UCMT ÉCOLE
SUPÉRIEURE COÉVOLUTION MANAGEMENT
ET TECHNOLOGIE

SUMMER
SCHOOL

in Visual Computing and Artificial Intelligence

3 JULY – 21 JULY, 2023

A 3–WEEK PROGRAM IN ENGLISH
TOPICS:

Visual Computing
Artificial Intelligence
French as a Foreign Language

10 ECTS

CY CERGY PARIS UNIVERSITY

Located in Greater Paris and in Pau, CY Tech is primarily an Engineering Graduate School.

It has earned the "Grande Ecole" status, the highest recognition stated by the French Ministry of Higher Education & Research. CY Tech is also a member of the "Conférence des Grandes Ecoles" (CGE), a French association that gathers elite higher education institutions, which meet strict criteria regarding the recruitment process, educational approach, international and corporate network.

Accessible after the completion of a secondary education diploma or through a dedicated post-secondary preparatory class, it delivers a Master's degree in these four fields:

• Applied Mathematics

• Computer Science

• Civil Engineering

• Biotechnology & Chemistry.

Two university departments have been incorporated into CY Tech: the Institute of Sciences

& Techniques (IST) and the Institute of Economics & Management (IEG), which broadens our

overall course delivery in these specific areas.

OUR MISSION
OUR VALUES

The mission of CY Tech is to meet the rising expectations of both students and industry.

Through innovative programs and faculty exchanges, we seek to provide our students with an ever-increasingly attractive educational experience. Students can choose undergraduate and graduate programs in both Engineering and Management disciplines.

Students also acquire valuable knowledge and global managerial skills through internships and study abroad experiences with universities worldwide. Since CY Tech's inception, the institution has gradually adapted itself to the evolving economy that offers an extensive and diversified curriculum that meets a contemporary vision of today's world.

WHAT MAKES
CY TECH DIFFERENT?

ONE AMBITIOUS VISION

CY, defined as a university of diversity, society-oriented and of international standing, seeks to educate new generations in the complex challenges of a globalized society in tune with the sustainable development objectives, academic excellence and quality student experience.

A HIGH-PROFILE RANKING STATUS

National and international rankings, recognized by many specialized media and websites, show once again that CY course offerings are considered as one of the best in the fields of **Engineering, Management, Mathematics & Finance, internationalization and professional integration.**

CUTTING-EDGE RESEARCH & TECHNOLOGY TRANSFER ACTIVITIES

Research and technology transfer are at the heart of the dynamics of CY Tech, whose missions contribute to the appropriation of scientific knowledge.

CY Tech asserts its vision and pursues an active policy in technology transfer innovation of its research activities, conducted by recognized full-time researchers within its fourteen laboratories and five Open Labs in modeling and experimental sciences.

A WIDE RANGE OF FACILITIES OFFERED AT THE CAMPUS

- Four libraries with over 2 million publi cations
- Four university residences and private housing facilities
- Student sports facilities with over 30 individual & team activities
- Four student restaurants, four cafeterias
- 47 student associations
- A full package of cultural activities including a "cultural Pass voucher", a special pass which offers discounts to theaters & cinemas bookings and to other cultural events in Greater Paris

"BIENVENUE EN FRANCE" LABEL

This national recognition, awarded by our university, enhances our expertise dedicated to international students, mainly in the following areas:

- Quality and accessibility of information & reception facilities
- Tutorial support services
- Housing facilities and campus life development
- Post-graduate career development and alumni services

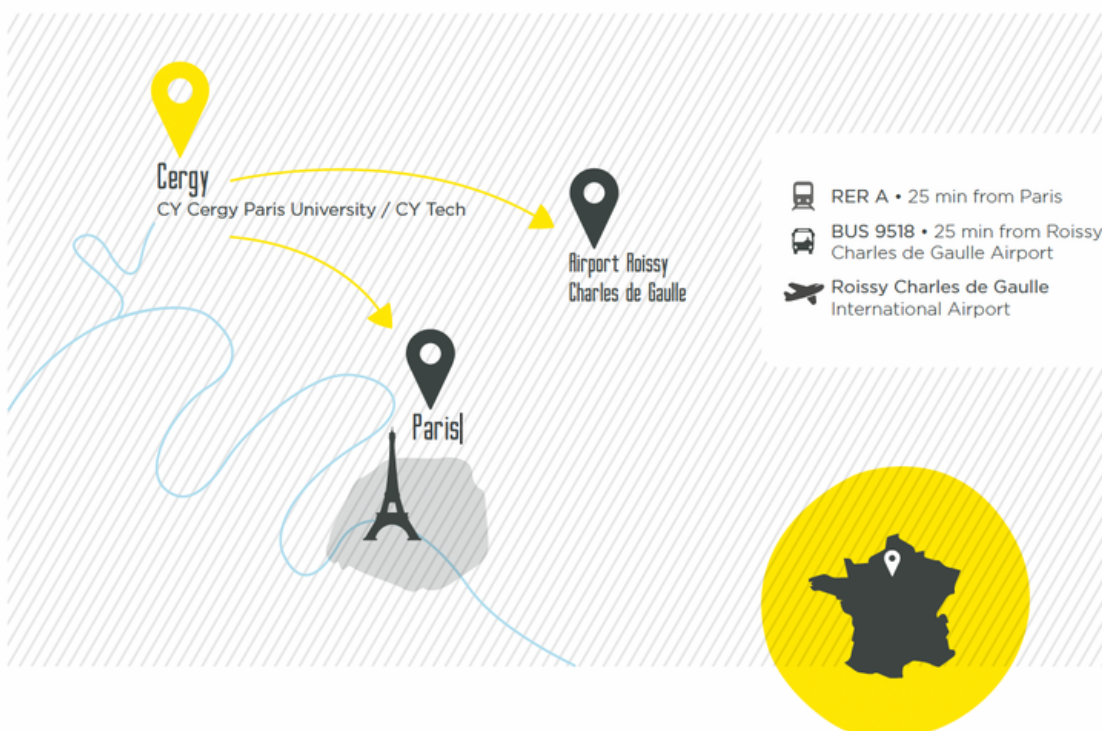# HAVE YOU EVER STUDIED IN EUROPE?

