

BORDEAUX
INP

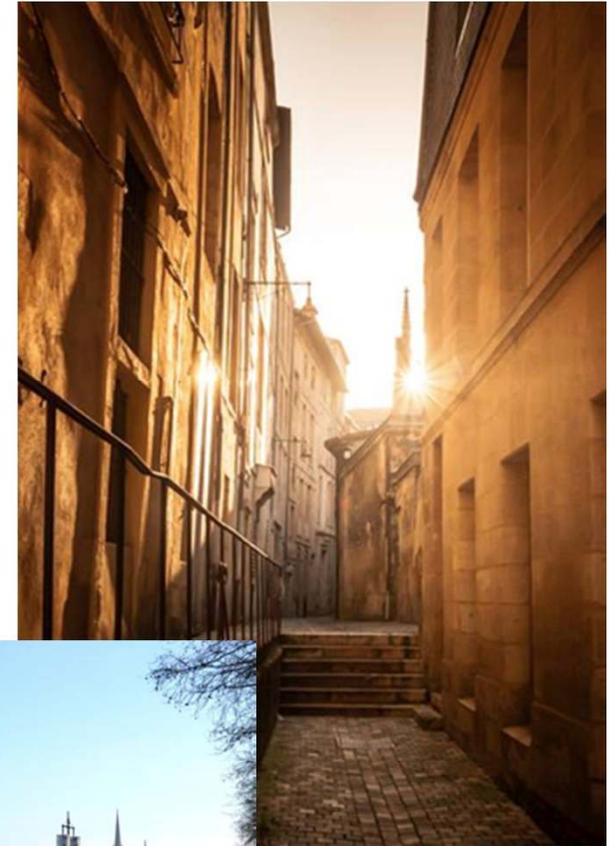
**Enseirb-
matmecca**

**Graduate School in Electronics, Computer Sciences,
Telecommunications, Mathematics and Mechanics**



Bordeaux

- **A 1 million inhabitant urban area**
 - Capital city of South West of France
 - 100 000 students in higher education
- **A world heritage city**
 - 2000 years of history
- **A easy way of life**
 - Ground transportation, safety
 - International city



