

SYLLABUS

1. Data about the program of study

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

2. Data about the subject

2.1	Subject name				Communication Skills	Subject code	17.00	
2.2	Course responsible/lecturer				Assoc.prof.PhD.arch. Șerban ȚIGĂNAȘ dragos.tiganas@arch.utcluj.ro			
2.3	Teachers in charge of laboratory				Lect.PhD.Eng Daniel Sorin RUSU daniel.rusu@insta.utcluj.ro			
2.4	Year of study	II	2.5	Semester	I	2.6	Assessment	E
2.7 Subject category		Formative category						DC
		Optionality						DOB

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) Exams and tests										2
(b) Manual, lecture material and notes, bibliography										24
(c) Supplementary study in the library, online and in the field										7
(d) Preparation for seminars/laboratory works, homework, reports, portfolios, essays										14
(e) Tutoring										-
(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 in civil engineering, Building Services Engineering, or Architecture and Urbanism
4.2	Competence	Technical and Humanistic Competences

5. Requirements (where appropriate)

5.1	For the course	Amphitheatre B-dul 21 December Nr.128-130, Cluj-Napoca
5.2	For the applications	Amphitheatre B-dul 21 December Nr.128-130, Cluj-Napoca

6. Specific competences

Professional Competences	CP1 – perform project management CP2 – synthesizes information CP8 – compares contractors' offers CP21 – combine multiple fields of knowledge CP27 – ensure compliance with purchasing and contracting regulations
Cross competence	CT1 – collaborating in teams and networks CT4 – respects the diversity of values and cultural norms

7. Expected Learning Outcomes

Knowledge	CP1 – Knows project management methodologies applicable to urban infrastructure, planning tools, resource allocation techniques, and cost control specific to pipeline and urban network projects, including aspects related to communication and reporting within projects. CP2 – Knows methods of critical analysis of information sources specific to the urban domain, synthesis techniques, and how to structure complex data to support decision-making in urban planning and for effective communication of these decisions. CP8 – Has in-depth knowledge of public and private procurement procedures, bid evaluation criteria, tender documentation, applicable legislation, as well as written and oral communication techniques specific to procurement processes. CP21 – Possesses integrated knowledge from diverse fields (building services engineering, architecture, urban planning, environmental sciences, circular economy, public policies, urban sociology), essential for the holistic approach to communication in complex projects. CP27 – Has in-depth knowledge of the national and European legal framework for public procurement, award procedures, selection criteria and tender documentation, as well as formal communication and documentation techniques specific to contracting processes.
Skills	CP1 – Develops project plans for urban infrastructure, defines stages and deliverables, allocates human and material resources, monitors progress through performance indicators, manages relationships with stakeholders (authorities, developers, communities), and periodically reports project status through effective communication. CP2 – Critically analyzes technical reports, impact studies, and geo-spatial data, selects relevant information for urban infrastructure projects, synthesizes and structures knowledge coherently, producing documented summaries and effectively communicating results to diverse audiences. CP8 – Analyzes and compares bids received from contractors, verifies compliance with requirements, applies predefined evaluation criteria, develops comparative evaluation reports, and formulates award recommendations, using written and oral communication techniques specific to procurement processes. CP21 – Integrates perspectives from multiple disciplines in analyzing and solving complex problems, collaborates effectively with specialists from different fields, develops interdisciplinary solutions and communicates effectively in multidisciplinary teams. CP27 – Ensures compliance of procurement and contracting processes with applicable regulations, develops tender documentation, participates in bid evaluation, provides legal and administrative consulting, using formal communication and documentation techniques.

Responsibilities and autonomy	CP1 – Leads complex urban infrastructure projects autonomously, makes managerial decisions, coordinates interdisciplinary teams and is responsible for achieving objectives, communicating effectively with all stakeholders. CP2 – Independently evaluates information sources, forms evidence-based opinions, supports conclusions before public authorities and stakeholders, assuming responsibility for the validity of analyses and for the quality of communication. CP8 – Leads bid comparison processes for complex projects, assuming responsibility for the correctness, objectivity and transparency of the evaluation and for substantiating the award recommendation before the procurement committee and beneficiaries. CP21 – Approaches regenerative urban development challenges from a holistic and integrated perspective, assuming responsibility for solutions that harmonize the multiple dimensions of sustainability, in collaboration with all stakeholders and respecting cultural and social diversity. CP27 – Leads procurement processes for complex projects, assuming responsibility for the legality and transparency of procedures and for compliance with regulations, communicating effectively with all parties involved.
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8. Discipline objectives (as results from the *key competences gained*)

