POLYTECH®
ORLÉANS
École d'Ingénieurs de l'Université d'Orléans

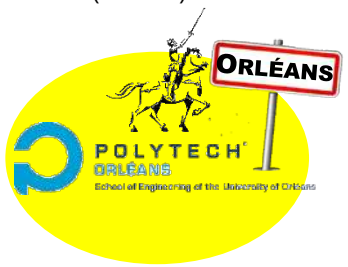
POLYTECH ORLÉANS

THE ENGINEERING SCHOOL OF THE UNIVERSITY OF ORLÉANS, FRANCE

Central location
1 hour south of Paris by train

266 km (165 miles)

120 km (74 miles)



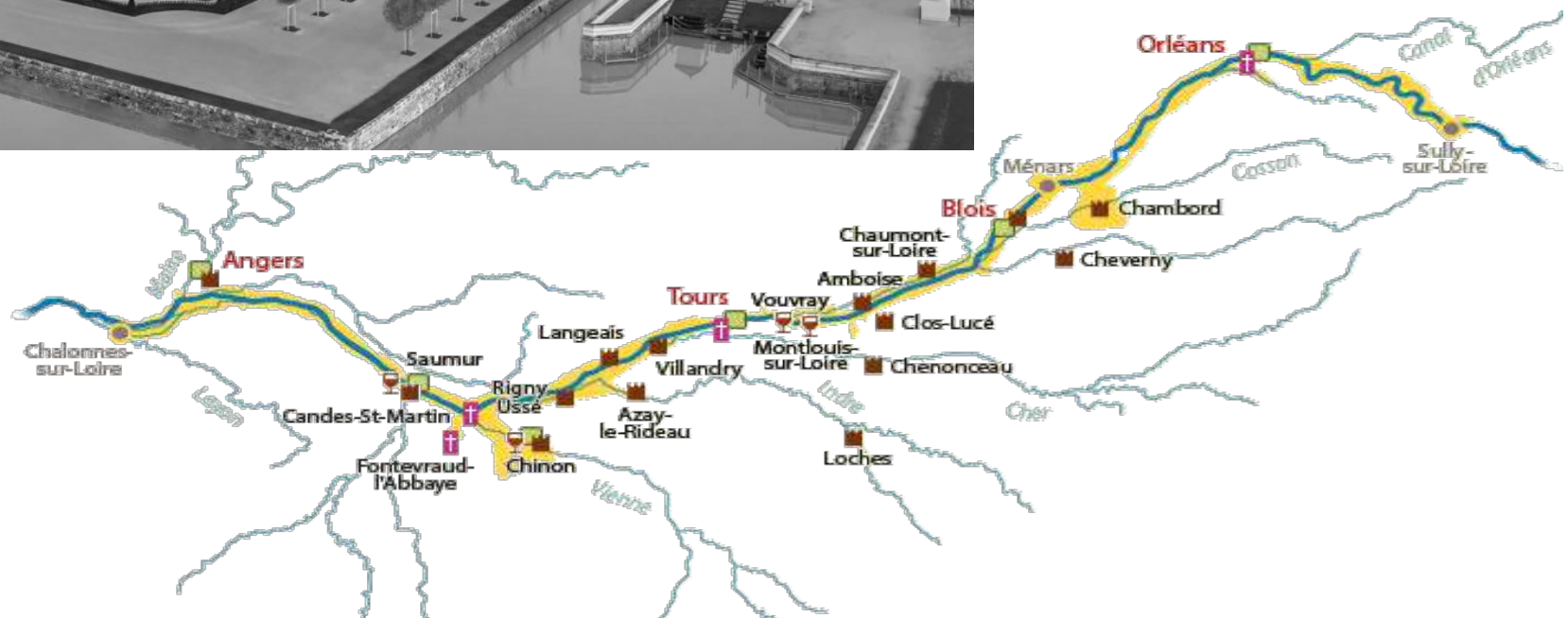
600 km (372 miles)

461 km (286 miles)

758 km (471 miles)

At the heart of the Loire Valley UNESCO World Heritage

Château of Chambord



Located on the campus of the University of Orléans

Founded in 1306

23 000 students
including 2 500 international students
1 200 teaching staff & researchers
800 administrative staff
27 laboratories
5 doctoral schools

5 fields of studies :

- Arts, litterature and languages
- Humanities and social sciences
- Law, Economics and Management
- Sciences, Technology and Health
- Sports and Physical education

Polytech Orléans

The public graduate engineering school of the University of Orléans

1 400	engineering students
280	graduates each year
50	technical and administrative staff
100	professors and researchers
7	associated research institutes

European Accreditation of Engineering Programmes EUR-ACE®

afaq ISO 9001 Qualité AFNOR CERTIFICATION

Cti Commission des Titres d'Ingénieur

CONFERENCE DES GRANDES ECOLES

cdefi Conférence des Directeurs des Écoles Françaises d'Ingénieurs

The POLYTECH Group is a consortium of **Graduate Schools of Science and Engineering** of the French public universities.