CY Tech provides you with an exceptional opportunity to combine both advanced academic learning and a memorable French cultural experience.

The Paris Region has much to offer to international students, such as history, art, culture on top of its academic & scientific excellence. It is a unique place to learn, discover, study,engage and exchange, a place where dialogue,fraternity, freedom and creativity will always prevail.
Paris has been listed in the QS best student cities ranking for many years. At only 25 minutes from the world famous Les Champs Elysées, or La Défense (one of the major futuristic skyscraper- packed, business districts in Europe) stands the city of Cergy-Pontoise.

The historic heart of Cergy-Pontoise thrives on a prestigious past which has often found itself at the crossroads of the history of France itself, as when the Royal Court resided there. Its fame was extended through the long residency of Camille PISSARRO, who painted the varied landscapes of the town and its nearby countryside in numerous works, which are now to be found in the greatest museums in the world.Blessed with rich heritage, Cergy-Pontoise became on March 30th, 2006, a member of the national network of towns and lands of Art and History.

This label, delivered by the Ministry of Culture and Communication, embodies a policy aiming to promote heritage and architecture. Today, Cergy is known as a vibrant student hub.

Cergy
CY Cergy Paris University / CY Tech

Airport Roissy Charles de Gaulle

Paris

RER A • 25 min from Paris
BUS 9518 • 25 min from Roissy Charles de Gaulle Airport
Roissy Charles de Gaulle International Airport

A THREE–WEEK PRORAM IN ENGLISH:

3 July - 21 July, 2023

Topic:
Visual Computing
Artificial Intelligence
French as a Foreign Language

Number of ECTS: 10

Number of US Credits: 5

Number of teaching & supervised project hours: 63 hours

Course details	
Lectures	**63 hours** - including face-to-face & supervised project in VC and AI
Visual Computing	**21 hours** (9 teaching hours + supervised poject)
Artificial Intelligence	**21 hours** (9 teaching hours + supervised poject)
French as a Foreign Language	**21 hours** (7 three-hour sessions)

Syllabus

VISUAL COMPUTING (9 hours + supervised project)
• Mathematical and algorithmic fundamentals of 3D rendering (3 hours)
• OpenGL and the shader-based graphics pipeline (3 hours)
• Introduction to the software tools Blender and Unity (3 hours)

ARTIFICIAL INTELLIGENCE (9 hours + supervised project)
• Theoretical concepts of Deep Learning (3 hours)
• Deep Learning for image processing (3 hours)
• Deep Learning for Natural language processing (3 hours)

SUPERVISED PROJECT (24 hours)
In this project we will apply your new skills in both Visual Computing and Artificial Intelligence. You will use Deep Learning algorithms to detect elements in an image or video stream in order to interact with your own virtual 3D environment.

FRENCH AS A FOREIGN LANGUAGE (21 hours)
In class, emphasis is placed on oral practice and interactive learning activities in a real-life approach to the language. It will include simple routine tasks, common polite phrases and exchange of information in order to encourage students to develop their communication skills in daily life situations.

Objectives

Visual Computing is the generic term covering all computer science disciplines dealing with images, including computer graphics and computer vision, for important application
domains such as digital prototyping, robotics or video games.
In this course, you will understand the basics of rendering a 3D scene, and learn how to create fully interactive 3D environments using popular professional tools.

Artificial Intelligence is a historical field of computer science that has been completely revolutionized by the emergence of deep learning in the last decade. Applications to image processing and natural language processing now offer very interesting and powerful tools. In this course, we will illustrate some examples of such applications, mixing theoretical and practical lessons.

French as a Foreign Language This course will enable students to start or improve their language skills in French. It is specifically designed to help them acquire language abilities and essential communicative skills according to their level.

Admission requirements

THIS PROGRAM IS OPEN TO:

• Undergraduate (18 years of age as a minimum criterion) and graduate Engineering students

• Native and non-native English speakers (proficiency level: IELTS 6.0 or equivalent)

• Applicants with relevant knowledge in Engineering-oriented subjects.

TOEIC: 800 IBT TOEFL: 80 IELTS: 6.0
French Proficiency: no prerequisite
French as a Foreign Language: Instruction included in CY Tech program

APPLICATION PROCEDURES

Please contact us directly and submit your application and required documents on the following email address: cytech.international@cyu.fr, as early as possible, and at the latest on May 31st, 2023.

APPLICATION FORM

Further information and the online application form are available
at the following email address: sunliping@ucmt.com

Deadline for registration May 31st, 2023

ACCOMMODATION

You will be able to stay at the "Résidence Jean Baptiste La Salle" or at the «KLEY Cergy résidence», both located less than a 5-minute walk from CY Tech. Both residences provide internet access, lounge with cable TV, fitness area, secure entrance, launderette, bike parking.

You will be accommodated in a fully furnished room. Town center, restaurants and shops are within easy walking distance from the residences. There are national festivals and music events at this time of the year.

You can also decide to book accommodation in Paris on your own initiative.

Call to Action

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Contact Us

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