

# DESCARTES TOURS

Behind the scenes of a territory of innovation

## Université Gustave Eiffel



### Sense-City

400-sqm climate chamber, the only one of its kind in Europe, to design, prototype and validate full-scale nanosensors for the city of tomorrow.

Equipment of excellence capable of recreating an environment close to the urban environment and validating the concept.



### Test platform

an outstanding ensemble for research to verify the safety and serviceability of bridges and civil engineering structures. Rare facility in Europe: 60 x 10 m test slab, 5 m high and 4 m wide two reaction walls, for multi-axial loading or earthquake-related studies.



### Immersive simulation rooms – LEPSIS (Laboratory for road Operations, Perception, Simulators and Simulations)

carrying out behavioural studies using car, pedestrian and bicycle driving simulators.

## ESIEE Paris – Université Gustave Eiffel

Graduate School of Engineering in Electrical Engineering and Electronics



### Salles blanches

platform dedicated to technological support in micro and nanotechnologies for companies, student training and research. D'une superficie de 650 m<sup>2</sup> en classe d'empoussièrement 100 et 10 000, ces salles disposent de 70 équipements. With a surface area of 650 sqm in dust class 100 and 10,000, these rooms have 70 pieces of equipment. Physical visit for small groups or virtual reality for larger groups.



### TI Innovation Gateway

Europe's first 4.0 library. It allows students to discover examples of electronic systems, exhibited and documented, in dynamic demonstration stands and to borrow the necessary equipment to carry out their projects.



### RF, microwave, optics/photonics and digital communications platform

transverse platform for the characterisation of systems in the Radio Frequency, microwave and optical fields, for digital communications or sensor applications.

## Technical centres



### FCBA - Forest Cellulose Wood Furniture

Industrial technical centre for the wood-forest and furniture sectors. Consultancy, testing, training, certification and research:

- Innovathèque: resource centre for innovative materials,
- Innovation path – virtual reality cube: for companies.



### CSTB - Scientific and Technical Center for Building

Five key activities: research and expertise, evaluation, certification and dissemination of knowledge. Field of competences covering construction products, buildings and their integration in neighbourhoods and cities.

## Laboratories



### ESYCOM Laboratory (Electronics, Communication Systems and Microsystems Laboratory)

Engineering of communication systems, sensors and microsystems.

- Anechoic chambers: unique equipment at the academic level in IDF. Measurement of wave propagation in circuits or lines, and in free space, without echoes. Application: radio, mobile telephony, internet...
- Nanomaterials: depollution of air and water using solar energy.



### LEESU – OCAPI Laboratory (Water Environment Urban Systems, Optimisation of Carbon Cycles)

OCAPI research and action programme - wastewater treatment, full-scale technical implementation of a source separation system with urine recovery.

Highlighting how urine source separation can contribute to a sober, circular and non-polluting approach to urban sanitation.

## Energy transition Institute



### Efficacity

Institute of the city and sustainable development. Joint public/private research platform bringing together 35 partners.

Design of a sustainable city model conceived as a global system and integrating technological, organisational and service innovations.

## Maison de l'Entreprise Innovante

Support for innovative companies



### Incubateur Descartes

a service to help the emergence and to support projects for the creation of innovative companies with high technological or scientific added value. This service has the EU-BIC label. Since 2011, nearly 70 start-ups have been created.



### Fablab Descartes

Digital manufacturing workshop open to all. Providing companies, "makers" and the general public with equipment and technical skills to manufacture their ideas: prototypes, cut-outs, customisation of objects.

Training courses are given to get to grips with the machines as well as workshops to put the training courses into practice.

## Design Thinking, Third party



### d.school@Ecole des Ponts Paristech

a demonstrator of the pedagogies of the future with the ambition to inspire a new generation of training courses in disruptive innovation, using new methods stemming from design thinking.



### La Centrif'

innovation and experimentation, in particular pedagogical and digital. Development of initiatives, experiments, events and training courses for students, academics and professionals. Home to the Grande Ecole du Numérique DigitalU.