Transilvania University of Braşov, Romania

Study program: Automotive 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)

1st Year

Crt. No.	Course	C_1*	C_2**	Code	1st Semester							2nd Semester						
					C	S	L	P	SI#	V	Cr	C	S	L	P	SI	V	Cr
1	*Mathematical Analysis*	DF	DI	AnaM	3	2			55	E	5							
2	*Descriptive Geometry*	DF	DI	GD	2		2		69	C	5							
3	*Chemistry*	DF	DI	Chim	2		1		58	E	4							
4	*Materials Science*	DD	DI	SM	2		1		33	E	3							
5	*Materials Engineering*	DD	DI	TM	2		1		33	E	3							
6	*Applied Informatics*	DF	DI	InfA	2		2		69	E	5							
7	*(O1) Communiation and Academic Writing*	DC	DO	Com	1	1			47	E	3							
	(O1) Etics and Academic Integration	DC	DO	EIA														
8	*Linear Algebra, Analytic and Differential Geometry*	DF	DI	AGAD								2	3			55	E	5
9	*Technical Drawing and Infographics - I*	DF	DI	DT1								2		2		69	C	5
10	*Physics*	DF	DI	Fizi								2		1		58	E	4
11	*Mechanics - I*	DD	DI	MEC1								3	1	1		55	E	5
12	*Computers Programming and Programming Languages*	DF	DI	PCLP								2		2		69	E	5
13	*Electrical Engineering*	DD	DI	ELM								2		1		58	E	4
14	*(O2) Foreign Language - French*	DC	DO	LF01/ LF02	1	1			22	C	2	1	1			22	C	2
	(O2) Foreign Language - German	DC	DO	LG01/ LG02														
15	*Physical Training*	DC	DI	EF01/ EF02		1			11	A/R	(1)		1			11	A/R	(1)
Total					**15**	**5**	**7**	**0**	**397**	**E 6 / C 2**	**30 (31)**	**14**	**6**	**7**	**0**	**397**	**E 5 / C 2**	**30 (31)**
Total number of hours per week					**27**							**27**						

2nd Year

Crt. No.	Course	C_1*	C_2**	Code	3rd Semester							4th Semester						
					C	S	L	P	SI#	V	Cr	C	S	L	P	SI	V	Cr
1	*Economics*	DC	DI	ECON	1	1			47	E	3							
2	*Technical Drawing and Infographics - II*	DF	DI	DT2	1		3		69	C	5							
3	*Mechanics - II*	DD	DI	MEC2	2	2	2		66	E	6							
4	*Strength of Materials - I*	DD	DI	RM1	2	2	2		66	E	6							
5	*Special Mathematics and Statistics*	DF	DI	MSSM	2	2			44	E	4							
6	*Applied Electronics*	DD	DI	EleA	2		1		58	E	4							
7	*Automotive Engineering Fundamentals*	DD	DI	BIA								2		2		19	E	3
8	*Fluid Mechanics and Hydraulic Machines*	DD	DI	MFMH								2		2		44	E	4
9	*Strength of Materials - II*	DD	DI	RM2								3	1	1		55	E	5
10	*Mechanisms*	DD	DI	MECS								3	1	1		55	E	5
11	*Machine Elements - I*	DD	DI	OM1								2		1	1	44	E	4
12	*Tolerances and Dimensional Control*	DD	DI	TCD								2		1		33	C	3
13	*(O1) Foreign Language - French* *(O1) Foreign Language - German*	DC	DO	LSF3/ LSe4 LSGe3/ LSGe4	1	1			22	C	2	1	1			22	C	2
14	*Physical Training*	DC	DI	EF03/ EF034		1			11	A/R	(1)		1			11	A/R	(1)
15	*Practical Placement*	DD	DI	PRTH1	3 weeks x 30 h / week = 90 h												C	4
Total					**11**	**9**	**8**	**0**	**383**	**E 5 C 2**	**30 (31)**	**15**	**4**	**8**	**1**	**283**	**E 5 C 3**	**30 (31)**
Total number of hours per week					**28**							**28**						