The POLYTECH Schools are associated with internationally-renowned science research labs and deliver a **government-accredited, 5-year Master of Science in Engineering**.

French Engineering Excellence ™

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR, DE LA RECHERCHE ET DE L'INNOVATION

CONFÉRENCE DES GRANDES ÉCOLES

La FRENCH TECH

Cti

POLYTECH Group | A National Powerhouse

16 Graduate Schools of Engineering

4 Associate Schools

12 Science & Engineering Fields

100 Majors

18,000 Students enrolled annually

3,900 Graduating Engineers annually

2,500 Internships or Study-Abroad Programs annually

640 PhD Candidates annually

162 Science Research Labs

POLYTECH Offer | Take **Your Pick**

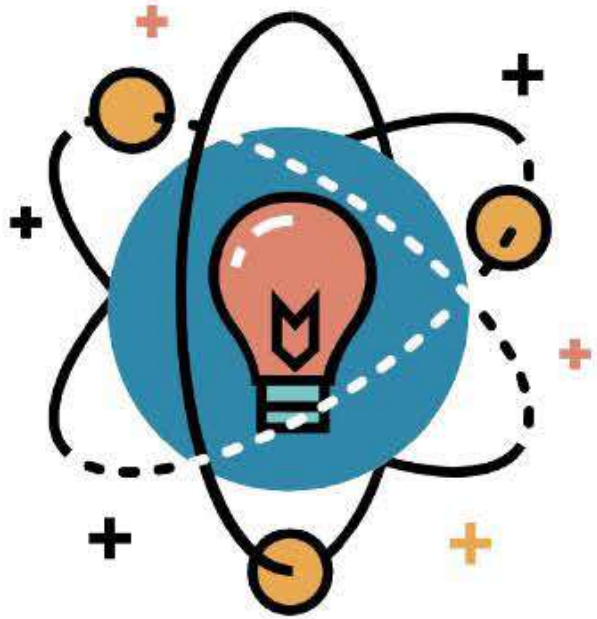
- Applied Mathematics
- Biomedical Engineering, Instrumentation
- Biotechnology, Bioengineering and Food Science
- Civil Engineering
- Computer Science
- Electrical Engineering
- Electronics Engineering
- Energy, Chemical Engineering
- Industrial Engineering
- Materials Science
- Mechanical Engineering
- Water Engineering and Environmental Sciences

12
Fields

100
Majors

3,900
Graduates/year

POLYTECH DNA | **Science**-trained, **Transition-ready** Engineers



SUSTAINABLE DEVELOPMENT GOALS

SCIENCE & SUSTAINABILITY

Engineering studies in France

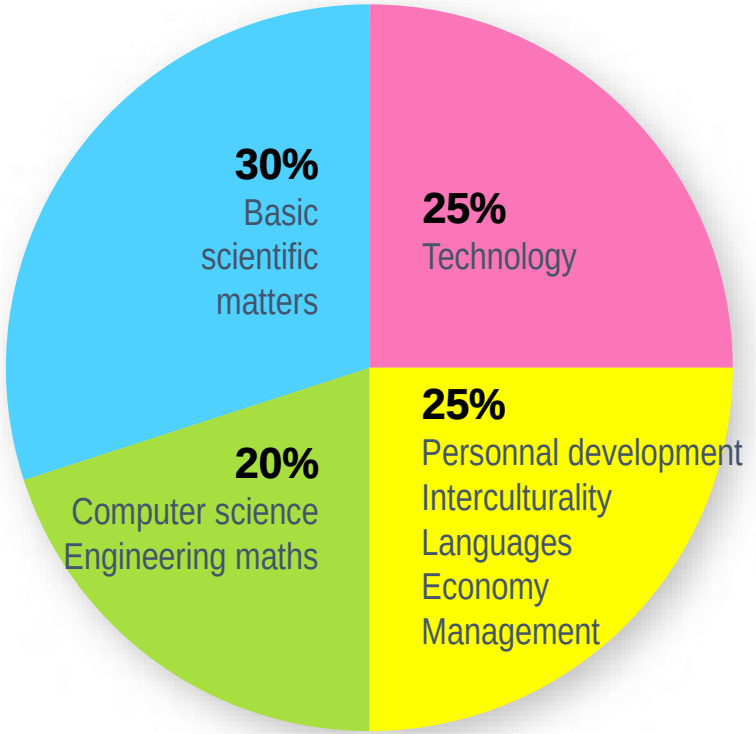
Engineering Master Degree

- Year 5 Master 2
- Year 4 Master 1
- Year 3 Bachelor level

3 years in one engineering department
+
3 compulsory internships (1-2 & 6 months)

