



National University of Engineering (UNI)
School of Computer Science
Syllabus 2026-I

1. COURSE

BEI201. Technical and professional English III (Mandatory)

2. GENERAL INFORMATION

2.1 Course	: BEI201. Technical and professional English III
2.2 Semester	: 3 rd Semester.
2.3 Credits	: 2
2.4 Hours	: 4 HP;
2.5 Duration of the period	: 16 weeks
2.6 Type of course	: Mandatory
2.7 Learning modality	: Face to face
2.8 Prerequisites	: BEI102. Technical and professional English II. (2 nd Sem)

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

At this level, students engage with English as the primary medium for accessing and producing technical content in computing, engineering, and the sciences. Grammar structures are applied to reading scientific articles, writing technical reports, describing engineering processes, and participating in professional discussions. The course bridges everyday English fluency with the demands of technical communication.

5. GOALS

- Train students to read, understand, and produce technical communication in English.
- Provide linguistic tools for connecting ideas in descriptive and analytical writing about computing and engineering.

6. COMPETENCES

AG-C04) Communication: Communicates effectively in complex computing activities. (Usage)

AG-C03) Individual and Team Work: Performs effectively as an individual and as a member or leader in diverse teams. (Familiarity)

7. TOPICS

Unit 1: Technical Communication (12 hours)	
Competences Expected: AG-C03,AG-C04	
Topics	Learning Outcomes
• Review of Tenses: Present, Past, and Future in technical documentation. • Interrogative sentences with complex Wh- questions for system analysis. • Words with more than one meaning in technical contexts (Polysemy). • Expressions for describing professional activities and research interests.	• By the end of the unit, students use various tenses to exchange detailed technical information and formulate precise questions about computing systems and engineering processes.
Readings : [SJ02], [Cam06], [Mac99]	

Unit 2: Comparing Architectures (12 hours)	
Competences Expected: AG-C03,AG-C04	
Topics	Learning Outcomes
• Use of "What's it like?": Describing system characteristics and interfaces. • Advanced comparative and superlative adjectives in benchmark analysis. • Collocations in computing: high-performance, low-level, fault-tolerant. • Reading: Architecture comparison reports (RISC vs. CISC, SQL vs. NoSQL).	• Students analyze and describe differences between computing architectures, frameworks, and systems using varied comparative structures with technical precision.
Readings : [SJ02], [Cam06], [Mac99]	

Unit 3: Then and Now in Computing (12 hours)	
Competences Expected: AG-C03,AG-C04	
Topics	Learning Outcomes
• Present Perfect vs. Simple Past: Contrasting historic events with current state. • Time expressions: for, since, ever, never applied to technology evolution. • Adverbs of time and manner in scientific narrative. • Vocabulary: Generations of technology, legacy systems, current platforms.	• Students differentiate and correctly apply the present perfect and the simple past to narrate the evolution of computing technologies and contrast historical achievements with the current state of the field.
Readings : [SJ02], [Cam06], [Mac99]	

Unit 4: Engineering Standards and Protocols (12 hours)	
Competences Expected: AG-C03,AG-C04	
Topics	Learning Outcomes
- Modals of obligation and permission: Have to, Must, Can in professional norms. - Giving technical recommendations: Should, Ought to — code reviews and design. - Vocabulary: IEEE/ACM standards, coding conventions, security policies. - Formal writing: Technical memos and engineering recommendations.	Students express engineering rules, standards, and professional recommendations using appropriate modal verbs in formal technical writing and peer discussion.
Readings : [SJ02], [Cam06], [Mac99]	

Unit 5: How Systems Are Built (12 hours)	
Competences Expected: AG-C03,AG-C04	
Topics	Learning Outcomes
- Passive Voice: Present and Simple Past to describe engineering processes. - Vocabulary: Manufacturing, deployment, integration, and testing. - Expressions for giving technical opinions and discussing design trade-offs. - Writing: Process description for a software or hardware system.	Students use the passive voice to describe how systems are designed, built, tested, and deployed, participating in technical discussions about engineering processes.
Readings : [SJ02], [Cam06], [Mac99]	

Unit 6: Debugging and Analysis (12 hours)	
Competences Expected: AG-C03,AG-C04	
Topics	Learning Outcomes
- Past Continuous vs. Simple Past in incident and failure reports. - Narrative and sequence connectors: while, when, suddenly, as a result. - Vocabulary: Bugs, exceptions, crashes, logs, root cause analysis. - Writing: Incident report for a software or network failure.	Students narrate debugging sessions, system failures, and experimental incidents using narrative tenses and technical sequencing connectors fluently.
Readings : [SJ02], [Cam06], [Mac99]	

Unit 7: Research and Innovation (12 hours)	
Competences Expected: AG-C03,AG-C04	
Topics	Learning Outcomes
• Future Forms: Will, Going to, Present Continuous for research projection. • Expressions of probability and certainty in scientific contexts. • Vocabulary: Innovation cycles, research proposals, technology forecasting. • Oral presentations: "The future of computing in my field".	• Students project research goals and discuss future directions in computing and engineering using various future structures with appropriate degrees of certainty.
Readings : [SJ02], [Cam06], [Mac99]	

Unit 8: Technical English III (12 hours)	
Competences Expected: AG-C03,AG-C04	
Topics	Learning Outcomes
• Programming and Web Development terminology: functions, APIs, frameworks. • User Interface (UI/UX) descriptions and usability concepts. • Basic project management vocabulary: sprints, milestones, deliverables. • Writing: Simple technical specification or README document.	• By the end of the course, students use specialized software development vocabulary to describe logical and functional components and produce basic technical documentation in English.
Readings : [SJ02], [Cam06], [Mac99]	

8. WORKPLAN

8.1 Methodology

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

8.2 Theory Sessions

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

8.3 Practical Sessions

The practical sessions are held in class where a series of exercises and/or practical concepts are developed through problem solving, problem solving, specific exercises and/or in application contexts.

9. EVALUATION SYSTEM

***** EVALUATION MISSING *****

10. BASIC BIBLIOGRAPHY

[Mac99] James MacGrew. *Focus on Grammar Basic*. Editorial Oxford, 1999.

[SJ02] Liz Soars and John. *American Headway N 2 Student Book*. Editorial Oxford, 2002.

[Cam06] Cambridge. *Diccionario Inglés-Español Cambridge*. Editorial Oxford, 2006.