



**National University of Engineering (UNI)**  
School of Cybersecurity  
Syllabus 2024-II

**1. COURSE**

CS365. Evolutionary Computing (Mandatory)

**2. GENERAL INFORMATION**

- 2.1 Course : CS365. Evolutionary Computing
- 2.2 Semester : 10<sup>th</sup> 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 : CS262. Machine learning. (7<sup>th</sup> Sem)

**3. PROFESSORS**

Meetings after coordination with the professor

**4. INTRODUCTION TO THE COURSE**

Write justification for this course here ...

**5. GOALS**

- Write your first goal here.
- Write your second goal here.
- Just in case you need more goals write them here

**6. COMPETENCES**

- a) An ability to apply knowledge of mathematics, science. (Familiarity)

**7. TOPICS**

<b>Unit 1: title for the unit goes here (5 hours)</b>	
<b>Competences Expected: a</b>	
<b>Topics</b>	<b>Learning Outcomes</b>
<ul style="list-style-type: none"><li>• Topic1</li><li>• Topic2</li><li>• Topic3</li></ul>	<ul style="list-style-type: none"><li>• Learning outcome1 [Levelforthislearningoutcome].</li><li>• Apply computing in complex problems [Usar].</li><li>• Create a search engine [Evaluar].</li><li>• Study data structures [Familiarizarse].</li></ul>
<b>Readings : [Bibitem1], [Bibitem2]</b>	

<b>Unit 2: another unit goes here (1 hours)</b>	
<b>Competences Expected:</b>	
<b>Topics</b>	<b>Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Topic1</li> </ul>	<ul style="list-style-type: none"> <li>• Learning outcome xyz [Levelforthislearningoutcome].</li> </ul>
<b>Readings : [Bibitem3], [Bibitem1]</b>	

## 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