- **Preparatory courses 2**
- **Preparatory courses 1**

2 years of preparatory courses



B2 English / French required
Courses taught in French
Courses available in English

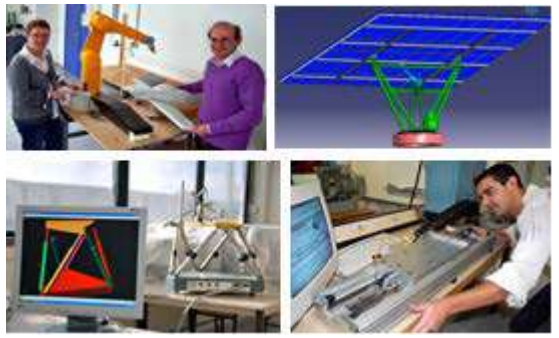
Entry requirements

7 engineering departments at Polytech Orléans

Civil and Geo-environmental Engineering

Engineering Physics and Embedded Systems

Innovations in Design and Materials

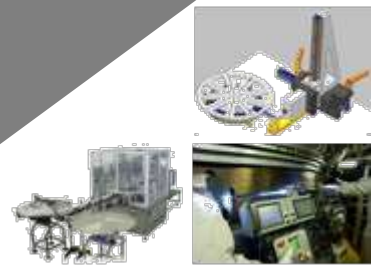


Technologies for Energy, Aerospace and Engine

Industrial Engineering applied to Cosmetics, Pharmacy and Food-processing industries

Smart Building*

Production Management*



Apprenticeship / not open to International students

Incoming and outgoing
Student and staff mobility

Collaborations within Europe

Over 70 signed Erasmus + agreements

Collaborations outside Europe

About 70 signed agreements

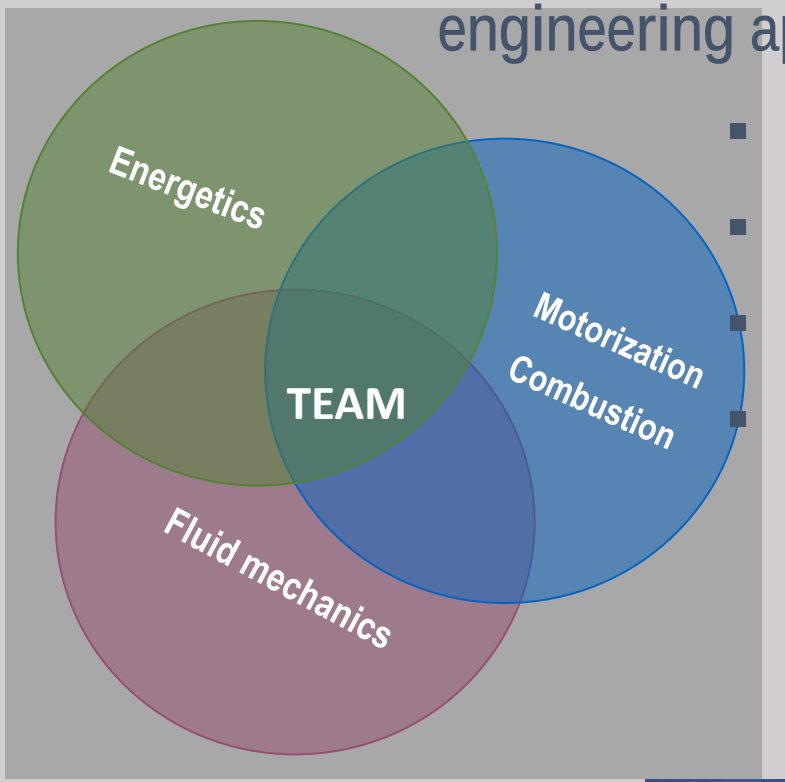
Study periods / Double degrees / Volunteering /

Summer schools / Internships / Wwoofing ...

