



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

1. COURSE

CS400. Pre-professional internships (Mandatory)

2. GENERAL INFORMATION

2.1 Course	: CS400. Pre-professional internships
2.2 Semester	: 9 th Semester.
2.3 Credits	: 2
2.4 Hours	: 1 HT; 2 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	: 110Cr

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

This course allows students to apply the knowledge acquired during their academic training in a real work environment, under the supervision of a company and the university. Pre-professional internships are essential to develop professional, ethical, and technical competencies, ensuring that the student gains experience in projects related to the degree program.

5. GOALS

- Evaluate student performance in a real work environment, applying Computer Science knowledge.
- Develop professional, ethical, and teamwork skills in a business context.
- Ensure that the activities performed are aligned with the degree program objectives.

6. COMPETENCES

AG-C09) Design and Development of Solutions: Designs, implements, and evaluates solutions for complex computing problems. (Assessment)

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

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

AG-C02) Ethics: Applies ethical principles and commits to professional ethics and the standards of professional computing practice. (Assessment)

AG-C06) Life-long Learning: Recognizes the importance of continuous learning and adaptation to new technologies. (Assessment)

AG-C05) Project Management: Applies management principles in computing to manage projects. (Usage)

AG-C01) The Professional and the World: Analyzes and evaluates the impact of solutions to complex computing problems on the sustainable development of society. (Usage)

7. TOPICS

Unit 1: Performance Evaluation in Work Environment (48 hours)	
Competences Expected: AG-C02,AG-C04,AG-C05,AG-C09	
Topics	Learning Outcomes
• Student integration into a professional work team. • Application of technical knowledge in real projects. • Evaluation of ethical and professional competencies in the work environment. • Presentation of reports and feedback from the company and university.	• Demonstrate technical skills in a real work environment [Evaluar]. • Apply ethical and professional principles in their activities [Evaluar]. • Work effectively in teams and communicate professionally [Evaluar].
Readings : [Edu22], [Soc21]	

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

[Soc21] IEEE Computer Society. *Prácticas Profesionales en Computación: Ética y Gestión*. IEEE Press, 2021.

[Edu22] Comité de Educación de la ACM. *Guía para Prácticas Pre-profesionales Exitosas en Ciencia de la Computación*. Tech. rep. Association for Computing Machinery, 2022.