



## National University of Engineering (UNI)

School of Artificial Intelligence

Syllabus 2024-I

### 1. COURSE

CS403. Final Project II (Mandatory)

### 2. GENERAL INFORMATION

2.1 Course	:	CS403. Final Project II
2.2 Semester	:	9 <sup>th</sup> Semester.
2.3 Credits	:	3
2.4 Horas	:	2 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	:	CS402. Capstone Project I. (8 <sup>th</sup> Sem)

### 3. PROFESSORS

Meetings after coordination with the professor

### 4. INTRODUCTION TO THE COURSE

This course aims at the student to conclude his thesis project.

### 5. GOALS

- That the student is in the capacity to formally present his thesis project with the theoretical framework and complete bibliographic survey.
- That the student master the state of the art of his area of research.
- The deliverables of this course are:

**Avance parcial:** Thesis plan progress including motivation and context, problem definition, objectives, schedule of activities up to the final thesis project and the state of the art of the topic addressed.

**Final:** Complete thesis plan and advancement of Thesis including theoretical framework chapters, related works and preliminary (formal or statistical) results oriented to your thesis topic.

### 6. COMPETENCES

- 1) Analizar un problema computacional complejo y aplicar los principios computacionales y otras disciplinas relevantes para identificar soluciones. (**Evaluar**)
- 2) Diseñar, implementar y evaluar una solución basada en computación para cumplir con un conjunto determinado de requisitos computacionales en el contexto de las disciplinas del programa. (**Evaluar**)
- 3) Comunicarse efectivamente en diversos contextos profesionales. (**Evaluar**)
- 4) Reconocer las responsabilidades profesionales y hacer juicios informados en el campo profesional de computación con principios éticos. (**Evaluar**)
- 5) Funcionar efectivamente como miembro o líder de un equipo involucrado en actividades apropiadas a la disciplina del programa. (**Evaluar**)
- 6) Aplicar la teoría de la computación y los fundamentos del desarrollo de software para producir soluciones basadas en computación. (**Evaluar**)
- 7) Desarrollar tecnología computacional buscando el bien común, aportando con formación humana, capacidades científicas, tecnológicas y profesionales para solucionar problemas sociales de nuestro entorno. (**Evaluar**)

## 7. TOPICS

Unit 1: Thesis project (30 hours)	
Competences Expected:	
Topics	Learning Outcomes
<ul style="list-style-type: none"> <li>• Thesis project.</li> </ul>	<ul style="list-style-type: none"> <li>• Description of the format used by the University for the thesis[Evaluat]</li> <li>• Conclude the thesis project plan[Evaluat]</li> <li>• Present the state of the art thesis topic(50%)[Evaluat]</li> </ul>
Readings : [IEE08], [Ass08], [Cit08]	

Unit 2: Thesis progress (30 hours)	
Competences Expected:	
Topics	Learning Outcomes
<ul style="list-style-type: none"> <li>• Thesis Progress.</li> </ul>	<ul style="list-style-type: none"> <li>• Description of the format used by the University for the thesis[Evaluat]</li> <li>• Conclude the chapter of the theoretical framework of the Thesis[Evaluat]</li> <li>• Complete the chapter on related works(35%)[Evaluat]</li> <li>• Plan, develop and present results (formal or statistical) of experiments oriented to your thesis topic (35%)[Evaluat]</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 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.