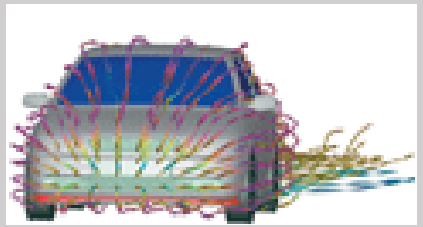
Compulsory international experience to make in order to graduate!

Department TEAM ‘Technologies for Energy, Aerospace and Engine’

Young graduate engineers able to integrate the industrial fields of mechanical engineering applied to energy processes and able to design, test and improve:

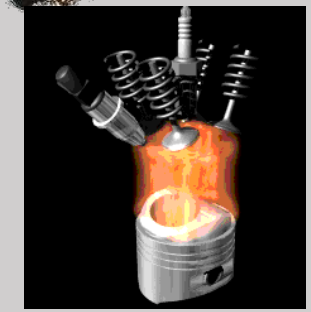


- Engines
- Energy system for power plant or buildings
- Ground or aircraft vehicles
- with a global approach of **energy efficiency and climate impact** while integrating different constraints (standards, economy, cost, sustainability ...)





Keywords:
Energy production/harvesting
Land & Air Transportation

Department GCGE ‘Civil engineering and geo-environment’

To train and to graduate engineers in Civil Engineering, Planning, Construction, Environment

- 3 specializations:
  - Sustainable Construction (COD)
  - Public Works and Planning (TPA)
  - Geo-environment and Sustainable City (GVD)

1800 hours of class work:

Professional Courses

Materials resistance, Sizing of structures, Reinforced concrete, …
Geotechnics, Earthworks, Foundations, Transport infrastructure, …
Geology, Environmental impact of planning, …

School Common Courses

Management, Engineering tools, Culture, English, …
Industrial Projects at School & Professional Experience in companies.

Our partners :

Bouygues construction, Eiffage construction, Vinci construction, Baudin Châteauneuf, …

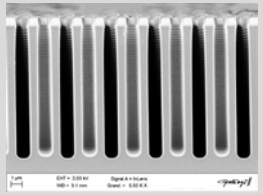
Vinci, Colas, Egis, Eiffage, Eurovia, Ingerop, Arcadis, …

Antea Group, Ginger-CEBTP, Artelia, Fondasol, ORTEC Générale de Dépollution, SETEC, Suez, Veolia, …

Department GPSE 'Engineering physics and embedded systems'

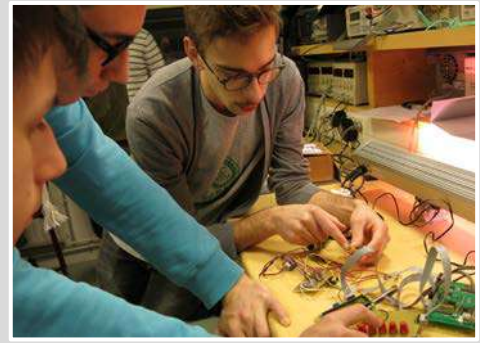
From material processing to embedded systems

Micro & nano technologies



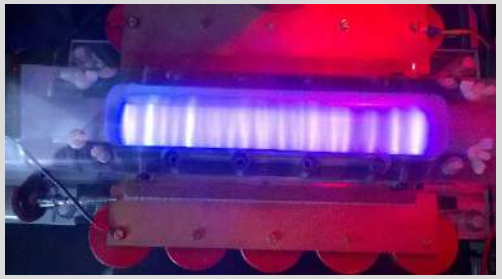
Internet of things

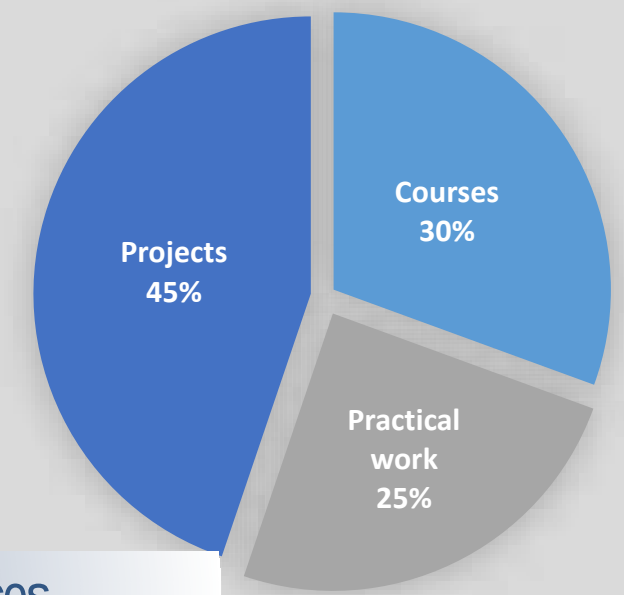
Vision & computing science



Photonic & lighting engineering

Plasma & laser engineering





Technology Facilities: clean room (ISO8), Laser and plasma lab, Fablab, photonics, electronics and computer dedicated rooms for practical work

