faculty	Mechanical Engineering
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	
01	Mathematical Analysis	AnaM	3	2			5						
02	Descriptive Geometry	GD	2		2		5						
03	Chemistry	Chim	2		1		4						
04	Materials Science	SM	2		1		3						
05	Materials Technology	TM	2		1		3						
06	Applied Informatics	INFA	2		2		5						
07	Linear Algebra and Analytical and Differential Geometry	AGAD						2	3				5
08	Technical Drawing and Infographics I	DT1						2		2			5
09	Physics	Fizi						2		1			4
10	Mechanics I	Mec1						3	1	1			5
11	Computers Programming and Programming Languages	PCLP						2		2			5
12	Electrical Engineering and Electrical Machines	ELME						2		1			4
13	(O1) Academic Writing and Communication	COM	1	1			3						
	(O2) Academic Ethics and Integrity	EIA	1	1			3						
14	Foreign Language - English	LE01/LE02											
	Foreign Language - French	LF01/LF02	1	1			2	1	1				2
	Foreign Language - German	LG01/LG02											
15	Sport and Physical Training	EF01 / F02		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	
01	Economics	ECON	1	1			3						
02	Technical Drawing and Infographics II	DT2	2		2		4						
03	Mechanics II	Mec2	3	2	1		6						
04	Strength of Materials I	RM1	2	2	2		6						

05	Special Mathematics and Mathematical Statistics	MSSM	2	2			4					
06	Informatics and Cybernetics in Transports	ICT	2		1		4					
07	Information Theory and Codes	TIC						2		2		3
08	Fluids Mechanics and Hydraulic Machines	MFMH						2		2		4
09	Strength of Materials II	RM2						3	1	1		5
10	Mechanisms	Mecs						3		1	1	5
11	Machine Elements I	OM1						2		1	1	4
12	Management	MANAG						2		1		3
13	Foreign Language - English	LE03/LE04	1	1			2	1	1			2
	Foreign Language - French	LF03/LF04										
	Foreign Language - German	LG03/LG04										
14	Sport and Physical Training	EF03/ EF04		1			1		1			1
15	Practical Placement	PT1	90 hours/ year									4

### 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	
01	Thermodynamics and Thermal Machines	TMT	2	1	2		5						
02	Machine Elements 2	OM2	2		2		5						
03	Machines and Installations for Goods Handling	MIMM	2		1		5						
04	Means of Transports	MT	2		2		5						
05	Internal Combustion Engines	MAI	3		2	1	5						
06	Automotives	AUT	2		2	1	5						
07	Elements of Vehicle Dynamics	EDA						2		2	1	5	
08	Road Infrastructure	IRUT						2			2	4	
09	Transport Control and Command Installations	ICCC						2		2		4	
10	Environment Protection and Engineering	PIM						2		2		4	
11	Road Traffic Management and Telematics I	MTRT1						3		2		5	
12	(O1) Multimodal Transports	TM						1	1			2	
	(O1) Transport Systems	STR						1	1			2	
13	(O2) Economic Analysis of Transport	AET						1	1			2	
	(O2) Transport Logistics	LOGT						1	1			2	
14	Practical Placement	PRTH2	90 hours/ year									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	
01	Automotive Electric Systems	EEA	2		2		5						
02	Road Traffic Management and Telematics II	MTRT2	3		2		5						
03	Machines for Road Infrastructure	UIR	2			2	4						
04	CAD in Transport Engineering	PAT						2		2		4	
05	Functional Reliability of Transport Systems	FFST						2		2		4	
06	Fuels, Lubricants and Maintenance Materials for Vehicles	CLMIA						2		2		4	

07	Diploma Project Develop	EPD								4		5
08	Practice for Diploma Project	PPD						60 hours/semester			5	
09	(01) Vehicle Fleet Maintenance I	MPV1	2		2	1	6					
	(01) Vehicles Maintenance and Reliability	FMA										
10	(02) Traffic Accidents Analysis and Reconstruction	ARAC	2		2		5					
	(02) Special Transports	TRS										
11	(03) Automotive Passive Safety	SPA	2		2		5					
	(03) International Transports	TI										
12	(04) Quality in Transports	CALT						2		2		3
	(04) Auxiliary systems of Transport Means	SAMT										
13	(05) Vehicle Fleet Maintenance II	MPV2						2		2		3
	(05) Risk Evaluation, Insurance and Vehicles Trade Techniques	ERATCA										
14	(06) Transport Terminals	TT						2	2			2
	(06) Transport Management and Marketing	MKTR										