The Science and Technology Campus



Haut Brion
Vineyards



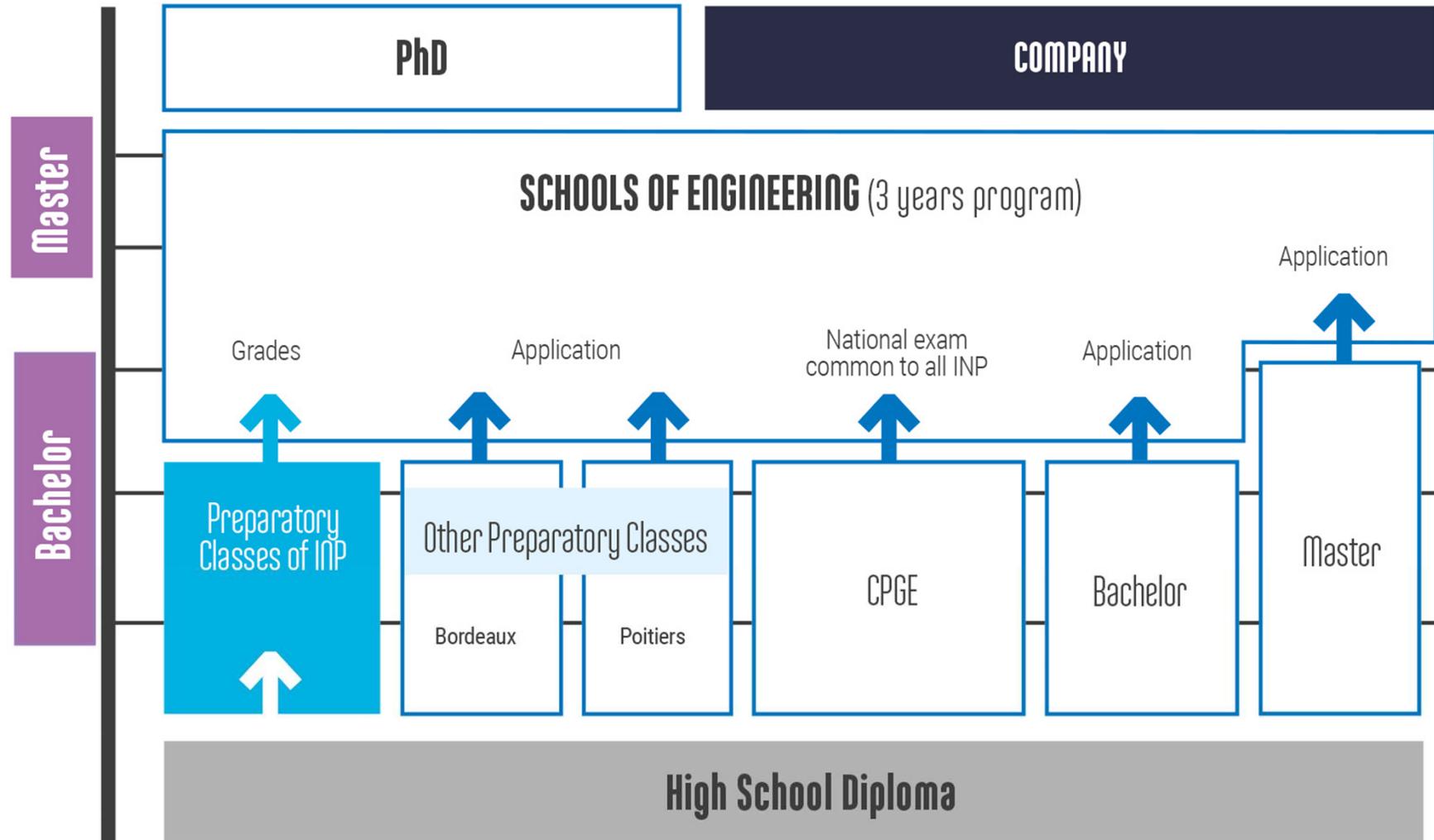
Bordeaux
Institute of
Technology



French
Research
Agency

université
de BORDEAUX

Engineering studies in France



Key figures of Bordeaux INP



11 joint research centers
40 patent applications
5 industrial chairs, 1 UNESCO chair
6 technical platforms
Over 200 PhD students supervised by Bordeaux INP



240 professors and lectures
200 administrative staff
More than 700 external lecturers



6 graduate schools
1 preparatory course : La Prépa des INP
1 student incubator : Sit'Innov



3 400 students including 37% female
14% work-study students
12% foreign students
48 businesses or start-ups created since 2009



Bordeaux INP : 6 graduate schools and 20 engineering programmes...



ENSC - BORDEAUX INP
Cognitics



ENSMAC - BORDEAUX INP
Chemistry – Physics, Biology - Food Sciences



ENSEGID - BORDEAUX INP
Environment, Geological Resources & Sustainable Development



ENSEIRB-MATMECA - BORDEAUX INP
Electronics, Computer Sciences, Mathematics and Mechanics, Telecommunications



ENSPIMA - BORDEAUX INP
Industrial Performance & Aeronautical Maintenance



ENSTBB - BORDEAUX INP
Biotechnologies



ENSEIRB-MATMECA

- **Some key figures**
 - Founded in 1920
 - 1500 students
 - 120 permanent professors
 - 4 research laboratories
 - 350 non-permanent teachers
- **Engineering programs**

Electrical Engineering

Computer Science

Mathematics and Mechanical Engineering

Telecommunications



https://www.youtube.com/watch?v=Cy_OKaunvY8



ENSEIRB-MATMECA, Ranking 2024

27°/ 170 → rank A+ : 76/123 pts

7°/48 Informatique

IMT Atlantique	⊕	97/123
Télécom Paris	⊕	96/123
INSA Lyon	⊕	84/123
Grenoble INP - Ensimag	⊕	83/123
ENSEEIHT - INP Toulouse	⊕	81/123
ESIEE Paris - Marne-la-Vallée	⊕	79/123
INP Bordeaux- ENSEIRB - MATMECA	⊕	76/123

