



SYLLABUS CONTENT

1. Program information

1.1	Higher Education Institution	Technical University of Cluj-Napoca
1.2	Faculty	Civil Engineering
1.3	Department	Civil Engineering and Management
1.4	Field of study	Civil Engineering
1.5	Cycle	Graduation
1.6	Study program/Qualification	Civil Engineering
1.7	Type of education	IF – învățământ cu frecvență
1.8	Syllabus code	38.00

2. Syllabus information

2.1	Syllabus name		Management and Administration of Construction Works (II)									
2.2	Subject area		Civil Engineering									
2.3	Course official		Assoc. Prof. Eng. PhD Livia Anastasiu									
2.4	Syllabus holder		Assoc. Prof. Eng. PhD Livia Anastasiu									
2.5	Year of study	III	2.6	Semester	I	2.7	Evaluation	Colloquium	2.8	Syllabus type	DOB	

3. Total estimated time

An/ Sem	Name of discipline	Nr. sapt.	Course			Applic.			Stud. Ind.	TOTAL	Credit			
			[hours/week]			[hours/week]								
				S	L	P		S				L	P	
III/1	Management and Administration of Construction Works (II)	14	1			2			14	28		62	104	4

3.1	Numar de ore pe saptamina	3	3.2	din care curs	1	3.3	aplicatii	2
3.4	Total ore din planul de inv.	42	3.5	din care curs	14	3.6	aplicatii	28
Studiul individual								Ore
Studiul dupa manual, suport de curs, bibliografie si notite								12
Documentarea suplimentara in biblioteca, pe platformele electronice si pe teren								24
Pregatire seminarii/laboratore, teme, referate, portofolii, eseuri								12
Tutoriat								12
Examinari								2
Alte activitati								-
3.7	Total ore studiul individual	62						
3.8	Total ore pe semestru	42						
3.9	Numar de credite	4						

4. Prerequisite (where it's necessary)

4.1	Curriculum	Passing the exam „Management and Administration of Construction Works (I)”
4.2	Competencies	Not necessary

5. Conditii (where it's necessary)

5.1	Course	Not necessary
5.2	Applications	Not necessary



6. Specific competencies

Professional competencies	Theoretical competencies (What he/she has to know)	<ul style="list-style-type: none"> - to understand the importance of project management in constructions; - to understand the importance of the methods and techniques in strategic planning; - to perform the methodology of calculation the duration of construction works; - to understand the techniques of optimization the schedule of the construction works; - to understand the methods for dimension the facilities of the site organization; - to know the techniques of developing a site organization project
	Acquired skills: (What he/she learned)	After studying the discipline, the students will be able: <ul style="list-style-type: none"> - to determine the unit price for an estimation; - to perform an estimation of the construction works; - to calculate the activities` durations; - to schedule the project using Microsoft Project; - to draw the Gantt chart; - to determine the critical path; - to perform a site organization project.
	Acquired abilities: (What instruments can handle)	After studying the discipline, the students will be able: <ul style="list-style-type: none"> - to make an estimation for a construction project; - to optimize the costs of the project; - to form optimum teams for the construction activities; - to use modern methods for construction planning; - to make a comparative analysis to optimize the duration of construction works; - to optimize the site organization project
Transversal competences		Completing and presenting a construction project with the calculations and site organization project.

7. Syllabus objectives (coming from the grid of acquired specific competences)

7.1	General objective	Developing the competencies regarding the planning of the construction works.
7.2	Specific objectives	Accomplishing theoretical knowledges concerning the strategic planning of construction works.

8. Content

8.1. Course (analytical syllabus)		Teaching methods	Observations
1	Project management in constructions	Interactive Projector	
2	Methods of works planning: Gantt, chain method, PERT		
3	Duration estimation for construction works		
4	Gantt chart method		
5	Critical path method		
6	Chain planning method		
7	Calculation of facilities and utilities for the site organization, design		



8.2. Applications (seminary/project)		Teaching methods	Observations
1	Estimation norms - presentation	Application	
2	Getting the estimation norms	Application	
3	Calculation of the unit price for an activity	Application	
4	Calculation the cost of material transport	Application	
5	Optimization of the costs for an activity	Application	
6	Presentation of INTELSOFT program	Application	
7	Final estimation of the project	Application	
8	Calculation for the number of workers	Application	
9	Optimization of teams	Application	
10	Calculation of the durations for the project activities	Application	
11	Presentation of Microsoft Project soft	Application	
12	Achieving the Gantt chart using Microsoft Project	Application	
13	Calculation of facilities for the site organization project	Application	
14	Achieving the drawings for the site organization project	Application	

Bibliography:

ANASTASIU L. – *Managementul lucrărilor de construcții (II)- Suport de curs*, Ed. UTPRES 2013
 ANASTASIU L. – *Managementul lucrărilor de construcții (II)- Îndrumător de laborator*, Ed. UTPRES 2013
 Andreica M., Stoica M., Luban F. – *Metode cantitative în management*, Ed. Economică, 1998
 Gavrilă T. – *Managementul general al firmei, studii de caz*, Ed. Economică, 2004
 Hossu T., Alexe, Blaga – *Managementul firmelor de constructii*, Casa cărții de știință, 2001
 Cole G. A. – *Management, Teorie și practică*, Ed. Știința, 2004
 Lessel W. – *Managementul proiectelor, Cum să planificăm eficient proiecte*, Ed. All, 2007

9. Corroborating the content of the syllabus with the expectations of the epistemic community representatives, professional associations and employers belonging to the program area

The acquired competences will serve the employees who will work in design or manufacturing companies in constructions (site or supply).

10. Evaluation

Type of activity	10.1	Evaluation criteria	10.2	Evaluation methods	10.3	Ratio on the final mark
Course		Solving 2 theory subjects		Written test – 1.5 h		40%
Applications		Solving a Critical Path problem		Written test – 0.5 h		40%
Project		Delivery of the project		Project evaluation		20%

10.4 Minimum standards of performance

Evaluating the project with min. 6.

Solving 1 theory subject and solving the problem

Date of completion
Sept. 2016

Responsible with the discipline
Assoc.prof. PhD Livia ANASTASIU

Responsible with the course
Assoc.prof. PhD Livia ANASTASIU

Approval in the dept.
Sept. 2016

Chief of department
Assoc.prof. PhD Claudiu ACIU