

SYLLABUS

1. Program information

1.1 Higher education institution	Technical University of Cluj-Napoca
1.2 Faculty	Faculty of Electronics, Telecommunications and Information Technology
1.3 Department	Bases of Electronics
1.4 Field of study	Electronic engineering, telecommunications and information technologies
1.5 Cycle of study	Bachelor of Science
1.6 Study program / Qualification	Electronic engineering, telecommunications and information technologies/ Engineer
1.7 Form of education	IF – full-time education

2. Course information

2.1 Course title	English language 1	Course code	14.10
2.2 Course coordinator	Lect. dr. Florina Codreanu, florina.codreanu@lang.utcluj.ro		
2.3 Seminar/ laboratory/ project/ practical activity coordinator	Lect. dr. Florina Codreanu, florina.codreanu@lang.utcluj.ro		
2.4 Year of study	I	2.5 Semester	1
2.6 Type of assessment	V		
2.7 Course status	Formative category		DC
	Optionality		DOP

3. Estimated total time

3.1 Hours per week	3	of which:	3.2 Lecture	2	3.3 Seminar	1	3.3 Laboratory	0	3.3 Project	0	3.3 Practical training	0
3.4 Hours per semester	42	of which:	3.5 Lecture	28	3.6 Seminar	14	3.6 Laboratory	0	3.6 Project	0	3.3 Practical training	0
3.7 Time distribution (hours per semester) for individual study and assessment:												
(a) Assessment											2	
(b) Study using textbook, course materials, bibliography, and notes											2	
(c) Additional documentation in the library, on specialized electronic platforms, and in the field											2	
(d) Preparation for seminars/laboratories, assignments, reports, portfolios and essays											2	
(e) Tutoring												
(f) Other activities												
3.8 Total hours of individual study and assessment (sum of (3.7(a))...3.7(f))									8			
3.9 Total hours per semester (3.4+3.8)									50			
3.10 Number of credits									2.0			

4. Prerequisites (where applicable)

4.1 curriculum	
4.2 competencies	B1 level, according to the Common European Framework of Reference for Languages (CEFR) and the European Language Portfolio (ELP).

5. Requirements (where applicable)

5.1. for the development of the lecture	
5.2. for the development of the seminar/ laboratory/ project	Seminar attendance and completion of the assigned independent study topics.

6. Specific competencies acquired

Professional competencies	Communication in a foreign language in academic and professional contexts at the B1+/B2 level.
Transversal competencies	CT1 Methodical analysis of the problems encountered in the activity, identifying the elements for which there are established solutions, thus ensuring the fulfillment of professional tasks. CT3 Adaptation to new technologies, professional and personal development, through continuous training. Use of printed documentation sources, specialized software and electronic resources in Romanian and in (at least) one language of international circulation.

7. Expected learning outcomes

Knowledge	- The student/graduate identifies and describes basic concepts, principles and methods in mathematics, physics, chemistry, technical drawing, economics and computer science.
Skills	- The student/graduate operates with basic concepts, principles and methods in mathematics, physics, chemistry, technical drawing, economics and computer science. - The student/graduate performs engineering and economic calculations of medium complexity and associates them with graphical/alphanumeric representations or with representations specific to computer-aided design. - The student/graduate describes physico-chemical and economic phenomena and processes.

Responsibility and autonomy	- The student/graduate applies the values of ethics and professional deontology specific to the engineering profession. - The student/graduate applies logical reasoning, evaluation and self-assessment in decision-making. - The student/graduate communicates effectively about engineering activities with a wide range of audiences. - The student/graduate is engaged in lifelong learning in order to acquire and implement knowledge, as needed, using appropriate learning strategies. - The student/graduate promotes dialogue, cooperation, respect for others and interculturality. - The student/graduate works effectively as a team member or as a team leader. - The student/graduate fluently uses at least one international language in technical communication
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8. Course objectives (based on the grid of specific competencies acquired)

8.1 General objective of the course	To develop students' English language communication skills at the B1+/B2 level for academic and professional contexts through the effective use of the language for understanding, producing, and exchanging information, as well as through the effective use of information resources to support lifelong professional development.
8.2 Specific objectives	- To develop students' ability to understand and use English in oral and written communication in academic and professional contexts. - To develop the ability to analyze and interpret specialized texts and documents written in English. - To develop skills in expressing, presenting, and supporting ideas using terminology specific to the field of study. - To develop autonomous learning and information literacy skills through the use of printed and electronic resources in English. - To develop the ability to use digital resources and modern information and communication tools in order to meet the requirements of academic and professional environments.

9. Contents

9.1 Lecture	No. of hours	Teaching methods	Remarks
1. The Main Differences between Oral and Written Communication	2	Interactive lecture, case study, practical exercises, critical text analysis, problem- and project-based	
2. Introduction to Written Communication: Types of Writing Styles. Technical Documents	2		
3. The Fundamentals of Scientific and Technical Discourse. Specialised Vocabulary	2		
4. Grammar and Punctuation Rules for Scientific and Technical Discourse	2		

