



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

1. COURSE

CS404. Research Workshop (Mandatory)

2. GENERAL INFORMATION

2.1 Course	: CS404. Research Workshop
2.2 Semester	: 10 th Semester
2.3 Credits	: 3
2.4 Horas	: 1 HT; 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	: CS403. Capstone Project II. (9 th Sem)

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

This course aims to enable students to properly complete their thesis draft.

5. GOALS

- For the student to complete this course with their thesis developed with sufficient quality for immediate defense.
- For the student to formally present the thesis draft to the faculty authorities.
- The deliverables for this course are:

Midterm: Progress of the thesis project including in the document: introduction, theoretical framework, state-of-the-art, proposal, analysis and/or experiments, and updated bibliography.

Final: Complete thesis document ready for defense within no more than fifteen days.

6. COMPETENCES

- 1) Analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions. (Assessment)

AG-C07) Computing Knowledge: Applies appropriate knowledge of mathematics, science, and computing. (Assessment)

- 2) Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline. (Assessment)

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

- 4) Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles. (Assessment)

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

- 5) Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline. (Assessment)

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

6) Apply computer science theory and software development fundamentals to produce computing-based solutions. (Assessment)

AG-C12) Applies computer science theory and software development fundamentals to produce computer-based solutions. (Assessment)

7. TOPICS

Unit 1: Writing the Undergraduate Thesis Draft (60 hours)	
Competences Expected: 1,2,4,5,6,AG-C02,AG-C03,AG-C07,AG-C09,AG-C12	
Topics	Learning Outcomes
<ul style="list-style-type: none">• Writing and correction of the undergraduate thesis work	<ul style="list-style-type: none">• Completed experimental part (if appropriate for the project) [Evaluar]• Verify that the document complies with the program's thesis format [Evaluar]• Delivery of the finalized thesis draft considered ready for public defense (approval requirement) [Evaluar]
Readings : [IEE08], [ACM08], [Cit08]	

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

- [ACM08] ACM. *Digital Libray*. <http://portal.acm.org/dl.cfm>. Association for Computing Machinery, 2008.
- [Cit08] CiteSeer.IST. *Scientific Literature Digital Libray*. <http://citeseer.ist.psu.edu>. College of Information Sciences and Technology, Penn State University, 2008.
- [IEE08] IEEE-Computer Society. *Digital Libray*. <http://www.computer.org/publications/dlib>. IEEE-Computer Society, 2008.