SYLLABUS

1. Program Information

1.1 Higher education institution	Technical University of Cluj-Napoca
1.2 Faculty	Faculty of Automation and Computer Science
1.3 Department	Department of Automation
1.4 Field of study	Automation, Applied Informatics and Intelligent Systems
1.5 Cycle of studies	Bachelor
1.6 Study Programme/Qualification	Intelligent Automation Systems (dual, in English language)
1.7 Form of education	IF – full-time education
1.8 Course code	38.00

2. Course information

2.1 Course title					Collaboration and communication	
2.2 Course lecturer						
2.3 Seminar / Laboratory / Project Lecturer					*Ing. Georgiana Miclea (Emerson)* *Ing. Emanuela Mocan (Emerson)*	
2.4 Year of study	3	2.5 Semester	1	2.6 Type of assessment		V
2.7 Course status	Formative category *(DF, DS, DC)*					DC
	Optionality *(DOB, DOP, DFac)*					DOB

3.Total estimated time

3.1 Number of hours per week	1	of which:	HEI	Lecture	0	Seminar	0	Laboratory	0	Project	0
			CO		0		0		0		1
3.2 Number of hours per semester	14	of which:	HEI	Lecture	0	Seminar	0	Laboratory	0	Project	0
			CO		0		0		0		14

3.3 Distribution of time allocation (hours per semester) for:	HEI	CO
(a) Study based on textbook, course support, bibliography, and notes		12
(b) Additional documentation in library, specialized electronic platforms, and fieldwork		
(c) Preparation of seminars/laboratories, assignments, papers, portfolios and essays		20
(d) Tutoring		
(e) Examinations		4
(f) Other activities:		
3.4 Total individual study hours (sum (3.3(a)... 3.3(f)))		36
3.5 Total hours per semester (3.2+3.4)		50
3.6 Number of credits per semester		2

(HEI = Higher Education Institution, CO = Company)

4. Prerequisites (where applicable)

4.1 Curriculum Prerequisites	
4.2 Competency Prerequisites	

5. Conditions (where applicable)

5.1. Course Organization Conditions	
5.2. Seminar / Laboratory / Project organization conditions	• Students will be divided into small groups of 4-5 people for semester-long projects • Students will use online collaboration tools

6. Specific Competencies Acquired

Professional Competencies	• PC12 Gather technical information • PC13 Interact professionally in research and professional environments • PC18 Perform project management • PC23 Synthesize information • PC26 Use information technology tools
Transversal Competencies	• TC03 Demonstrate responsibility • TC04 Work in teams

7. Learning outcomes

Knowledge:	• Describe key principles of effective communication, active listening, teamwork, and conflict resolution. • Explain different team roles, stages of group development, and decision-making models. • Understand strategies for collaborative problem-solving and presenting ideas in professional contexts.
Skills:	• Apply active listening, feedback, and negotiation techniques in realistic team scenarios. • Demonstrate the ability to collaborate effectively in diverse teams to solve problems and complete projects. • Present ideas clearly and persuasively in individual and group presentations, responding appropriately to questions.
Responsibility and autonomy:	• Take responsibility for one's contributions within a team, demonstrating accountability and ethical behavior. • Reflect on personal communication strengths and weaknesses to improve collaboration and professional practice. • Independently plan, coordinate, and execute tasks in group projects while respecting deadlines and team agreements.

8. Course Objectives

8.1 General objective of the course	• This course aims to equip students with essential skills for effective collaboration and communication in academic and professional contexts, enabling them to work confidently in teams and convey ideas clearly
8.2 Specific objectives	• Develop active listening, constructive feedback, and interpersonal communication skills. • Apply strategies for conflict resolution, negotiation, and collaborative problem-solving. • Demonstrate the ability to work effectively in teams and present ideas coherently in group settings.

9. Contents

9.1 Lectures	No. of hours		Teaching methods	Obs.
9.2 Seminar / laboratory / project	Hours HEI	Hours CO	Teaching methods	Obs.
Foundations of Communication and Collaboration Exploring communication models, verbal and non-verbal expression, and the role of trust in teamwork through icebreakers and reflection on personal communication styles.		2	Case Studies and Scenario Analysis, Role-playing and Simulations, Group Discussions and Peer Feedback, Guided Practice and Coaching	
Active Listening and Feedback Practicing levels of listening, paraphasing, and giving constructive feedback through paired exercises and roleplay.		2		
Team Dynamics and Roles Understanding how teams develop, identifying different roles and strengths within a group, and applying these insights to small case studies and discussions.		2		
Conflict Resolution and Negotiation Analyzing common sources of conflict, experimenting with communication strategies to de-escalate tension, and engaging in negotiation simulations.		2		
Collaborative Problem-Solving and Decision-Making Applying brainstorming and consensus-building techniques in group projects, practicing decision-making models, and reflecting on collaborative case studies.		2		
Presenting and Communicating in Teams Designing and delivering team presentations, practicing persuasive communication, managing questions from peers, and receiving structured feedback.		3		

Bibliography
(CO)

[1] K. Patterson and J. Grenny, Crucial Conversations: Tools for Talking When Stakes Are High. New York: McGraw-Hill, 2012.
[2] D. Stone, B. Patton, and S. Heen, Difficult Conversations: How to Discuss What Matters Most. New York: Penguin Books, 2010.
[3] R. J. Paterson, The Assertiveness Workbook: How to Express Your Ideas and Stand Up for Yourself at Work and in Relationships. Oakland, CA: New Harbinger Publications, 2000.
[4] OpenLearn: *Teamwork and Problem Solving* (free online course material) https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=85536
[5] MindTools: Communication Skills – practical guide to verbal, non-verbal, and written communication https://www.mindtools.com/pages/main/newMN_TCS.htm
[6] Toastmasters International, "Resources on Public Speaking and Feedback." [Online]. Available: https://www.toastmasters.org/

10. Correlation of course content with the expectations of the epistemic community representatives, professional associations, and major employers in the field related to the program

The course develops essential communication, teamwork, and problem-solving skills highly valued by the epistemic community, ensuring students can collaborate effectively in multidisciplinary settings. It aligns with professional associations' standards for ethical and efficient practice in the field. It also meets

employers' expectations for graduates who can work productively in teams, adapt to diverse professional environments, and present ideas clearly.

11. Evaluation

Activity Type	Evaluation criteria	Evaluation methods	Weight in final grade
11.1 Lecture			
11.2 Seminar/ Laboratory/Project	Teamwork and Collaboration	Assessment of contribution to group activities, collaboration in problem-solving tasks	40%
	Case Study / Group Project	Submission and presentation of a collaborative case study or project	60%
11.3 Minimum Performance Standard			
Demonstrate basic competency in clear, assertive communication, effective teamwork, and the ability to apply collaboration and problem-solving techniques in realistic scenarios.			

Date of completion: 11.05.2025	Program responsible	Conf.dr.ing. Roxana Rusu-Both	

Date of approval by the Department of Automation Council 24.11.2025 Date of approval by the Faculty of Automation and Computer Science Council 28.11.2025	Director of the Department of Automation Prof.dr.ing. Honoriu VĂLEAN Dean Prof.dr.ing. Vlad MUREȘAN