SYLLABUS [1]

THIS COURSE UNIT IS TAUGHT IN ROMANIAN LANGUAGE

1. Information about the program

1.1 Higher education institution	Politehnica University Timisoara
1.2 Faculty[2] / Department[3]	Management in Production and Transportation / Management
1.3 Chair	—
1.4 Field of study (name/code[4])	Engineering and Management / 207010
1.5 Study cycle	Master
1.6 Study program (name/code/qualification)	Entrepreneurial management in business administration

2. Information about discipline

2.1 Name of discipline/The educational classe[5]	Quality Management / field discipline						
2.2 Coordinator (holder) of course activities	Assoc. Prof. Adrian Pavel Pugna, PhD. Eng.						
2.3 Coordinator (holder) of applied activities[6]	Assoc. Prof. Adrian Pavel Pugna, PhD. Eng.						
2.4 Year of study[7]	2	**2.5** Semester	3	**2.6** Type of evaluation	E	**2.7** Type of discipline[8]	DA

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

3.1 Number of hours fully assisted/week	3 ,of which:	**3.2** course	2	**3.3** seminar/laboratory/project			1
3.1* Total number of hours fully assisted/sem.	42 ,of which:	**3.2*** course	28	**3.3*** seminar/laboratory/project			14
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	3.5 ,of which:	Additional documentation in the library, on specialized electronic platforms, and on the field					1.5
		Study using a manual, course materials, bibliography and lecture notes					1
		Preparation of seminars/ laboratories, homework, assignments, portfolios, and essays					1
3.8* Total number of hours of unasssited asctivities/ semester	49 ,of which:	Additional documentation in the library, on specialized electronic platforms, and on the field					21
		Study using a manual, course materials, bibliography and lecture notes					14
		Preparation of seminars/ laboratories, homework, assignments, portfolios, and essays					14
3.9 Total hrs./week[10]	7.5						
3.9* Total hrs./semester	91						
3.10 No. of credits	7						

4. Prerequisites (where applicable)

4.1 Curriculum	• Quality Engineering, Mathematical Statistics
4.2 Competencies	•

[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.

5. **Conditions** (where applicable)

5.1 of the course	• Room with video projector / On-line class
5.2 to conduct practical activities	• Seminar materials, projector room,on-line, blackboard, laptop

6. **Specific competencies** acquired through this discipline

Specific competencies	• Ability to select, combine and use appropriately knowledge, skills, values and attitudes, in order to successfully solve specific work or learning situations of the study program. • The capacity for professional and personal development in conditions of effectiveness and efficiency, in terms of responsibility and autonomy of action of the student.
Professional competencies ascribed to the specific competencies	•
Transversal competencies ascribed to the specific competencies	•

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

7.1 The general objective of the discipline	• The acquisition by master students of concepts, tools, methods and models specific to the discipline of Quality Management, to develop / cultivate master skills professional skills (knowledge and skills, as well as a behavior determined by new values and attitudes imposed by the modern specifics of Quality Management .
7.2 Specific objectives	• Ability and ability to know and understand the approaches of Quality Management and Quality Management Systems • Developing the skills to manage concrete situations from the point of view of Quality Management

8. **Content**

8.1 Course	Number of hours	Teaching methods
The concept of quality. Definitions, quality functions, absolute technical level, quality gurus..	2	Presentation, lecture, explanation, modeling accompanied by visual and auditory technical means
2. Statistical quality tools .; graphical presentation of data, histogram, scatter plot (correlation), stratification analysis, Ishikawa chart, Pareto chart, control sheets.	8	
3.Tools used in quality management and strategy. Tools for identifying problems through data processing	6	
4. Tools for identifying and analyzing causes. Affinity diagram, tree diagram, matrix diagram, 5 Whys questionnaires, priority grid, effectiveness / efficiency grid	6	
5.Quality tools used in processes. VOC, Kano Model, QFD, FMEA	6	

