

„Aurel Vlaicu“ University of Arad

Faculty of Engineering

Department: Automation, Industrial Engineering, Textile and Transportation

Study area: Automotive Engineering

Bachelor Study Programme: Automotive Engineering

Form of education: Full-time learning - 4 years

STUDY COURSES WITH RESPECT TO THE ACADEMIC YEARS
valid throughout the academic year 2018-2019
2nd YEAR

Course code	Course	Course type	Indiv. study/ Sem (h)	Weekly learning hours and evaluation type													
				1 st Semester 14 weeks						1 st Semester 14 weeks							
				C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
	OFFICIALLY COMPULSORY																
CIEF3O01	Special mathematics	DF	63	2	2			E	6								
CIEF3O07	Technical Drawing and Infographics 3	DF	30			3		C	3								
CIED3O05	Strenght of materials 1	DD	38	2	1	1		E	5								
CIED3O02	Mechanics 2	DD	21	3	2	1		E	6								
CIED3O03	Mechanisms	DD	27	2	1			E	4								
CIED3O04	Tolerances and Dimensional Control	DD	52	2		1		E	5								
CIEC3O14	Physical training and sport 3	DC	19		2			C A/R	2								
CIEF4O08	Technical Drawing and Infographics 4	DF	5									3			C		2
CIED4O06	Strenght of materials 2	DD	38							2	1	1			E		5
CIED4O09	Termotechnics	DD	0							3	1				E		4
CIED4O10	Fluid mechanics	DD	2							2		1			C		3
CIED4O11	Mechanical vibrations	DD	13							2		2			E		4
CIED4O12	Hydraulic and pneumatic actions	DD	27							2		1			E		4
CIED4O13	Electrotechnics	DD	0							2		2			E		3
CIED4O15	Domain practical placement	DD	97											90	C		4
	TOTAL OFFICIALLY COMPULSORY			11	8	6			29+2	13	2	10					29
	OPTIONAL COMPULSORY			C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
CIEC3A16	Foreign Language 3 (English)	DC	8		1			C	1								
CIEC3A17	Foreign Language 3 (French)	DC															
CIEC3A18	Foreign Language 3 (German)	DC															
CIEC4A19	Foreign Language 4 (English)	DC	8								1				C		1
CIEC4A20	Foreign Language 4 (French)	DC															
CIEC4A21	Foreign Language 4 (German)	DC															
	TOTAL S1/S2 (Opt. Compulsory)				1				1		1						1
	TOTAL An I (Opt. Compulsory)																
	TOTAL COMPULSORY S1/S2			11	9	6			30+2	13	3	10					30
	TOTAL COMPULSORY								K30+2								K30
	TOTAL COMPULSORY DISCIPLINES 1st year																
	FACULTATIVE			C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
CIEC3F23	Foreign Language	DC	19		2			C	2								
CIEC3F24	Pedagogy II	DC	66	2	2			E	5								
CIEC3F25	Sport	DC	19		2			C	2								
CIEF3F22	Numerical methods	DF	5	1	2			C	2								
CIEC4F27	Legislation and certification	DC	19							2					C		2
CIEC4F28	Foreign Language	DC	19								2				C		2
CIEC4F29	Speciality didactics	DC	66							2	2				E		5
CIEC3F30	Sport	DC	19		2			C	2								
CIEF4F26	Numerical methods	DF	5							1	2				C		2
	TOTAL Facultative			3	10				13	5	6						11

Legend: C – course; S – seminar; L – laboratory; P – project; SI – individual study; Ev – evaluation type; K – ECTS (credits);
 DF –fundamental discipline; DD –domain discipline; DS – speciality discipline; DC – complementar discipline.

RECTOR

Prof. Univ. Dr. Ramona LILE

DEAN

Conf. Dr. Ing. Dan Ovidiu GLĂVAN

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Prof. Dr. Ing. Gheorghe SIMA

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STUDY COURSES WITH RESPECT TO THE ACADEMIC YEARS
valid throughout the academic year 2018-2019
3rd YEAR

