



National University of Engineering (UNI)

School of Computer Science
Syllabus 2024-II

1. COURSE

CS393. Information systems (Mandatory)

2. GENERAL INFORMATION

- 2.1 Course : CS393. Information systems
- 2.2 Semester : 6th Semester.
- 2.3 Credits : 4
- 2.4 Horas : 2 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 : CS291. Software Engineering I. (5th Sem)

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

Analyze techniques for the correct implementation of scalable, robust, reliable and efficient information systems in organizations.

5. GOALS

- Implement correctly (scalable, robust, reliable and efficient) Information Systems in organizations.

6. COMPETENCES

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

7. TOPICS

| Unit 1: Introduction (15 hours) | |
|---|---|
| Competences Expected: | |
| Topics | Learning Outcomes |
| <ul style="list-style-type: none">• Introduction to information management.• Software for information management.• Technology for information management. | <ul style="list-style-type: none">• Correctly apply technology for information management [Evaluar] |
| Readings : [Som17], [PM15], [LL17] | |

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|---|--|
| Unit 2: Strategy (15 hours) | |
| Competences Expected: | |
| Topics | Learning Outcomes |
| <ul style="list-style-type: none"> • Strategy for information management. • Strategy for knowledge management • Strategy for information system. | <ul style="list-style-type: none"> • Apply and evaluate correctly management strategies [Evaluar] |
| Readings : [Som17], [PM15] | |

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| Unit 3: Implementation (15 hours) | |
| Competences Expected: | |
| Topics | Learning Outcomes |
| <ul style="list-style-type: none"> • Management Information Systems Development. • Change management • Information Architecture | <ul style="list-style-type: none"> • Implement and correctly evaluate implementation strategies [Evaluar] |
| Readings : [Som17], [PM15] | |

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

- [PM15] Roger S. Pressman and Bruce Maxim. *Software Engineering: A Practitioner's Approach*. 8th. McGraw-Hill, Jan. 2015.
- [LL17] Kenneth C. Laudon and Jane P. Laudon. *Management Information Systems: Managing the Digital Firm*. 15th. Pearson, Mar. 2017.
- [Som17] Ian Sommerville. *Software Engineering*. 10th. Pearson, Mar. 2017.