



## National University of Engineering (UNI)

School of Computer Science  
Syllabus 2024-II

### 1. COURSE

CS404. Research Workshop (Mandatory)

### 2. GENERAL INFORMATION

|                            |   |
|----------------------------|---|
| 2.1 Course                 | : CS404. Research Workshop                            |
| 2.2 Semester               | : 10 <sup>th</sup> Semester.                          |
| 2.3 Credits                | : 4   |
| 2.4 Horas                  | : 8 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 III. (10 <sup>th</sup> Sem) |

### 3. PROFESSORS

Meetings after coordination with the professor

### 4. INTRODUCTION TO THE COURSE

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

### 5. GOALS

- That the student completes this course with his thesis elaborated in sufficient quality as for an immediate support.
- That the student formally present the draft dissertation before the authorities of the faculty
- The deliverables of this course are:

**Partial:** Advancement of the thesis project including in the document: introduction, theoretical framework, state of the art, proposal, analysis and / or experiments and solid bibliography.

**Final:** Full thesis document and ready to support in a period of 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)
- 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)
- 3) Communicate effectively in a variety of professional contexts.. (Assessment)
- 4) Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles. (Assessment)
- 5) Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline. (Assessment)
- 6) Apply computer science theory and software development fundamentals to produce computing-based solutions. (Assessment)
- 7) Develop computational technology for the well-being of all, contributing with human formation, scientific, technological and professional skills to solve social problems of our community. (Assessment)

## 7. TOPICS

| Unit 1: Escritura del Borrador del trabajo de final de carrera (tesis) (60 hours)                     |   |
|---|---|
| Competences Expected:   |   |
| Topics  | Learning Outcomes   |
| <ul style="list-style-type: none"><li>• Writing and correction of the work of end of career</li></ul> | <ul style="list-style-type: none"><li>• Experimental part completed (if appropriate to the project) [Evaluar]</li><li>• Verify that the document complies with the thesis format of the course [Evaluar]</li><li>• Delivery of the completed thesis draft and considered ready for public support (approval requirement)[Evaluar]</li></ul> |
| Readings : [IEE08], [Ass08], [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

- [Ass08] Association for Computing Machinery. *Digital Library*. <http://portal.acm.org/dl.cfm>. Association for Computing Machinery, 2008.
- [Cit08] CiteSeer.IST. *Scientific Literature Digital Library*. <http://citeseer.ist.psu.edu>. College of Information Sciences and Technology, Penn State University, 2008.
- [IEE08] IEEE-Computer Society. *Digital Library*. <http://www.computer.org/publications/dlib>. IEEE-Computer Society, 2008.