Employment placement: research engineer, project engineer, process engineer

Join high tech companies for future connected services

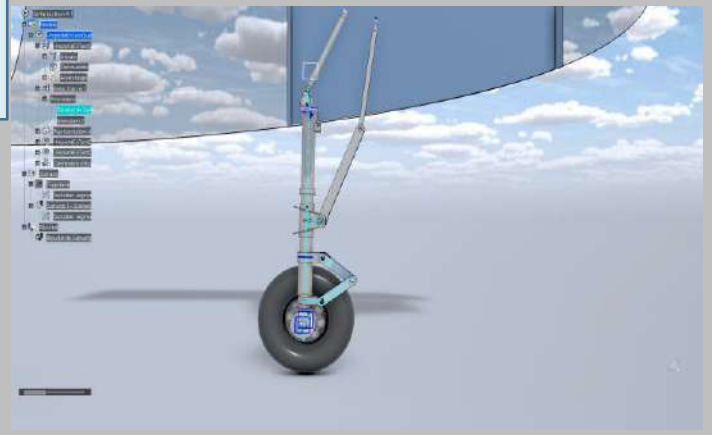
Department ICM 'Innovations in design and materials'

1st & 2nd year

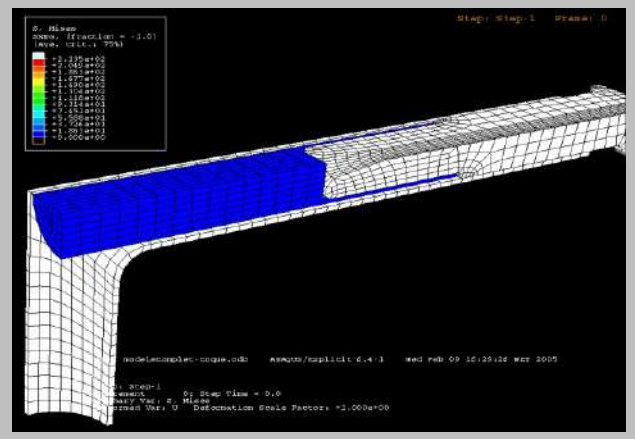
Common skills (design, modelling, simulation, instrumentation and materials)

3rd year

Eco-design of mechatronic systems (EcoSyM)



Multiphysics modelling and simulation (MSP)



Materials of structures (MS)

ENGINEER

Modelling	Design office	Simulation	R&D	Trials

Sectors : Transport (automotive, aeronautics, naval, rail way, agriculture), Energy Production, heavy Industry, mechanical construction, Materials (metallurgy, composites, plastics, ceramics…)

Department GI ‘Industrial Engineering applied to cosmetics, pharmacy and agri-food’

Trains engineers capable of meeting the challenges of manufacturing and industrializing the products of tomorrow in strategic sectors

Professional Courses

Industry 4.0, Supply Chain Management, Quality, Maintenance, Qualification/Validation, Continuous Improvement, LEAN Management, Office and Manufacturing, 6 Sigmas, Health, Safety and Environment, Corporate Social Responsibility

General Subject Courses

Management, Engineering tools, International Culture, English etc.,
Industrial Academic Projects & Professional Experience in companies.

Our partners :

NOVO NORDISK, LOREAL, PUIG, SANOFI, DANONE, MERCK, MARS, GUERLAIN, NOVARTIS, SODEBO, LEO PHARMA, APTAR PHARMA, LVMH, RECKITT BENCKISER, NOVANDIE, CEVA, …

