universite angers

Human-Computer Interaction and Virtual reality

SCHOOL
Polytech Graduate School of Engineering

CAMPUS
Belle-Beille

LEVEL
3rd year Bachelor's degree

OPEN TO EXCHANGE STUDENTS
Yes

SEMESTER
Spring (S2)

> **Degree course:** Graduate School of Engineering - Automation and Computer Engineering
> **Teaching unit:** UE 6.4 Génie informatique
> **Course language:** English
> **Duration (hours):** 32
> **ECTS:** 1
> **Teacher(s):** Paul Richard

> **Assessment:**
> [X] Continuous assessment
> [ ] Final exam

> **Teaching methods:**
> [X] Lecture course 8 hours
> [ ] Tutorial course hours
> [X] Practical work 24 hours
> [ ] Case study
> [ ] Project

COURSE DESCRİPTİON

Principles of human-computer interaction - - Advanced human-computer interfaces - - Metaphors and interaction techniques - - 3D application programming (Unity3D) -

OBJECTİVES

To address the general principles of human-computer interaction, advanced human-computer interfaces such as 3D interaction devices, natural user interfaces, haptics interfaces and advanced visualization systems. Overview of interaction metaphors and 3D interaction techniques. Programming of 3D real-time application using Unity3D.

PREREQUİSİTES

Basic knowledge in computer programming (C# or C)

SELECTİVE BİBLİOGRAPHY

- Human-Computer Interaction (second edition) par Alan Dix, Janet Finlay, Gregory Abowd and Russell Beale. London, UK : Prentice Hall Europe, 1998, 638 p. - - 3D User Interfaces: Theory and Practice By Doug Bowman, Ernst Kruijff, Joe LaViola, and Ivan Poupyrev, 512 p. Addison Wesley (2004) - - Learning C# Programming with Unity 3D (English Edition), Alex Okita, Taylors and Francis, 2015 -