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

1. COURSE

CS351. Topics in Computer Graphics (Elective)

2. GENERAL INFORMATION

2.1 Course	:	CS351. Topics in Computer Graphics
2.2 Semester	:	9^{th} 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	:	Elective
2.7 Learning modality	:	Face to face
2.8 Prerrequisites	:	CS251. Computer graphics . (7^{th} Sem)

3. PROFESSORS

Meetings after coordination with the professor

4. INTRODUCTION TO THE COURSE

In this course you can delve into any of the topics Mentioned in the area of Graphics Computing (Graphics and Visual Computing - GV).

This course is designed to perform some advanced course suggested by the ACM / IEEE curriculum. [**Foley13**; **Hearn90**]

5. GOALS

- That the student uses computer techniques Graphs that involve complex data structures and algorithms.
- That the student apply the concepts learned to create an application about a real problem.
- That the student investigate the possibility of creating a new algorithm and / or new technique to solve a real problem

6. COMPETENCES

1) ()

6) Apply security principles and practices to maintain operations in the presence of risks and threats.()

7. TOPICS

Unit 1: Advanced Topics on Computer Graphics (0 hours)	
Competences Expected:	
Topics	**Learning Outcomes**
• CS355. Advanced Computer Graphics • CS356. Computer animation • CS313. Geometric Algorithms • CS357. visualization • CS358. Virtual reality • CS359. Genetic algorithms	• Advanced Topics on Computer Graphics
Readings : [**Soars022S**], [**Soars022W**], [**Soars022T**], [**Cambridge06**], [**MacGrew99**]	

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