Professional Certifications

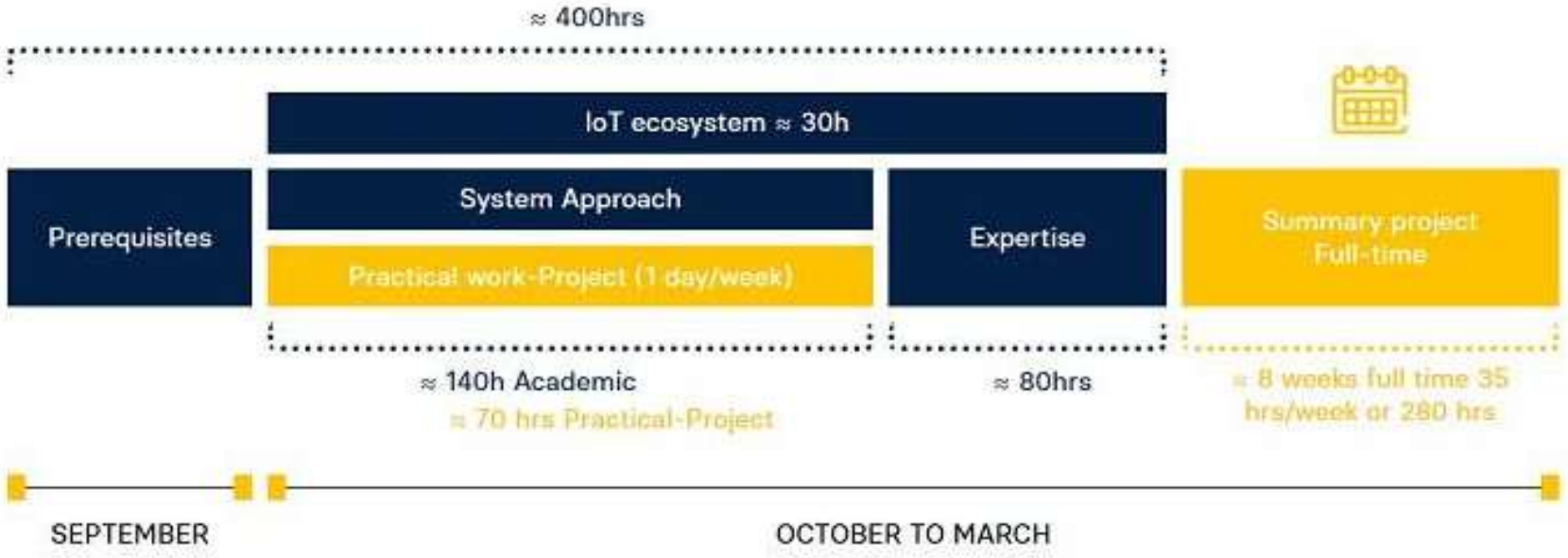
VISAE Pharma

FAPICS FESTO : MFSC

LEAN 6 SIGMAS

CPIM Part 1

Other programme: ‘School of IOT – Internet of Things’



HITACHI
Inspire the Next

ORLÉANS
MÉTROPOLE

Prerequisites

2 x 40 hrs modules out of 4 :

- Mathematics
- IT
- Analogue and digital electronics
- Web and networks

System Approach

7 modules over 140 hrs :

- Architectures and technologies
- Communications
- IoT Design
- Servers and Frameworks
- Smartphones and Tablets
- Databases
- Data Mining

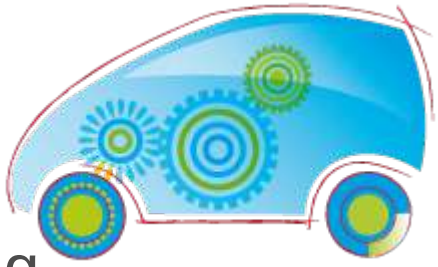
Expertise

1 module over 80 hrs out of 3 :

- Embedded System
- Full-Stack Integration
- Data Science

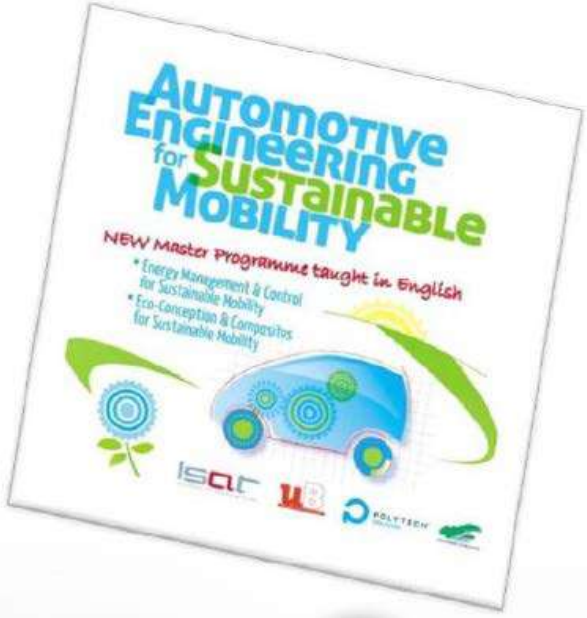
AESM MSc

- Dedicated to non-French students only;
- Entirely taught in English
- Professional purpose in the field of automotive engineering

