

SYLLABUS

1. Data about the program of study

1.1	Institution	The Technical University of Cluj-Napoca
1.2	Faculty	Faculty of Building Services Engineering
1.3	Department	Building Services Engineering
1.4	Field of study	Civil Engineering and Building Services
1.5	Cycle of study	Master
1.6	Program of study/Qualification	Building Services for Regenerative Cities / MS Engineer
1.7	Form of education	Full time
1.8	Subject code	20.10

2. Data about the subject

2.1	Subject name	Project Management					
2.2	Course responsible/lecturer	Eng. Geapana Izabella					
2.3	Teachers in charge of seminars	Eng. Geapana Izabella					
2.4	Year of study	2	2.5 Semester	1	2.6 Assessment	Exam	
2.7	Subject category	Formative category					DS
		Optional					DO

3. Estimated total time

3.1	Number of hours per week	2	of which	3.2 Course	1	3.3 Seminar		3.3 Laboratory	1	3.3 Project	
3.4	Total hours in the curriculum	28	of which	3.5 Course	14	3.6 Seminar		3.6 Laboratory	14	3.6 Project	
3.7 Individual study:											
(a) Manual, lecture material and notes, bibliography										14	
(b) Supplementary study in the library, online and in the field										14	
(c) Preparation for seminars/laboratory works, homework, reports, portfolios, essays										14	
(d) Tutoring										3	
(e) Exams and tests										2	
(f) Other activities											
3.8 Total hours of individual study (sum (3.7(a)...3.7(f)))					47						
3.9 Total hours per semester (3.4+3.8)					75						
3.10 Number of credit points					3						

4. Pre-requisites (where appropriate)

4.1	Curriculum	Bachelor's degree
4.2	Competence	Project development principles; Risk assessment principles; Communication principles;

5. Requirements (where appropriate)

5.1	For the course	Classroom equipped with Video Projector - 21 December 1989 Blvd., no. 128-130 Alternatively, ONLINE on UTCN's TEAMS platform.
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5.2	For the applications Seminar / laboratory / project	Room equipped with Video Projector and whiteboard/blackboard- 21 December 1989 Blvd., no. 128-130 Alternatively, ONLINE on UTCN's TEAMS platform.
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6. Specific competences

Professional competences	<p>Theoretical knowledge:</p> <ul style="list-style-type: none"> - Specific notions of project lifecycle; - Specific notions of management; - Specific notions of cost analysis. <p>Acquired skills:</p> <ul style="list-style-type: none"> - To score the projects based on the regenerative urban development framework criteria; - To evaluate the project quality; - To evaluate the project feasibility; - To evaluate the project cost efficiency; - To evaluate the project impact. <p>Skills acquired:</p> <ul style="list-style-type: none"> - To propose projects in line with circular economy and regenerative urban development framework.
Cross competences	To demonstrate the capacity for analysis and synthesis in a multi-stakeholder project context.

7. Discipline objectives (as results from the *key competences gained*)

7.1	General objective	Development of skills in the field of project evaluation understand the impact of their specialty on complex interdisciplinary projects at every stage of the project lifecycle.
7.2	Specific objectives	<p>To Establish the criteria and assumptions of regenerative project requirements;</p> <p>To identify the phases of the project management life cycle and the necessary steps, resources and documentations for supporting the project;</p> <p>To use the basic concepts to evaluate interdisciplinary projects based on regenerative principles;</p> <p>To use project management tools and methods to communicate relevant information during all phases of a project with various stakeholders.</p>

8. Contents

8.1. Lecture (syllabus)	Number of hours	Teaching methods	Notes
1. Introduction in Project Lifecycle processes and how they apply to regenerative design	2	Video-Projector	

2. Feasibility and Pre-FEED analysis based on regenerative principles	2	Teaching style based on the interactive teacher-student partnership; Alternatively ONLINE on UTCN's TEAMS platform	
3. FEED phase of complex projects and mapping out all stakeholders	2		
4. Design phase in a closed loop approach and quality management plan	2		
5. Execute phase and prerequisites for implementation in the regenerative urban development framework	2		
6. Operating complex projects and change management	2		
7. Decommission and maximize reuse at end of life of the projects	2		
Bibliography:			
1. A guide to the project management body of knowledge, Ed. Newton Square: Project Management Institute, 2013;			
2. Project management: a systems approach to planning, scheduling, and controlling; Harold Kerzner, Ed. John Wiley and Sons, 2013;			
3. https://www.worldfuturecouncil.org/wp-content/uploads/2016/01/WFC_2010_Regenerative_Cities.pdf https://www.worldfuturecouncil.org/wp-content/uploads/2016/01/WFC_2014_Regenerative_Urban_Development_A_Roadmap_to_the_City_We_Need.pdf			
4. https://issuu.com/world.bank.publications/docs/9781464804731 https://issuu.com/msc.exhibition2019/docs/190902_thesis_final_single_pages https://www.projectsart.co.uk/white-papers.php			
5. https://www.pmi.org/business-solutions/white-papers			
8.2. Seminar /Laboratory/Project	Number of hours	Teaching methods	Notes
1. Project ideas and working groups designation, cost efficiency principles	2	Teaching style based on the interactive teacher-student partnership; Student presentation of evaluations on the selected projects.	
2. Project economic feasibility evaluation results and impact criteria selection	2		
3. Project stakeholder mapping and FEED evaluation	2		
4. Project quality plan and correspondence with design documents	2		
5. Project management tools and their application to a change management scenario	2		
6. Project end of life scenarios and reuse option for the involved materials	2		
7. Project conclusion presentations	2		
Bibliography			
1. https://ec.europa.eu/environment/gpp/lcc.htm			
2. https://ec.europa.eu/environment/gpp/pdf/Buying-Green-Handbook-3rd-Edition.pdf			
3. https://spregions.eu/fileadmin/user_upload/Life_Cycle_Costing_SoA_Report.pdf			
4. https://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/cba_guide.pdf			

5. <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0098&from=EN>

6. <https://www.pmi.org/learning/library/practical-quality-management-project-managers-16>

9. Bridging course contents with the expectations of the representatives of the community, professional associations and employers in the field

The acquired competencies will be necessary for the employees who carry out their activity in complex interdisciplinary context for understanding the impact of their own specialty on the project at every phase of the project management life cycle.

10. Evaluation

Activity type	10.1 Assessment criteria	10.2 Assessment methods	10.3 Weight in the final grade
10.4 Course	The exam consists in verifying the theoretical and practical knowledge acquired	Oral exam	20%
10.5 Seminars /Laboratory/Project	Completion and submission of project evaluation - conditions the entrance to the exam.	Submission of project evaluation	80%
10.6 Minimum standard of performance			
Participation in the laboratory conditions the entrance to the exam. Exam grade components (E); Laboratory (L); Calculation formula of the grade $G = 0.2 \times E + 0.8 \times L$ Condition for obtaining credits: $G > 5.0$; where $E > 5.0$, $L > 5.0$			

Date of filling in:		Title Surname Name	Signature
21.06.2024	Lecturer	Eng. Izabella GEAPANA	
	Teachers in charge of application	Eng. Izabella GEAPANA	

Date of approval in the Department of Building Services Engineering	Head of department
27.06.2024	Assoc.prof.phd.eng. Ciprian BACOȚIU
Date of approval in the Council of the Faculty of Building Services Engineering	Dean
27.06.2024	Assoc.prof.phd.eng. Florin DOMNIȚA