8.1	General objective	Understanding the importance of communication in investment processes in construction, understanding different types of communication and the adaptation to the context and achieving basic skills for professional communication. Students will learn to communicate effectively in interdisciplinary and multicultural contexts, to position professionally their building services engineering expertise within multidisciplinary teams, and to achieve relevant experiences of communication.
8.2	Specific objectives	• Understanding the specific of interdisciplinary communication in construction projects (CP21, CT1). • Positioning the building services engineer through communication within multidisciplinary teams (CP1, CP21, CT1). • Achieving relevant experiences of communication for professional activity (CP2, CP8, CP27). • Development of verbal, nonverbal and paraverbal communication skills in professional contexts (CP2, CT1, CT4). • Development of competences in preparing communication and managing interaction with the audience (CP1, CP2). • Acquisition of written and oral communication techniques specific to procurement, contracting and project management processes (CP1, CP8, CP27). • Development of intercultural communication skills and adaptation of the message to diverse audiences (CT4).

9. Contents

9.1. Lecture (syllabus)	Number of hours	Teaching methods	Observations
1. Why is communication important? – an introduction	1	Oral presentations and debates	Video-projector
2. Communication types and to whom do we address?	1		
3. Verbal, visual and combined communication – means of communication	1		
4. The content and the support of a communication; technical communication	1		
5. Communication of the essential; adapting the message to the time gap and to the means	1		
6. Verbal, nonverbal and paraverbal communication	1		
7. How to prepare a communication and how to improvise	1		
8. Communicating as a team	1		
9. Templates and innovations; open communication; interaction with the audience	1		
10. Case studies: pro-active communication, discourse, offer, technical proposal, and negotiations	1		
11. Case studies: concluding, retroactive communication, feed-back	1		
12. Didactic communication	1		
13. On-line communication	1		
14. Conclusions and feed-back	1		
Total	14		
Bibliografie 1. D'Iribarne, P., Chevrier, S., Segal, A. H. J-P and Tréguer-Felten, G. "Interpersonal Communication" in Cross-Cultural Management Revisited. A Qualitative Approach, Oxford University Press, 2020 2. Hopkins, Claude C., Scientific Advertising, Fq Classics, 2007 3. Ju, I. "Marketing Communication," in R. L. Heath and W. Johansen (Eds.), The International Encyclopedia of Strategic Communication, 2018 4. McKinsey, D., Strategic Storytelling: How to Create Persuasive Business Presentations, Kindle Edition, 2014			
9.2. Applications	Number of hours	Teaching methods	Observations
1. Definition, components and communication types. Applications and Examples.	2	Oral presentations and debates	Video-Projector, didactic materials
2. Communication in professional areas, distinctions, principals and rules. Applications.	2		
3. Modes and mediums of communication. Applications.	2		
4. Principles of non-violent, assertive communication. Positive and negative feedback offering techniques. Applications.	2		
5. Open communication, speech and presentation. Applications.	2		
6. Digital communication (e-mail, sms, voice and video). Phone call communication. Applications.	2		
7. Overview and practical applications.	2		
Total	14		
Bibliografie			

1. Panisoara, I., Comunicarea eficientă. Editia a IV-a, Editura Polirom, ISBN 978-973-46-5479-6, 2015
2. DK, Effective Communication, Dorling Kindersley Ltd, ISBN 978-024-11-8616-9, 2015
3. Mucchielli, A., Arta de a comunica. Metode, forme si psihologia situatiilor de comunicare, Editura Polirom, ISBN 978-973-46-5208-2, 2015

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

The competences accumulated are necessary to activate the graduates in design activities, realization of buildings, consultancy and sales to meet the employers' requirements.

11. Evaluation

Activity type	11.1 Assessment criteria	11.2 Assessment methods (and evaluation form: continuous/summative)	11.3 Weight in the final grade
11.4 Course	Verification of the knowledge learned as a result of completing the course activities and bibliography	Oral exam	50%
11.5 Applications	Knowledge assessment of practical applications	Portfolio	50%
11.6 Minimum standard of performance			
Students must pass the laboratory test to be accepted in the final exam. Final grade components: Exam (E) and portfolio evaluation (L). Final grade formula $N=0.5 \times E + 0.5 \times L$ Credits obtained only if $N \geq 5$ where $E \geq 5$ and $L \geq 5$.			

Date of filling in:		Title Surname Name	Signature
14.05.2026	Lecturer	Assoc.prof.PhD.Arch. Dragoș Șerban ȚIGĂNAȘ	
	Teachers in charge of application	Lect.PhD.Eng. Daniel RUSU	

Date of approval in the Department of Building Services Engineering	Head of department Assoc.Prof.PhD.Eng. Ciprian BACOȚIU
09.07.2026	
Date of approval in the Council of the Faculty of Building Services Engineering	Dean Assoc.Prof.PhD.Eng. Florin DOMNIȚA
09.07.2026	