## SYLLABUS<sup>1</sup>

#### 1. Information about the program

1.1 Higher education institution	Politehnica University of Timisoara
1.2 Faculty <sup>2</sup> / Department <sup>3</sup>	Faculty of Electronics and Telecommunications Engineering / Department of Management
1.3 Chair	_
1.4 Field of study (name/code <sup>4</sup> )	Electronics and Telecommunications Engineering / 100
1.5 Study cycle	Bachelor
1.6 Study program (name/code)/Qualification	(Telecommunications Technologies and Systems / 020) / L20202010020

#### 2. Information about the discipline

2.1 Name of disciplin	е		Microeconomics				
2.2 Coordinator (hold	der) of	course activities	Prof. Anca DRAGHICI				
2.3 Coordinator (hold	der) of a	applied activities 5	Prof.	. Anca DRAGHICI			
2.4 Year of study <sup>6</sup>	2	2.5 Semester	2	2.6 Type of evaluation	D	2.7 Type of discipline	Obligatory

## 3. Total estimated time (hours / semester of didactic activities)

3.1 No. of hrs. / week	3 , of which:	3.2 course	2	3.3 seminar/laboratory/ project/training	1
3.4 Total no. of hrs. in the education curricula	42 , of which:	3.5 course	28	3.6 applied activities	14
3.7 Distribution of time for individual acti	vities related to the dis	cipline	America de la companya della companya della companya de la companya de la companya della company		hrs.
Study using a manual, course materials,	bibliography and lectu	re notes			10
Additional documentation in the library, on specialized electronic platforms and on the field					
Preparation for seminars / laboratories, homeworks, assignments, portfolios, and essays					10
Tutoring					
Examinations					
Other activities					
Total hrs. of individual activities					48
3.8 Total hrs. / semester <sup>7</sup>	90				

# 3.9 No. of credits 4 ECTS

## 4. Prerequisites (where applicable)

4.1 Curriculum	
4.2 Competencies	•

<sup>&</sup>lt;sup>1</sup> The form corresponds to the Syllabus promoted by OMECTS 5703/18.12.2011 (Annex3).

The name of the faculty which manages the educational curriculum to which the discipline belongs.

The name of the department entrusted with the discipline, and to which the course coordinator / holder belongs.

<sup>&</sup>lt;sup>4</sup> Fill in the code provided in GD no. 493/17.07.2013.

<sup>&</sup>lt;sup>5</sup> The applied activities refer to: seminar (S) / laboratory (L) / project (P) / practice/training (Pr).

<sup>&</sup>lt;sup>6</sup> The year of study to which the discipline is provided in the curriculum.  $^{7}$  It is obtained by summing up the number of hrs. from 3.4 and 3.7.

## 5. Conditions (where applicable)

5.1 of the course	Amphitheatre, laptop and videoprojector
5.2 to conduct practical activities	Seminar room, laptop and videoprojector, whiteboard and pen

### 6. Specific competencies acquired

Professional competencies <sup>8</sup>	C3 Aplicarea cunostintelor, conceptelor si metodelor de baza privitoare la arhitectura sistemelor de calcul, microprocesoare, microcontrolere, limbaje si tehnici de programare (0.6 credit point of 4.0 ECTS)
	C4 Conceperea, implementarea si operarea serviciilor de date, voce, video, multimedia, bazate pe întelegerea si aplicarea notiunilor fundamentale din domeniul comunicatiilor si transmisiunii informatiei (1 credit point of 4.0 ECTS)
Transversal competencies	CT1 Analiza metodica a problemelor întâlnite în activitate, identificând elementele pentru care exista solutii consacrate, asigurând astfel îndeplinirea sarcinilor profesionale (0.8 credit point of 4.0 ECTS )
	CT2 Definirea activitatilor pe etape si repartizarea acestora subordonatilor cu explicarea completa a îndatoririlor, în functie de nivelurile ierarhice, asigurând schimbul eficient de informatii si comunicarea interumana (1.0 credit point of 4.0 ECTS)
	CT3 Adaptarea la noile tehnologii, dezvoltarea profesionala si personala, prin formare continua folosind surse de documentare tiparite, software specializat si resurse electronice în limba româna si, cel putin, într-o limba de circulatie international (0.6 credit point of 4 ECTS )

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

7.1 General objective of the discipline	• The Microeconomics classes aim to explain economic knowledge and show the utility and usefulness of the economic perspective (decision making process based on the economic indicators calculation) related to the specific circuits, systems, instrumentation and electronic technology; there is explained how productivity growth can take place in a company and the impact of costs reduction policies. Students will understand how pricing and market mechanisms work.		
7.2 Specific objectives	<ul> <li>Students of the technical profile will understand and know the fundamental concepts of microeconomics, that they will face in the future profession (as engineers), such as: production (labor, capital); cost; productivity; labor income (wages); capital income (profits, interest); competition; market structures; supply-demand etc.</li> <li>Course and applications aim to develop for students those cognitive (specific methods and economy) and professional skills/competencies (economic decision making to optimize results) in order to be potential entrepreneurs and/or investors.</li> </ul>		

#### 8. Content

8.1 Course	No. of hours	Teaching methods
Introduction to Microeconomics (Economics; Microeconomics;	3	PPT lecture
Macroeconomics (References for the course and seminars;		presentations,
evaluation/assessment explanations		discussions,
		explanations, examples,