Course code	Course	Course type	Indiv. study/ Sem (h)	Weekly learning hours and evaluation type													
				1 st Semester 14 weeks						1 st Semester 14 weeks							
				C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
	OFFICIALLY COMPULSORY																
CIED5O01	Machinery devices 1	DD	13	2		2		E	4								
CIED5O03	Applied electronics	DD	30	2		1		E	3								
CIED5O04	Basics of automated systems	DD	30	2		1		E	3								
CIED5O06	Machines and electrical actuators	DD	30	2		1		E	3								
CIED5O07	Finite element method	DD	30	1		1		C	3								
CIED5O08	Fundamentals of Vehicle Engineering	DD	83	2		1		E	5								
CIES5O11	Industrial automotive manufacturing	DS	30	2		1		E	3								
CIES5O13	Automotive reliability	DS	44	1		1		C	3								
CIED6O02	Machinery devices 2	DD	66							2			2	E	5		
CIES6O05	Transportation systems	DS	41							3		1		E	4		
CIED6O09	Vehicles dynamics 1	DD	41							2			2	E	4		
CIES6O10	Internal combustion engines processes and operating characteristics	DS	52							2		2	1	E	5		
CIES6O12	Automotive systems – Calculus and construction 1	DS	52							3		1	1	E	5		
CIES6O14	Practical placement 2	DS	72										30	C	3		
	TOTAL OFFICIALLY COMPULSORY			15		9			27	11		4	6		26		
	OPTIONAL COMPULSORY			C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
CIED5A19	Plant organising	DD	30	2	1			C	3								
CIED5A28	Quality engineering	DD															
CIEC6A17	Labour and social security law	DC								2				E	2		
CIEC6A30	Law and international legislation	DC															
CIED6A15	Management	DD	19							1	1			C	2		
CIED6A29	Marketing	DD															
	TOTAL SI/S2 (Opt. Compulsory)			2	1				3	3	1				4		
	TOTAL An I (Opt. Compulsory)			5C + 2S						1E + 2C						7K	
	TOTAL COMPULSORY SI/S2			17	1	9			30	14	1	4	6		30		
	TOTAL COMPULSORY			27						K30	25						K30
	TOTAL COMPULSORY DISCIPLINES 1st year			31C + 2S + 13L+6Pr						12E + 5C						K60	
	FACULTATIVE			C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
CIEC5F21	Method of calculation in mechanical engineering	DC	30	1		2		C	3								
CIEC5F23	Economical diagnosis	DC	30	2	1			C	3								
CIEC5F25	Teaching practice	DC	80	0	3			C	5								
CIEC6F22	European administration	DC	19							2				C	2		
CIEC6F26	Teachnig practice	DC	80								3			C	5		
CIEC6F27	Final evaluation – Didactic portofolio	DC	108								1			E	5		
	TOTAL Facultative			3	4	2			11	2	4				12		

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STUDY COURSES WITH RESPECT TO THE ACADEMIC YEARS
valid throughout the academic year 2018-2019
4th YEAR

Course code	Course	Course type	Indiv. study/ Sem (h)	Weekly learning hours and evaluation type													
				1 st Semester 14 weeks						1 st Semester 14 weeks							
				C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
	OBLIGATORII IMPUSE																
CIED7O01	Vehicles dynamics 2	DD	33	2			1	E	3								
CIES7O02	Automotive systems – Calculus and construction 2	DS	44	2		1	1	E	4								
CIES7O03	Automotive engine systems – Calculus and construction	DS	55	2		1	2	E	5								
CIES7O04	Braking, steering and suspension systems	DS	58	2		1		C	4								
CIES7O05	Automotive electric and electronic systems	DS	83	2		1		E	5								
CIES7O06	Automotive repairing	DS	69	2		1	1	E	5								
CIES8O07	Automotive terotechnics	DS	8							2		1		E		2	
CIES8O08	Auxiliary automotive systems – Calculus and construction	DS	19							2			2	E		3	
CIES8O09	Unconventional propulsion systems	DS	8							2		1		C		2	
CIES8O10	Computer aided design	DS	22									2		C		2	
CIES8O11	Vehicle testing	DS	33							2		1		C		3	
CIES8O12	Diploma project develop	DS	180										5			10	
CIED8O13	Practice for diploma project	DS	15										60	C		3	
	TOTAL OFFICIALLY COMPULSORY			12		5	5		26	8		5	7			25	
	OPTIONAL COMPULSORY			C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
CIES7A14	Automatic transmissions and automotive powertrains	DS	44	2		2		E	4								
CIES7A20	Diagnose technics and equipments	DS															
CIES8A16	Automotive fuel economy	DS	33							2		1		E		3	
CIES8A21	Planetary gear transmissions	DS															
CIES8A18	Welding and assembling of thin sheets	DS	8							2		1		C		2	
CIES8A22	Pollution control	DS															
	TOTAL S1/S2 (Opt. Compulsory)			2		2			4	4		2				4	
	TOTAL An I (Opt. Compulsory)			6C + 4L							2E + 1C						8K
	TOTAL COMPULSORY S1/S2			14		7	5		30	12		7	7			30	
	TOTAL COMPULSORY			26						K30	26						K30
	TOTAL COMPULSORY DISCIPLINES 1st year			26C + 14L + 12Pr							9E + 6C						K60
	FACULTATIVE			C	S	L	Pr	Ev	K	C	S	L	Pr	Ev	K		
CIEC7F18	Calculation methods in mechanical engineering	DC	33	1		2		C	3								
CIEC7F20	Economic diagnosis	DC	33	2	1			C	3								
CIEC8F19	European administration	DC	22							2				C		2	
	TOTAL Facultative			3	1	2			6	2						2	
	Diploma exam passing													E		10	

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