9.1 Lecture	No. of hours	Teaching methods	Remarks
5. The Sentence and the Paragraph. Types of Sentences. The Main Elements of a Paragraph	2	learning, writing workshop, peer review, debate, oral presentation, and collaborative learning.	
6. Elements of Style in Technical Writing	2		
7. Readability. Text Coherence and Cohesion	2		
8. <i>Technical Writing in Use</i> . Definitions, Classifications, Exemplifications	2		
9. <i>Technical Writing in Use</i> . Explanations, Descriptions, Instructions	2		
10. <i>Technical Writing in Use</i> . Cause & Effect, Comparing & Contrasting, Problems & Solutions	2		
11. The Main Stages of the Writing Process. Writing an Abstract for a Scientific Paper	2		
12. Writing Numbers, Units of Measure, Equations & Symbols. Types of Illustrations	2		
13. The Ethical Issues of Scientific Writing. Avoiding Plagiarism: Quotes, Paraphrases & Summaries	2		
14. Final Written Assessment	2		
Bibliography			
1. Codreanu, F. (2025). <i>Written & Oral Communication for Engineering Students</i>. UT Press, Cluj-Napoca. 2. Walesh, S.G. (2024). <i>The Communicative Engineer: How to Ask, Listen, Write, Speak, and Use Visuals</i>. Wiley, Hoboken. 3. Finkelstein, L., Aune, J.E. & Potter, L.A. (2023). <i>Technical Writing for Engineers and Scientists</i> (4th ed.). McGraw-Hill Education, New York. 4. Bolton, K. (2019). <i>Engineering Communication I</i> (2nd ed.). Routledge, London. 5. Laplante, P.A. (2019). <i>Technical Writing: A Practical Guide for Engineers, Scientists, and Nontechnical Professionals</i> (2nd ed.). CRC Press, New York. 6. House, R., Layton, R.A., Livingston, J. & Moseley, S. (2017). <i>The Engineering Communication Manual</i>. Oxford University Press, New York. 7. Irish, R. & Weiss, P.E. (2013). <i>Engineering Communication: From Principles to Practice</i> (2nd ed.). Oxford University Press, Don Mills. 8. Bailey, S. (2011). <i>Academic Writing: A Handbook for International Students</i> (3rd ed.). Routledge, London & New York. 9. Strunk Jr., W. & White, E.B. (2000). <i>The Elements of Style</i> (4th ed.). Allyn & Bacon, Needham Heights, Massachusetts.			

9.2 Seminar /laboratory /project /practical training	No. of hours	Teaching methods	Remarks
1. What is Electronics? – Main Electronic Inventions, Electronic circuits, Mobile Phones and Radio Signals	2	Interactive teaching, heuristic discussion, practical exercises, communication task and problem-	
2. Digital Electronics – Analogue vs Digital, The Binary System, From Input to Output, Microprocessors and Microchips	2		
3. Telecommunication and Networks – Means of Transmission, Ground and Air Transmission, Main Network Components, Network Topologies	2		
4. Computer History – Terms Related to the History of Computers	2		

9.2 Seminar /laboratory /project /practical training	No. of hours	Teaching methods	Remarks
5. Computer Technology – Hardware and Software, USB Flash Drives, Types of Computers, Internet Connections	2	solving activities, collaborative activities (pair and group work), and individual work.	
6. Automation and Robotics – Automation Technologies, Robot Applications and Artificial Intelligence, Sensors and Transducers	2		
7. Health and Safety at Work – Work Regulations and Objectives, Safety Signs and Colours, Safety Equipment, Fire Safety Plan, Privacy and Online Data Protection	2		
Bibliography			
1. Linsalata, A., Masenga, N. & Simoncini, E. (2021). <i>It Works! English for Electronics, Electrotechnology and Mechanics</i> . EDISCO, Torino.			
2. Sopranzi, S. R. (2016). <i>Flash on English for Mechanics & Electronics</i> (2nd ed.). ELI Publishing, Recanati.			
3. Codreanu, F. (2015). <i>English for Mechanical, Electrical and Medical Engineering Students</i> . UT Press, Cluj-Napoca.			

10. Alignment of the course contents with the expectations of the epistemic community, professional associations, and representative employers in the field related to the program

The course content and the teaching-learning-assessment methods are aligned with the current requirements of the Electronics, Telecommunications, and Information Technology Engineering field, considering the expectations of the academic and professional community, representative employers, as well as the national quality assurance standards in higher education. The course helps prepare students in line with employer expectations and the quality requirements set for engineering study programs.

11. Assessment

Activity type	11.1 Assessment criteria	11.2 Assessment methods (and type of assessment: continuous/ summative)	11.3 Weight in final grade
11.4 Lecture	Knowledge of specialized language (appropriate use of the theoretical concepts studied and technical vocabulary; grammatical, lexical, and discourse accuracy).	Summative assessment (written)	50%
11.5 Seminar/ Laboratory/ Project /Practical activity	Accuracy, relevance, and creativity of the student's personal contribution in applying theoretical concepts to the completion of practical communication tasks. Level of involvement, active participation, and responsibility in carrying out individual and group activities.	Continuous assessment (oral)	50%
11.6 Minimum performance standard Obtaining at least 50% of the score allocated to each examination component (course and seminar).			

Completion date:	Course coordinators	teaching rank, title First name LAST NAME	Signature
23.06.2026	Lecture	Senior Lecturer Florina CODREANU, Ph.D.	
	Applications	Senior Lecturer Florina CODREANU, Ph.D.	

Approval of the Head of the Department coordinating the course, only if this differs from the department organizing the study program

Head of the Modern Languages and Communication Department
Assoc.prof. Ruxandra LITERAT, Ph.D.

Date of approval by the Council of the Department of Bases of Electronics

Head of the Bases of Electronics Department
Prof. Sorin HINTEA, Ph.D.

26.06.2026

Date of approval by the Council of the Faculty of Electronics, Telecommunications and Information Technology

Dean,
Prof. Ovidiu-Aurel POP, Ph.D.

30.06.2026