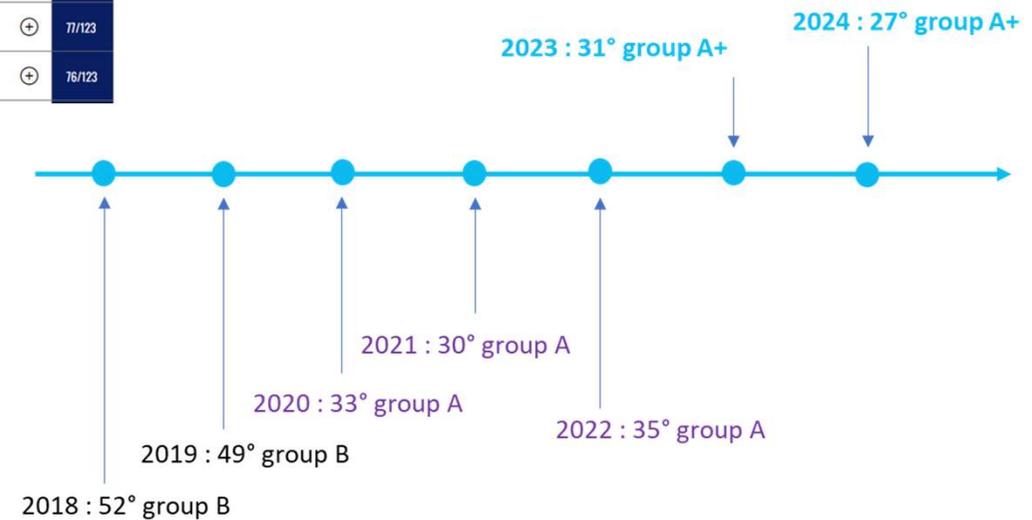
8°/48 Electronique

École centrale - Nantes	⊕	97/123
INSA Lyon	⊕	84/123
ENSEEIHT - INP Toulouse	⊕	81/123
Grenoble INP - Phelma	⊕	80/123
ENSTA Bretagne - Brest	⊕	79/123
ESIEE Paris - Marne-la-Vallée	⊕	79/123
INSA Toulouse	⊕	77/123
INP Bordeaux- ENSEIRB - MATMECA	⊕	76/123



5°/18 Télécommunications

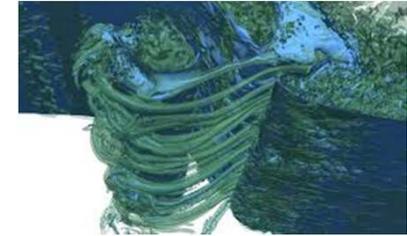
IMT Atlantique	⊕	97/123
Télécom Paris	⊕	96/123
INSA Lyon	⊕	84/123
ENSEEIHT - INP Toulouse	⊕	81/123
IMT Nord Europe	⊕	76/123
INP Bordeaux- ENSEIRB - MATMECA	⊕	76/123



Research-based training offer

5 research centers of international renown
+ 5 industrial chairs

- **I2M** - Bordeaux Institute of Mechanics and Engineering



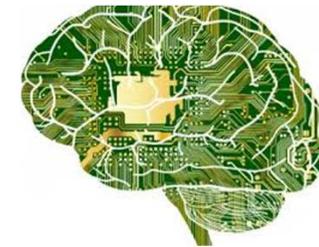
- **IMB** - Bordeaux Institute of Mathematics



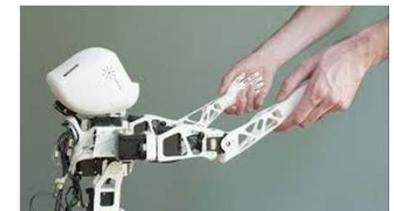
- **IMS** – Laboratory for the Integration from Material to System



- **LaBRI** - Bordeaux Computer Science Research Laboratory



- **Inria** - French National Institute for Research in Computer Science and Control



Our industrial partners



ALLEN

AKKODIS

ASOBO
STUDIO

Atos

Betclik



BORDEAUX
MÉTROPOLE

Capgemini

Cdiscount

DASSAULT
AVIATION

ekino.

eesa

(expleo)

NAVAL
GROUP

NXP

ONET
TECHNOLOGIES

randstad
digital

RATP
SMART SYSTEMS

SEGULA
TECHNOLOGIES



sopra steria

life.augmented

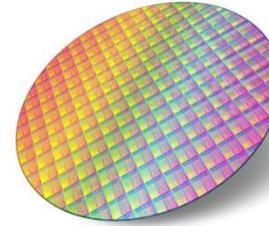
THALES

BORDEAUX
INP Enseirb-
Matmeca

The background is a solid dark blue color. It features several white, abstract, curved shapes that resemble stylized brushstrokes or geometric forms. These shapes are scattered across the page, with some appearing as thin lines and others as larger, more complex shapes. The overall aesthetic is modern and minimalist.

