

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	20.2

2. Data about the subject

2.1	Subject name	Local, National and European Policies		
2.2	Course responsible/lecturer	<i>Lect.PhD.Eng. Cristina IACOB – cristina.iacob@insta.utcluj.ro</i>		
2.3	Teachers in charge of seminars	<i>Lect.PhD.Eng. Cristina IACOB – cristina.iacob@insta.utcluj.ro</i>		
2.4	Year of study	II	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										21	
(b) Supplementary study in the library, online and in the field										7	
(c) Preparation for seminars/laboratory works, homework, reports, portfolios, essays										10	
(d) Tutoring										7	
(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	

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	Classroom equipped with Video Projector - 21 December 1989 Blvd., no. 128-130 Alternatively, ONLINE on UTCN's TEAMS platform.
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6. Specific competences

Professional competences	<p>Acquiring theoretical knowledge about:</p> <ul style="list-style-type: none"> - local, national and EU institutions and legislation - policymaking in the EU - the EU budget, programmes and projects - the EU cohesion policy and structural and investment funds - national and EU regional and urban development strategies - policy and management of water resources, wastewater and energy with respect to sustainable development <p>Acquired skills:</p> <ul style="list-style-type: none"> - a solid understanding of current policies, strategies, institutions and regulations in the major areas of building services - the ability to monitor changes in rules, policies and legislation and to identify how they may affect the organization, existing operations or, in some cases, a specific situation. - the ability to promote the use of renewable sources, energy efficient and clean equipment and technologies - the ability to analyze and interpret data, to verify compliance with current regulations - preparing the documentation for financing applications for development / investment projects in different areas of building services
Cross competences	<ul style="list-style-type: none"> - Adapting to new technologies, professional and personal development, using printed documentation sources, specialized software and electronic resources in an international language. - Team development of a project - the ability to synthesize and clearly define the activities of each team member, ensuring the efficient exchange of information and knowledge and interpersonal communication. - Use of ICT technologies

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

7.1	General objective	A comprehensive understanding of current policies, strategies, institutions and regulations in the major areas of building services
7.2	Specific objectives	<p>To be acquainted with the technical framework and the legislation in the field of building services in correlation with the specific international regulations</p> <p>To analyze and synthesize existing information on installation earthquakes</p> <p>To use methods and programs to transmit information</p> <p>To be familiar with the recent technical and scientific achievements and the national and international tendencies for the development of the field</p>

8. Contents

8.1. Lecture (syllabus)	Number of hours	Teaching methods	Notes
1. Local, National and EU Institutions and Legislation	2	Presentation, discussions and case studies	
2. Policymaking in the EU. Transposition and Implementation	2		
3. The EU Budget, Programmes and Projects. EU Cohesion Policy and Structural and Investment Funds	2		
4. National and EU Regional and Urban Development Strategies.	2		
5. Water Resources Policy and Management	2		
6. Wastewater Policy and Management.	2		
7. Energy Strategies. Energy Efficiency – Targets, Directives and Rules.	2		
<p>Bibliography</p> <p><i>Policies and Policy Processes of the European Union</i> - Laurie Buonanno, Neill Nugent, Macmillan International Higher Education, 2013</p> <p><i>Environmental Policy in the EU: Actors, Institutions and Processes</i>- Andrew Jordan, Taylor & Francis 2nd Edition, 2012</p> <p>https://europa.eu/european-union/law_en</p> <p>https://www.europarl.europa.eu/factsheets/en/home</p> <p>https://www.europarl.europa.eu/factsheets/en/section/193/environment-policy</p> <p>https://ec.europa.eu/regional_policy/en/funding/</p> <p><i>Strategia Națională pentru Dezvoltare Durabilă a României Orizonturi 2013-2020-2030</i>, Guvernul României, Ministerul Mediului și Dezvoltării Durabile - București 2008</p> <p><i>Strategia energetică a României 2020-2030, cu perspectiva anului 2050</i> - Ministerul Economiei Energiei și Mediului de Afaceri</p> <p><i>The Transposition of EC Directives: A Comparative Study of Instruments, Techniques and Processes in Six EU Member States</i> - Steunenber, B., Voermans, W. J., 2006.</p> <p><i>Carta de la Lisabona. Ghid privind reglementări și politici publice în domeniul serviciilor de alimentare cu apă potabilă, canalizare și managementul apelor uzate</i> -International Water Association, 2015</p>			
8.2. Seminar /Laboratory/Project	Number of hours	Teaching methods	Notes
1. The main European and national regulations in the field of water and energy - applications and case studies.	2	Presentation, discussions and case studies	
2. Preparing the documentation for financing applications for development projects in the sectors of drinking water supply systems and collection and treatment of urban wastewater.	2		
3. Preparing the documentation for financing applications for development / investment projects in the electricity and gas transmission systems sector.	2		
4. Preparing the documentation for financing applications for development / investment projects in the renewable energy sector and increasing energy efficiency.	2		

5. Preparing the documentation for financing applications for development / investment projects in the sector of central heating systems.	2		
6. Presentation of an IT system for electronic data exchange between beneficiaries and authorities for coordination, management and control of the Structural and Investigation Funds (MySims)	2		
7. Evaluation of practical work.	2		
Bibliography https://europa.eu/european-union/law_en https://www.europarl.europa.eu/factsheets/en/home https://www.europarl.europa.eu/factsheets/en/section/193/environment-policy https://ec.europa.eu/regional_policy/en/funding/ <i>Strategia Națională pentru Dezvoltare Durabilă a României Orizonturi 2013-2020-2030</i> , Guvernul României, Ministerul Mediului și Dezvoltării Durabile - București 2008 <i>Strategia energetică a României 2020-2030, cu perspectiva anului 2050</i> - Ministerul Economiei Energiei și Mediului de Afaceri <i>Carta de la Lisabona. Ghid privind reglementări și politici publice în domeniul serviciilor de alimentare cu apă potabilă, canalizare și managementul apelor uzate</i> -International Water Association, 2015 https://www.anre.ro/ro/energie-termica/legislatie1580310091 https://www.anre.ro/ro/energie-electrica/legislatie https://www.anre.ro/ro/gaze-naturale/legislatie https://www.anre.ro/ro/eficienta-energetica/legislatie			

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 design, execution and maintenance.

10. Evaluation

Activity type	10.1 Assessment criteria	10.2 Assessment methods	10.3 Weight in the final grade
10.4 Course	Evaluating the theoretical and practical knowledge acquired	Written test	80%
10.5 Seminars /Laboratory/Project	Evaluation of knowledge and abilities acquired during class practical activities.	Oral examination	20%
10.6 Minimum standard of performance			
Students must pass the laboratory test for the final exam. The components of the final grade are Exam (E) and Laboratory (L). Thus, the formula for the final grade of this subject is $N = 0.8xE + 0.2xL$. The 3 credits are obtained only if $N \geq 5$, where both $E \geq 5$ and $L \geq 5$.			

Date of filling in:		Title Surname Name	Signature
26.06.2023	Lecturer	<i>Lect.PhD.Eng. Cristina IACOB</i>	
	Teachers in charge of application	<i>Lect.PhD.Eng. Cristina IACOB</i>	

Date of approval in the Department of Building Services Engineering	Head of department Assoc.Prof.PhD.Eng. Carmen MÂRZA
29.06.2023	
Date of approval in the Council of the Faculty of Building Services Engineering	Dean Assoc.Prof.PhD.Eng. Florin DOMNIȚA
29.06.2023	