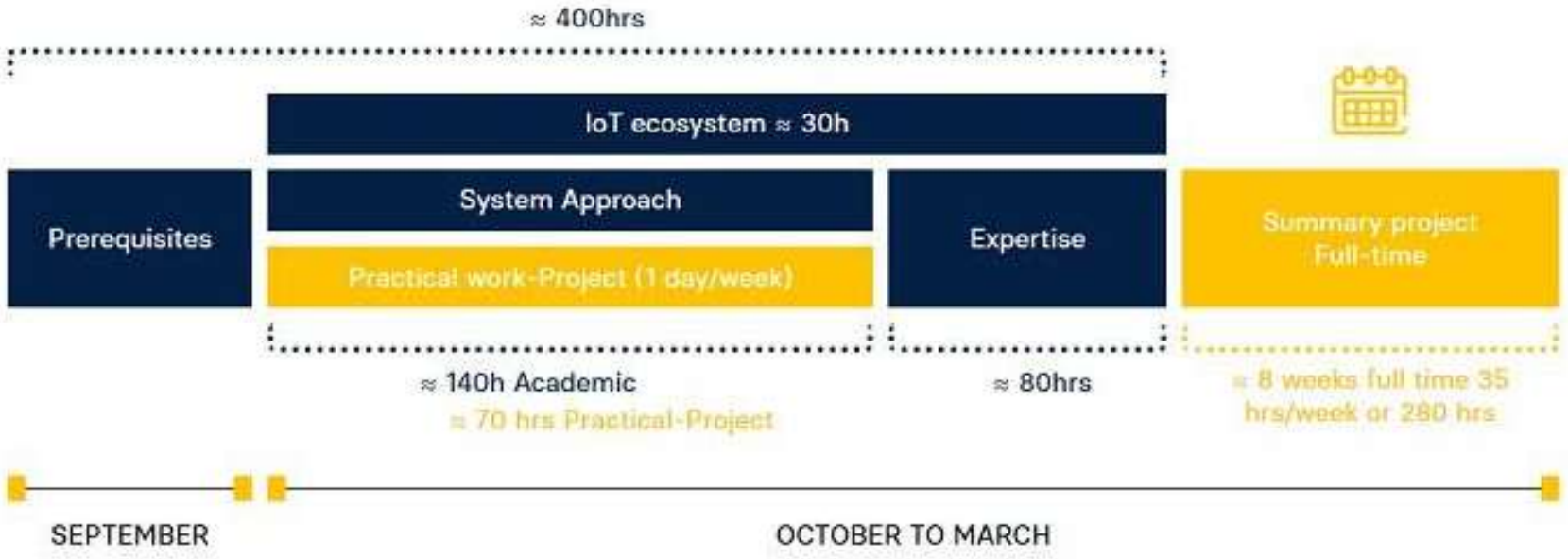


Low Environmental Impact Mobility

- **Powertrain**
  - New powertrain concepts (hybrids, alternative fuels, downsizing …)
  - Low emission concepts
  - Electrification
- **Vehicular networks and embedded systems**
  - Control and On-Board Diagnostics
  - Vehicular communication and automatic driving
  - Traffic management



School of IOT – 'Internet of Things'



HITACHI
Inspire the Next

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- Servers and Frameworks
- Smartphones and Tablets
- Databases
- Data Mining

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1 module over 80 hrs out of 3 :

- Embedded System
- Full-Stack Integration
- Data Science

Application form:
http://www.univ-orleans.fr/fr/polytech/iot-application-form-0

Entrepreneurship

POLYTECH STARTUP LOUNGE Orléans

FABLAB ORLÉANAIS

Associated research institutes

GREMI
Research group for Energetics of Ionized Environments

PRISME
Multi-disciplinary Research Institute in Systems and Mechanical Engineering

LaMé
Lab of Mechanical and Civil Engineering

CEMHTI
Extreme Conditions and Materials: High Temperature and Radiation

ICMN
Interfaces, Confinement, Materials and Nanostructures

ISTO
Institute of Earth Sciences of Orleans

ICARE
Institute of Combustion, Aerothermal, Reactivity and Environment

Links with 3 Research Centers

National Research Center

The French Geological Survey

National Research Institute for

4 Regional Industrial Clusters

Cosmetic Valley France

S2E2 Smart Electricity Cluster

Elastopôle Pôle de compétitivité caoutchouc et polymères

DREAM Eau & Milieux

Perfumery and cosmetics resources, skills, research and training

Electricity technologies, in the service of energy management

Rubber and polymeres

Environmental technologies related to water and its environments

Incoming student support

The central international office of the University of Orléans

& Polytech Orleans international officers help international students with their registration, accommodation & other administrative procedures.

