

DISCIPLINE FILE

English Language

1. Program information

1.1	Higher education institution	University of Pitesti
1.2	Faculty	Mechanics and Technology
1.3	Department	Automobiles and Transport
1.4	Field of studies	Automotive Engineering
1.5	Cycle of studies	Master
1.6	Program of study / Qualification	Automotive Engineering for Sustainable Mobility

2. Discipline information

2.1	Name of discipline					English Language					
2.2	Teacher of the course activities										
2.3	Teacher of the seminar activities					Ungureanu Cristina					
2.4	Year of the studies	I	2.5	Semester	I	2.6	Type of evaluation	V	2.7	The discipline regime	O

3. Estimated total time

3.1	Number of hours per week	2	3.2	from which course	-	3.3	seminar	2
3.4	Total hours of the Academic Syllabus	28	3.5	from which course	-	3.6	seminar	28
Distribution of the time allocated to the individual study								hours
Study by handbook, course support, bibliography and notes								30
Additional documentation in the library, on specialized electronic platforms and in the field								30
Preparation of seminars / laboratories, topics, reports, portfolios, essays								40
Tutorial								4
Examinations								4
Other activities								
3.7	Total hours of individual study	22						
3.8	Total hours per semester ²	50						
3.9	Number of credits allocated to the discipline	2						

4. Preconditions (where applicable)

4.1	Curriculum	Not applicable
4.2	Skills	Level of linguistic competence B1 according to the Common European Framework of Reference for Languages.

5. Conditions (where applicable)

5.1	for the course	Classroom equipped with board, video projector, projection screen, computer
5.2	For the seminar	Classroom equipped with board, video projector, projection screen, computer

6. Specific skills acquired

Professional skills	<ul style="list-style-type: none"> - To acquire the necessary competence to communicate, orally or in writing, in different professional or socio-cultural contexts, through messages with medium complexity; - To develop individual learning strategies in order to improve their linguistic competence, including multilingual one, according to their specific needs, through teamwork or autonomy; - To identify and use the language tools essential to the profession they are prepared for through the study program followed; - To deepen their fundamental notions about British and European civilization -To raise awareness of the cultural differences reflected in the language and their impact on professional interactions.
transversal skills	Through the level of language acquired at the end of the course, the student is able to understand the main ideas of complex texts on concrete and abstract topics, including technical discussions. He is able to communicate with a certain degree of spontaneity and fluency specific to a native speaker. He can act and carry out professional tasks, in its specialized environment, based on linguistic communication. He can use language effectively in social, professional or academic life.

7. Objectives of the discipline

7.1 The main objective of the discipline	The general objective of the discipline is to deepen the main notions of thermodynamics and their application in concrete cases concerning the theoretical and practical study of thermal machines.
7.2 Specific objectives	<ul style="list-style-type: none"> - To deepen and apply the theory of thermodynamics by applying the basic equations of the gas and vapor flow, the calculation of the different types of nozzles, the calculation of the gas flow parameters under different conditions; calculation of the boundary layer parameters; - Deepening the theory of heat transfer with applications in the thermal management of internal combustion engines; - Deepening the theory of energy conversion. Practical applications for automobiles. Rankine Cycle. Seebeck Effect. Peltier Effect

8. Contents

8.2. Seminar	No.	Teaching	Remarks
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		hours	methods	Resources used
1	Mathematics for Engineers: Review of Fundamental Concepts	2	- Lecture	board, sketches, tables, graphs, sheets, photos, models, video projector, computer, internet
2	Basic Concepts of Mechanics	4	- Exposure with support material	
3	Sustainable Mobility. Environmental Awareness	4	- Explication	
4	Materials Technology	2	- Description and exemplification	
5	Mid-Term Evaluation	2	- The heuristic conversation	
6	Energy Conversion and Storage in Transport	2	- Debate	
7	Vehicle Energy and Fuel Consumption	4	- State the problem	
8	Performance and Technical Specifications	2	-Exercise	
9	Active and Passive Safety Features. Car Recalls	2		
10	The Design Process. Expanding the Product Range Evaluation	2 2		
TOTAL Hours		28		

Minimal bibliography:

Schmitt, Diane, Schmitt, Norbert, *Focus on Vocabulary 2*, Pearson, 2011
 Ibbotson, Mark, *Cambridge English for Engineering*, Cambridge, 2011
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 Glendinning, Eric and Norman Glendinning, *Oxford English for Electrical and Mechanical Engineering*, Oxford University Press, 2008.
 Ibbotson, Mark, *Professional English in Use Engineering with Answers: Technical English for Professionals*, Cambridge University Press, 2009.

9. Corroboration the contents of the discipline with the expectations of the epistemic community representatives, professional associations and employers in the field related to the program

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10. Evaluation

Activity type	10.1 Evaluation Criteria	10.2 Evaluation methods	10.3 Percentage of the final grade
10.4 Course			
10.5 Seminar	Involvement in activity throughout the semester	Questions / answers. Individual discussions	30%
	Periodical assesement		30%
10.6. Homework	Correct resolution. Quality of presentation	Oral presentation. Individual discussions	30%
10.6 Minimum standard of performance	- Determining the type of gas flow in a pipeline - Designing / checking a nozzle - Evaluation of pressure losses in a pipe		

Date completed
17.09.2019

Course teaching

Seminar teaching
Assoc. Prof. Cristina Ungureanu

Date of approval in the Department Council,
18.09.2019

Head of department,
(supplier)
Assoc. Prof. Laura Cîțu

Head of department DAT,
Adrian CLENCI, prof. dr. ing.

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8. Contents

8.2. Seminar		No. hours	Teaching methods	Remarks Resources used
1	Prospects for a Sustainable Aluminium Industry	2	<i>- Lecture</i> <i>- Exposure with support material</i> <i>- Explication</i> <i>- Description and exemplification</i> <i>- The heuristic conversation</i> <i>- Debate</i> <i>- State the problem</i> <i>-Exercise</i>	<i>board, sketches, tables, graphs, sheets, photos, models, video projector, computer, internet</i>
2	Waste Reduction in Materials Manufacturing	2		
3	Environmentally Conscious Materials and Chemical Processing	2		
4	The Four Cycles of an Engine. Air and Fuel	2		
5	Outputs (Fuel Injectors, Fuel Pump)	2		
6	Mid-Term Evaluation	2		
7	Ignition (Burn Rate)	2		
8	Automatic Transmissions	2		
9	IC (International Combustion)-Engine-Based Propulsion Systems	2		
10	Electric and Hybrid-Electric Propulsion Systems	2		
11	Renewable Energies for Powering Fuel Cell Vehicles	2		
12	Manual and Automatic Transmission	2		
13	Cars of the Future: Developments in Chassis, Drivetrains and Body Engineering	2		
14	Introduction to Mechatronics and Measurement Systems	2		
TOTAL Hours		28		

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