



June 26th
–
July 9th 2023

COURSE OBJECTIVES

- To explore, design and implement creative and innovative interactions in virtual, augmented and mixed environments
- To understand specific user's needs for dance, music and painting in virtual environments using a CAVE or an HMD
- To build an intuitive experience, with appropriate tools to quickly prototype a 3D environment and design flow of interactions
- To follow well-known principles in 3D UI: guidance and assistance
- To acquire a cultural basis on digital art experience in virtual / augmented reality

TECHNICO-CULTURAL OUTINGS EACH WEDNESDAY AND SATURDAY

- **One day in Paris** : Art Museum Beaubourg, Atelier des lumières and concert at La Maison de Radio France
- **One day in Lille** : Art Museum La Piscine and visit of Lille center (typical historic city)
- **One day in Paris** : Cité de la Musique Philharmonie de Paris, and Paris Festival de Jazz

PROGRAM

Sunday 25th	Monday 26th	Tuesday 27th	Wednesday 28th	Thursday 29th	Friday 30th
Transfer from Roissy airport to Compiègne Welcome at the international residence	3D Interaction in VE	Perception and action	Technico-cultural outing	From interaction to presence : experiencing art	VR Interfaces
	Lunch	Lunch		Lunch	Lunch
	CAVE platform visit	Designing a creative interaction		Designing a creative interaction	Designing a creative interaction

Saturday 1st	Monday 3rd	Tuesday 4th	Wednesday 5th	Thursday 6th	Friday 7th
Technico-cultural outing	3D real time rendering	Dancing with VR interfaces	Technico-cultural outing	Sound music movement interactions	Natural user interfaces and intelligent VE
	Lunch	Lunch		Lunch	Lunch
	Developing a creative interaction	Developing a creative interaction		Developing a creative interaction	Testing a creative interaction Open experimentations
				Written exam	Final Banquet

PREREQUISITES

- Bachelor or master degree in Computer sciences or art
- Good skills in programming in C++/C#

COURSE ASSESSMENT

This summer school allows the student to obtain 3 ECTS credits. Final grade is calculated from three exams / projects, with the following breakdown:

- Theoretical knowledge examination (1h, multiple choice quiz) (30%)
- Discovery report (1-2 pages) (10%)
- Supervised team project on virtual reality (60%)

WHO WILL BE YOUR INSTRUCTOR ?

Indira Thouvenin obtained her PhD in Biophysics at University UPMC, Paris in 1989. Since 2001 she is a Professor at CNRS Heudiasyc Lab, University of Technology Compiègne, France. Her work focuses on adaptive feedback between human and system, in virtual, augmented, mixed environments, considering the user's state, attention and intention.



Indira Thouvenin

More information and Application procedure on the UTC website, international page : <https://www.utc.fr/en/international-relations/international-mobility/incoming-mobility/>

Deadline // applications must be received by **April 30, 2023**

Cost // **2500€*** including accommodation into the Compiègne Business University Residence

* To be eligible for the exchange student rate, a partnership must exist between your university and UTC. Kindly contact your mobility coordinator for more information.

Contacts

Gaëlle DACQMINE

Associate Director for International Relations
International Affairs Division
gaelle.dacqmine@utc.fr

www.utc.fr

Université de Technologie de Compiègne
rue du docteur Schweitzer
CS 60319
60203 Compiègne Cedex France

