

## 1. COURSE

CS393. Information systems (Mandatory)

## 2. GENERAL INFORMATION

- 2.1 Credits : 4  
 2.2 Theory Hours : 2 (Weekly)  
 2.3 Practice Hours : 2 (Weekly)  
 2.4 Duration of the period : 16 weeks  
 2.5 Type of course : Mandatory  
 2.6 Modality : ■FaceToFace■  
 2.7 Prerequisites : CS291. Software Engineering I. (5<sup>th</sup> 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. SPECIFIC COMPETENCES

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## 8. TOPICS

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

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

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

## 9. WORKPLAN

### 9.1 Methodology

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

### 9.2 Theory Sessions

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

### 9.3 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.

## 10. EVALUATION SYSTEM

\*\*\*\*\* EVALUATION MISSING \*\*\*\*\*

## 11. BASIC BIBLIOGRAPHY

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