RÉPUBLIQUE FRANÇAISE
Liberté
Égalité
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université
angers

Virtual reality

SCHOOL
Polytech Graduate School of Engineering

CAMPUS
Belle-Beille

LEVEL
Engineering 4th year

OPEN TO EXCHANGE STUDENTS
Yes

SEMESTER
Spring (S2)

> **Degree course:** Graduate School of Engineering - Automation and Computer Engineering
> **Teaching unit:** UE 8.3 Génie informatique
> **Course language:** English
> **Duration (hours):** 20
> **ECTS:** 2
> **Teacher(s):** Paul Richard

> **Assessment:**
> **Teaching methods:**

Assessment		Teaching methods				
☒ Continuous assessment		☒ Lecture course	4	hours	☐ Case study	
☐ Final exam		☐ Tutorial course		hours	☐ Project	
		☒ Practical work	16	hours		

COURSE DESCRİPTİON

Advanced virtual reality
Procedural animation techniques
Joint systems and inverse kinematics
Physics modeling and dynamic rendering

OBJECTİVES

Deepen knowledge in virtual reality: advanced animation techniques, development of 3D real-time applications (Unity3D).
Deepen the aspects relating to physical modeling and dynamic rendering (collision detection, behavior, optimization).
Interaction with joint systems and inverse kinematics.

PREREQUİSİTES

Human-computer interaction and virtual reality