SYLLABUS [1]

THIS COURSE UNIT IS TAUGHT IN ROMANIAN LANGUAGE

1. Information about the program

1.1 Higher education institution	Politehnica University of Timișoara
1.2 Faculty[2] / Department[3]	Mechanics/Mechatronics
1.3 Chair	—
1.4 Field of study (name/code[4])	Mechatronics and Robotics
1.5 Study cycle	Master
1.6 Study program (name/code/qualification)	Quality Engineering in Mechatronics and Robotics

2. Information about discipline

2.1 Name of discipline/The educational classe[5]			Integrated Quality Management				
2.2 Coordinator (holder) of course activities			Liana-Maria DEHELEAN, PhD, BEng Senior Lecturer				
2.3 Coordinator (holder) of applied activities[6]			Liana-Maria DEHELEAN, PhD, BEng Senior Lecturer				
2.4 Year of study[7]	2	**2.5** Semester	3	**2.6** Type of evaluation	E	**2.7** Type of discipline[8]	DS

3. **Total estimated time** (direct activities (fully assisted), partially assisted activities and unassisted activities[9])

3.1 Number of hours fully assisted/week	4 ,of which:	**3.2** course	2	**3.3** seminar/laboratory/project			0/2/0
3.1* Total number of hours fully assisted/sem.	56 ,of which:	**3.2*** course	28	**3.3*** seminar/laboratory/project			28
3.4 Number of hours partially assisted/week	,of which:	**3.5** project, research		**3.6** training		**3.7** hours designing M.A. dizertation	
3.4* Number of hours pasrtially assisted/ semester	,of which:	**3.5*** project of research		**3.6*** training		**3.7*** hours designing M.A. dizertation	
3.8 Number of hours of unassisted activities/ week	4,5 ,of which:	Additional documentation in the library, on specialized electronic platforms, and on the field					2
		Study using a manual, course materials, bibliography and lecture notes					1,5
		Preparation of seminars/ laboratories, homework, assignments, portfolios, and essays					1
3.8* Total number of hours of unasssited asctivities/ semester	63 ,of which:	Additional documentation in the library, on specialized electronic platforms, and on the field					28
		Study using a manual, course materials, bibliography and lecture notes					21
		Preparation of seminars/ laboratories, homework, assignments, portfolios, and essays					14
3.9 Total hrs./week[10]	8,5						
3.9* Total hrs./semester	119						
3.10 No. of credits	7						

4. **Prerequisites** (where applicable)

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[1] The form corresponds to the Syllabus promoted by OMECTS 5703/18.12.2011 (Annex 3), updated based on the Specific Standards ARACIS of December 2016.
[2] The name of the faculty which manages the educational curriculum to which the discipline belongs
[3] The name of the department entrusted with the discipline, and to which the course coordinator/holder belongs.
[4] Fill in the code provided in HG no. 376/18.05.2016 or in HG similars annually updated.
[5] The educational classes of disciplines (ARACIS – specific standards, art./paragraph 4.1.2.a) are: fundamental disciplines, field disciplines, majoring/specialization disciplines.
[6] The applied activities refer to: seminar (S) / laboratory (L) / project (P) / practice/training (Pr).
[7] The year of study to which the discipline is provided in the curriculum .
[8] The types of disciplines (ARACIS – specific standards, art./paragraph 4.1.2.a) are: extended knowledge discipline / advanced knowledge discipline and synthetic discipline (DA / DCAV and DS) or art./paragraph 4.1.2 b) complementary discipline (DC)).
[9] Within UPT, the number of hours from 3.1*, 3.2*,…,3.9* are obtained by multipling by 14 (weeks) the number of hours from 3.1, 3.2,…, 3.9.
[10] The total number of hours/week is obtained by summing up the number of hours from 3.1, 3.4 şi 3.8.