<sup>&</sup>lt;sup>8</sup> The professional competencies and the transversal competencies will be treated according to the Methodology of OMECTS 5703/18.12.2011. The competencies listed in the National Register of Qualifications in Higher Education [Registrul National al Calification din Învățământul Superior RNCIS] (http://www.rncis.ro/portal/page? pageid=117,70218& dad=portal& schema=PORTAL) will be used for the field of study from 1.4 and the program of study from 1.6 of this form, involving the discipline.

		case studies
Utility of study; Normative & positive; Scarce resources; Market economy	3	PPT lecture presentations, discussions,
		explanations, examples, case studies
Firms definition and way of operation; Internal and external environment of companies; Entrepreneurship characteristics;	4	PPT lecture presentations, discussions, explanations, examples, case studies
Production factors; Production costs; Relation between costs and profit;  Breakeven point; Production factors productivity	4	PPT lecture presentations, discussions, explanations, examples, case studies
Supply and demand; Functions; Supply law; Supply elasticity	4	PPT lecture presentations, discussions, explanations, examples, case studies
Market and the competition; Market typology; Competition law and functions; Competition typology	4	PPT lecture presentations, discussions, explanations, examples, case studies
Price and market mechanism; Profit	3	PPT lecture presentations, discussions, explanations, examples, case studies
Wage and work productivity; Interest (definitions, indicators and factors of influence); Money (definition, typology and characteristics)	3	PPT lecture presentations, discussions, explanations, examples, case studies

Bibliography<sup>9</sup> A. Draghici (Foris), Economia Firmei, Ed. Editura OMNIA UNI SAST, Brasov, 2002; Duran V., Microeconomie, Ed. Eurostampa, Timisoara, 2003; Duran V., Economia si gestiune firmei, Ed. Eurostampa, Timisoara, 2005; Duran V., Economie. Teorie si practicu, (vol. I, II), Ed. Eurostampa, Timisoara, 2007; Dobran M., Bazele microeconomiei, Editura Eurostampa, Timinoara, 2008; Barglazan D., Microeconomie, Editura Eurostampa, Timişoara, 2007&2008

Taylor J. B., Principles of Microeconomics, Houghton Miffin, 1996; Byrns R. T., Microeconomics, Scott Foresman, 1989 Other open courses available each year (on Internet)

8.2 Applied activities <sup>10</sup>	No. of hours	Teaching methods
Economic indicators. Marginal analysis	2	Problem solving, presentation of case studies, debates
Capital indicators. Work productivity. Capital efficiency	2	Problem solving, presentation of case studies, debates
Production costs. Profit. Price perspective (company vs. market perspective). Supply and demand elasticity. Price elasticity.	2	Problem solving, presentation of case studies, debates
Homework essay presentation	4	Homework presentation (ppt), debates and analysis, peer-to-peer review

Bibliography 11 A. Draghici (Foris), Economia Firmei, Ed. Editura OMNIA UNI SAST, Brasov, 2002; Duran V., Microeconomie, Ed. Eurostampa, Timisoara, 2003; Duran V., Economia si gestiune firmei, Ed. Eurostampa, Timisoara, 2005; Duran V., Economie. Teorie si practică, (vol. I, II), Ed. Eurostampa, Timisoara, 2007; Dobran M., Bazele microeconomiei, Editura Eurostampa, Timisoara, 2008 Barglazan D., Microeconomie, Editura Eurostampa, Timisoara, 2007&2008

Taylor J. B., Principles of Microeconomics, Houghton Miffin, 1996; Byrns R. T., Microeconomics, Scott Foresman, 1989 Other open courses available each year (on Internet)

#### 9. Corroboration 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

- The course of Microeconomics is included in the engineering curricula of other universities as: MIT USA; Houston University; L'Ecole Polytechnique Paris; University of Glasgow; American University of Athens; L'Ecole Polytechnique du Lausanne, Singapore University of Technology and Design etc.
- The course content and its problematic is perfect aligned with the employees expectation because graduates will know the economic problems that are correlated with products/services manufacturing/delivery and technical systems exploitation.

<sup>9</sup> At least one title must belong to the department staff teaching the discipline, and at least 3 titles must refer to national and international works

relevant for the discipline, and which can be found in the Politehnica University Library.

10 The types of applied activities are those specified in footnote 5. If the discipline contains several types of applied activities, then these will be written consecutively in the lines of the table below. The type of activity will be written in a distinct line, as "Seminar:", "Laboratory:", "Project:"

and/or "Practice/Training:".

11 At least one title must belong to the staff teaching the discipline.

#### 10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share of the final grade
10.4 Course	8 questions regarding the theoretical aspects, issues presented and explain during the course classes	2 partial exams (distributed evaluation = 2 tests) in the week 6 and 11 of the semester.  Each exam has a duration of 1 hour	0.6
10.5 Applied activities	S: Problems homework and essay (including its ppt)	Problems homework assessment (conclusions and resoning) and homework essay evaluation	0.4
	L:		
	P;		
	Pre		

10.6 Minimum performance standard (minimum amount of knowledge necessary to pass the discipline and the way in which this knowledge is verified)

- Examination of theoretical issues granted with 5, minimum 4 questions solve COURSE
- Homework problems and essay done (granted with 5) SEMINAR

Date of completion  4 <sup>th</sup> of March, 2015	Course coordinator (signature)	Coordinator of applied activities (signature)
Head of Department (signature)	Date of approval in the Faculty Council <sup>12</sup>	Dean (signature)

<sup>&</sup>lt;sup>12</sup> Avizarea este precedată de discutarea punctului de vedere al board-ului de care aparţine programul de studiu cu privire la fişa disciplinei.