Bibliography[11]

1. Olaru M., Isaic-Maniu Al., Et al., (2000). Techniques and tools used in management quality. Bucharest: Economic Publishing House.
2.Oprean, C., Kifor, C. V., & Suciu, O., (2005). Integrated quality management. Sibiu: Ed. Of the "Lucian Blaga" University of Sibiu.
3. Pruteanu, O., etc., (1998) Total Quality Management. Iaşi: Junimea Publishing House.
4. Pugna, A. P., (2003). Mathematical Methods of Quality Analysis, Part I. Timisoara: Solness Publishing House.
5. Pugna, A. P., Potra, S., (2015). Quality Control and Assurance. Writing Guide a Quality Documents. Timisoara: Solness Publishing House.
6. Pyzdek, T., Keller,. (2013) .The Handbook for Quality Management A Complete Guide to Operational Excellence 2nd ed. New York: Mc.Graw-Hill, Inc.
7. Teodoru, T., (1995). Quality assurance. Bucharest: Tribuna Economică Publishing House
8. Pugna, A.P., (2017) - Engineering and Quality Management - http://www.mpt.upt.ro/resurse-utile/cursuri-si-seminarii.html.
9. Pugna, A.P., (2017) - Optimizations in Engineering and Quality Management. Six Sigma - http://www.mpt.upt.ro/resurse-utile/cursuri-si-seminarii.html.

8.2 Applied activities[12]	Number of hours	Teaching methods
The master students, grouped in teams of two, carry out a case study during the semester according to an established initial schedule. The projects will be supported in front of colleagues, using the presentation in the PPT. After the presentation, the case study will be discussed at the time of the case study..	14	Presentation of case studies, in front of colleagues, in PPT. following the discussions based on the presentation made

Bibliography[13]

1. Olaru M., Isaic-Maniu Al., Et al., (2000). Techniques and tools used in management quality. Bucharest: Economic Publishing House.
2.Oprean, C., Kifor, C. V., & Suciu, O., (2005). Integrated quality management. Sibiu: Ed. Of the "Lucian Blaga" University of Sibiu.
3. Pruteanu, O., etc., (1998) Total Quality Management. Iaşi: Junimea Publishing House.
4. Pugna, A. P., (2003). Mathematical Methods of Quality Analysis, Part I. Timisoara: Solness Publishing House.
5. Pugna, A. P., Potra, S., (2015). Quality Control and Assurance. Writing Guide a Quality Documents. Timisoara: Solness Publishing House.
6. Pyzdek, T., Keller,. (2013) .The Handbook for Quality Management A Complete Guide to Operational Excellence 2nd ed. New York: Mc.Graw-Hill, Inc.
7. Teodoru, T., (1995). Quality assurance. Bucharest: Tribuna Economică Publishing House
8. Pugna, A.P., (2017) - Engineering and Quality Management - http://www.mpt.upt.ro/resurse-utile/cursuri-si-seminarii.html.

[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.

9. Pugna, A.P., (2017) - Optimizations in Engineering and Quality Management. Six Sigma - http://www.mpt.upt.ro/resurse-utile/cursuri-si-seminarii.html.

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

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10. Evaluation

Type of activity	**10.1** Evaluation criteria[14]	**10.2** Evaluation methods	**10.3** Share of the final grade
10.4 Course	Knowledge of concepts, tools, methods and models specific to Quality Management	Exam	0.60
10.5 Applied activities	**S:**		
	L:		
	P: Application of concepts, tools, methods and models specific to Quality Management	Case study presentation and answers to questions	0.40
	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]			
• Use and correct expression of defined notions and concepts. Solving and explaining problems of medium complexity. Performing specific applications and tasks, interpreting results of medium complexity, active participation in teamwork. Minimum grade 5 in the exam, respectively promotion of the project with the minimum passing grade 5			

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

[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.)
[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.