

# National University of Engineering (UNI)

School of Computer Science Syllabus 2026-I

### 1. COURSE

CS400FCCS. Pre-professional internships (Mandatory)

### 2. GENERAL INFORMATION

2.1 Course : CS400FCCS. Pre-professional internships

**2.2 Semester** :  $9^{th}$  Semester

**2.3** Credits : 2

2.4 Horas : 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 Prerrequisites : 110Cr

#### 3. PROFESSORS

Meetings after coordination with the professor

## 4. INTRODUCTION TO THE COURSE

This course enables students to apply knowledge acquired during their academic training in a real work environment, under the supervision of a company and the university. Professional internships are essential to develop technical, ethical, and teamwork competencies, ensuring students gain hands-on experience in projects related to Computing.

#### 5. GOALS

- Evaluate student performance in a real work environment, applying Computing principles.
- Develop professional, ethical, and teamwork skills in an industry setting.
- Ensure internship activities align with the program's learning outcomes.

### 6. COMPETENCES

- 1) Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions. (Assessment)
- AG-C08) Problem Analysis: Identifies, formulates, and analyzes complex computing problems. (Assessment)
- 3) Communicate effectively in a variety of professional contexts.. (Assessment)
- AG-C04) Communication: Communicates effectively in complex computing activities. (Assessment)
- 4) Recognize professional responsabilities and make informed judgments in computing practice based on legal and ethical principles. (Usage)
- AG-C02) Ethics: Applies ethical principles and commits to professional ethics and standards of computing practice. (Usage)
- AG-C06) Lifelong Learning: Recognizes the importance of continuous learning and adapting to new technologies. (Usage)

## 7. TOPICS

<ul> <li>Application of technical skills in real-world projects.</li> <li>Assessment of ethical and professional conduct.</li> <li>Properties and feedback from the company and unit</li> </ul>	Unit 1: Performance Evaluation in Professional Settings (48 hours)	
<ul> <li>Integration into a professional work team.</li> <li>Application of technical skills in real-world projects.</li> <li>Assessment of ethical and professional conduct.</li> <li>Demonstrate technical ronment [Evaluar (Assessment of ethical and professional conduct.</li> </ul>	Competences Expected: 4,AG-C02	
<ul> <li>Application of technical skills in real-world projects.</li> <li>Assessment of ethical and professional conduct.</li> <li>Properties and feedback from the company and unit</li> </ul>		
versity.  Readings: [Edu22], [Soc21]  • Collaborate effectively professionally [Evaluation of the company and uniform the company and uniform professionally [Evaluation of the company and uniform professional of the company and unifor	ofessional principles in their ment)].	

# 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*. Manual de buenas prácticas para entornos laborales en TI. IEEE Press, 2021.
- [Edu22] Comité de Educación de la ACM. Guía para Prácticas Pre-profesionales Exitosas en Ciencia de la Computación. Tech. rep. Documento oficial con estándares para prácticas en computación. Association for Computing Machinery, 2022. URL: https://www.acm.org/education.