3rd Year

Crt. No.	Course	C_1*	C_2**	Code	5th Semester							6th Semester						
					C	S	L	P	SI#	V	Cr	C	S	L	P	SI	V	Cr
1	*Thermodynamics and Thermal Machines*	DD	DI	TMT	2	1	2		55	E	5							
2	*Vibrations*	DD	DI	VIBR	2	1	1		69	E	5							
3	*Hydraulic and Pneumatic Actuation*	DD	DI	AHP	2		2	1	55	E	5							
4	*Machine Elements - II*	DD	DI	OM2	2		1	1	69	C	5							
5	*Finite Elements Method*	DS	DI	FEM	2		2		69	E	5							
6	*Vehicle Dynamics I*	DD	DI	DA1	3		2		55	E	5							
7	*Vehicle Dynamics II*	DD	DI	DA2								2				22	E	2
8	*Vehicle Dynamics II P*	DD	DI	DA2p											2	22	C	2
9	*Processes and Characteristics of Internal Combustion Engines - I*	DS	DI	PCMAI1								2		2	1	55	E	5
10	*Construction and Calculus of Internal Combustion Engines - I*	DS	DI	CCMAI1								2		2		44	E	4
11	*Construction and Calculus of Automotive Vehicles - I*	DS	DI	CCA1								2		1	1	69	E	5
12	*Computer Aided Design*	DD	DI	PAC								2		2		19	C	3
13	*Autonomous Vehicles*	DS	DI	VAut								1	1			22	C	2
14	*Automatic Systems Bases*	DD	DI	BSA								2	1	1		19	E	3
15	*Practical Placement*	DS	DI	PRTH2	3 weeks x 30 h / week = 90 h												C	4
Total					**13**	**2**	**10**	**2**	**372**	**E 5**	**C 1**	**30**	**13**	**2**	**8**	**4**	**272**	**E 5**	**C 4**	**30**
Total number of hours per week					**27**								**27**							

4th Year

3	*Construction and Calculus of Automotive Vehicles - II*	DS	DI	CCA2	2		1	1	69	E	5								
4	*(O1) Automotive Fault Diagnosis*	DS	DO	DIAG	2		1	1	44	E	4								
	(O1) Structure and Management of Service Stations	DS	DO	ORAU															
5	*(O2) Vehicles Testing*	DS	DO	INCA	2		2		44	E	4								
	(O2) Road Vehicle Homologation	DS	DO	OMAU															
6	*Management*	DS	DO	Manag															
7	*(O4) Automotive sensorics and control systems*	DC/ DD	DO	SSCAut	1	1			22	C	2								
	(O4) History of Science and Technique	DC/ DD	DO	IST															
8	*Automotive Electric and Electronic Systems*	DS	DI	SEEA								2		2		35	E	3	
9	*Road Traffic Management*	DS	DI	TRAF								2		1	1	35	E	3	
10	*Manufacturing and Assembling Technologies for Automotive Vehicles*	DS	DI	TFA								2		1	1	35	C	3	
11	*(O5) Fuels*	DS	DO	COMB								2		2		35	E	3	
	(O5) Working Fluids for Motor Vehicles	DS	DO	FLA															
12	*(O6) Autovehicule speciale*	DS	DO	As								2		1	1	35	E	3	
	(O6) Tractors	DS	DO	TRA															
13	*(O7) Hybrid and Electric Vehicles*	DS	DO	AH								2		2		35	E	3	
	(O7) Components for Electric Vehicles	DS	DO	CEE															
14	*(O8) Traffic Accident Reconstruction*	DS	DO	RECA								2		1		20	C	2	
	(O8) Life Cycle Analysis of Vehicle Components	DS	DO	ACVA															
15	*Diploma Project Elaboration*	DS	DI	EPD										4		69	C	5	
16	*Practical Placement for Diploma Project Elaboration*	DS	DI	PPD								60 h / sem. (4.285 h / week)					C	5	
Total					**11**	**1**	**6**	**4**	**303**	**E** 5	**C** 1	**25**	**14**	**0**	**14**	**3**	**299**	**E** 5	**C** 4	**30**
Total number of hours per week					**22**								**31**							