International students can attend French courses at the French Institute for 65€ per semester;

BDE POLYTECH ORLEANS

IESN Orléans INTERNATIONAL EXCHANGE ERASMUS STUDENT NETWORK

help the incoming students to integrate and join social clubs and events.

An orientation week is organized at the beginning of each semester.

Everyday life on our campus

Students can live:

- **In dormitories on or off campus (from 250 € per month + around 60€ insurance)**
- **In a private accommodation**
- **With a host family** (around 450€ per month)

University restaurants:

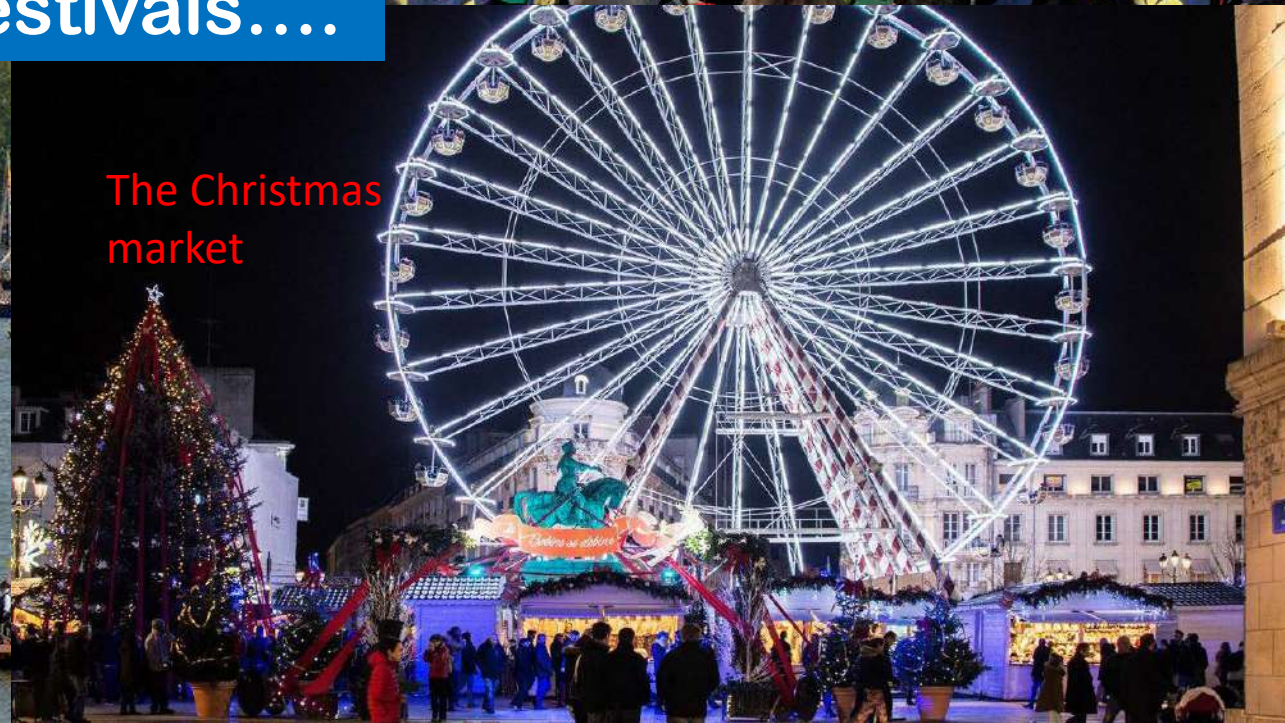
- **4 cafeterias**
- **1 pizzeria**
- **1 foodtruck**

- **4 restaurants: 3,50€ = starter + hot meal + cheese + dessert + bread**

Health Center
Sports Center
Center for people with disabilities
Public transportation: Easy access to Orleans city center by bus & tram

Orléans, a cultural city…

With several festivals….



COME AND STAY WITH US !

International Relations Office

Contact : international.polytech@univ-orleans.fr

University of Orléans welcome guide :

https://www.calameo.com/read/005608029fcec107fe658

Application procedure for exchange students:

https://www.univ-orleans.fr/en/univ/international/coming-university/exchange-programmes

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