4.1 Curriculum	• Mathematical Statistics
4.2 Competencies	• Computer skills - the Microsoft Office suite

5. Conditions (where applicable)

5.1 of the course	• Classroom with blackboard and video projector
5.2 to conduct practical activities	• Application room with computer network - with software installed individually on all workstations

6. Specific competencies acquired through this discipline

Specific competencies	• Deepening the tools necessary for integrated quality management in order to apply in real situations • Acquisition of scientific research skills in the field of quality
Professional competencies ascribed to the specific competencies	• CP2. Capabilities in the field of quality management • CP3. Capabilities in analyzing and testing the performance of mechatronic systems
Transversal competencies ascribed to the specific competencies	• CT2. Fulfilling the professional tasks with the exact identification of the objectives to be achieved, the available resources, the conditions for their completion, the work stages, the working time and the related deadlines

7. Objectives of the discipline (based on the grid of specific competemcies acquired)

7.1 The general objective of the discipline	• The discipline aims to familiarize with the tools needed for integrated quality management in order to apply in real situations
7.2 Specific objectives	• Knowledge of methods and means of data processing to achieve integrated quality management

8. Content

8.1 Course	Number of hours	Teaching methods
Introduction	2	Classics - on the board with explanations Modern - presentation with explanations with electronic material
Marketing and Market Research	4	
Product Design and Development	2	
Technology Design and Development	2	
The Supply	2	
The Production Process	2	
The Packing	2	
Sales and Distribution	2	
Assembly and Operation. Technical Assistence and Maintenance	2	
Disposal and Recycling	2	
Integrated Quality Management	6	

Bibliography[11] 1. Andrașiu, M., ș.a. – Metode de Decizii Multicriteriale, Editura Tehnică, București, 2007.
2. Rumșiski, L.Z. – Prelucrarea matematică a datelor experimentale, Editura Tehnică, București, 2009.
3. Olaru, Marieta – Managementul calităţii, Editura Economică, Bucureşti, 1999.
4. Oprean, Constantin – Managementul calităţii, Editura ULB, Sibiu, 2002.
5. Rusu, Costache, s.a. – Bazele managementului calităţii, Editura Dacia, Cluj-Napoca, 2002

8.2 Applied activities[12]	Number of hours	Teaching methods
Marketing research. Product sales forecast	8	Classics - on the board with explanations Modern - presentation with explanations with electronic material Practical - on the computer network
The theme of the laboratory works follows the main chapters of the course	20	

Bibliography[13] 1. Andrașiu, M., ș.a. – Metode de Decizii Multicriteriale, Editura Tehnică, București, 2007.
2. Rumșiski, L.Z. – Prelucrarea matematică a datelor experimentale, Editura Tehnică, București, 2009.

9. Coroboration of the content of the discipline with the expectations of the main representatives of the epistemic community, professional associations and employers in the field afferent to the program

- Through contacts with companies, the content of the discipline was discussed and agreed

10. Evaluation

Type of activity	**10.1** Evaluation criteria[14]	**10.2** Evaluation methods	**10.3** Share of the final grade
10.4 Course	Learning the principles of integrated quality management. Ability to assimilate theoretical knowledge in the field of course topics	Written exam containing 5 topics from the course syllabus and practical applications	60%
10.5 Applied activities	**S:**		
	L: Ability to do marketing research and forecast sales of technical products	Practical work containing the analysis of a product with field documentation and the 3-year sales forecast.	40%

[11] At least one title must belong to the department staff teaching the discipline, and at least one title must refer to a relevant work for the discipline, a national and international work that can be found in the UPT Library.
[12] The types of applied activities are those mentioned in 5. If the discipline containes more types of applied activities then they are marked, consecutively, in the table below. The type of activity will be marked distinctively under the form: „Seminar:", „Laboratory:", „Project:" and/or „Practice/Training:".
[13] At least one title must belong to the staff teaching the discipline.
[14] The Syllabus must contain the evaluation method of the discipline, specifying the criteria, the metods and the forms of evaluation, as well as mentioning the share attached to these within the final mark. The evaluation criteria must correspond to all activities stipulated in the curriculum (course, seminar, laboratory, project), as well as to the methods of continuous assessment (homework, essays etc.)

	Ability to analyze and understand catalog data on various technical products	Enunciation of a new research-design topic	
	P:		
	Pr:		
	Tc-R[15]:		
10.6 Minimum performance standard (minimum amount of knowledge necessary to pass the discipline and the way in which this knowledge is verified[16]			
• Evaluation note of the practical activities minimum 5 (five); • Minimum Exam Grade 5 (five)			

Date of completion 01.12.2020	**Course coordinator (signature)**	**Coordinator of applied activities (signature)**
Head of Department (signature)	**Date of approval in the Faculty Council [17]**	**Dean (signature)**

[15] Tc-R= Homework-Reports
[16] For this point turn to "Ghid de completare a Fișei disciplinei" found at: http://univagora.ro/m/filer_public/2012/10/21/ghid_de_completare_fisa_disciplinei.pdf
[17] The approval is preceeded by discussing the study program's board's point of view with redgards to the syllabus.