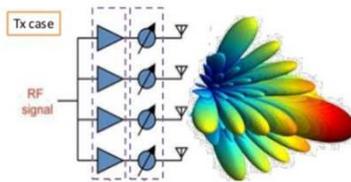
Master Programs

Electronics



SRT : Radio and Telecommunications Systems

Signal transmission, Spectrum management, Analog - Radio frequency - Digital circuits, Micro and Nanoelectronics

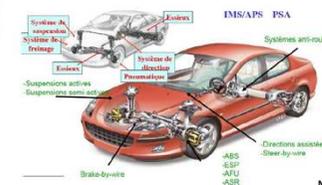
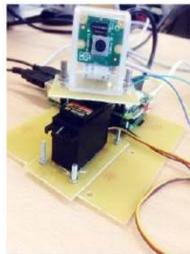


SE : Embedded Systems

Hardware architectures and joint design, software architectures and operating systems and networks / system security.

ESYBIO

Electronic systems optimized to meet environmental constraints.



TSI : Signal and Image Processing

Dual competency in signals in the broad sense, including image and video, and in digital systems architecture

AM2AS

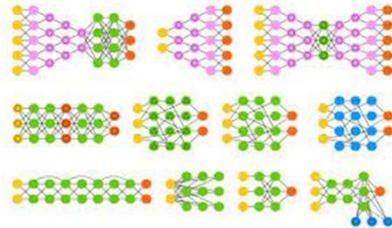
Automation and Mechatronics, Automotive, Aeronautics & Space.

Computer Science (CS)

Software Engineering : mastery of the concepts, technologies and methodologies of software development and management of large amounts of data (Big-data)



High Performance Computing and Data Science : technology of modern parallel computers, processing of large masses of data.



Algorithms and formal methods : modeling, verification, algorithms, logic, game theory

Cyber-security, Systems and Networks : servers and networks, embedded systems, cloud servers, hacking and reverse engineering of code, cyber defense.

Artificial Intelligence

Data science and machine learning, language processing, AI and video games

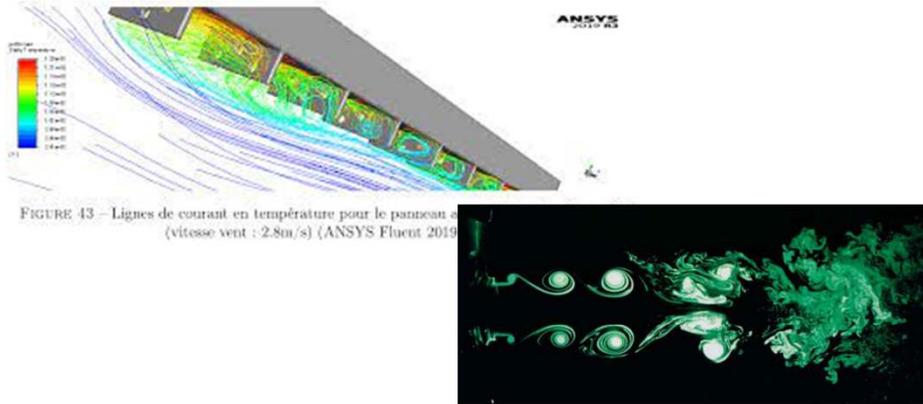


Robotics and machine learning : complete robotic systems in interaction in an evolving environment.



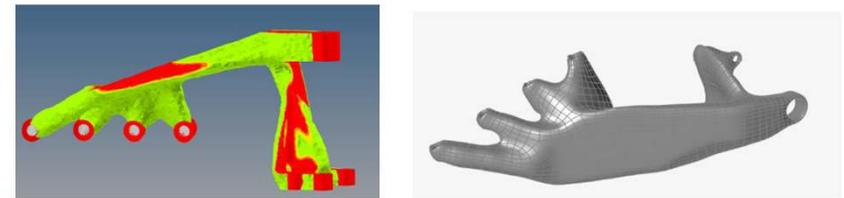
Artificial intelligence, cognitics.

Mathematics & Mechanics (MatMeca)



Fluids and Energy :

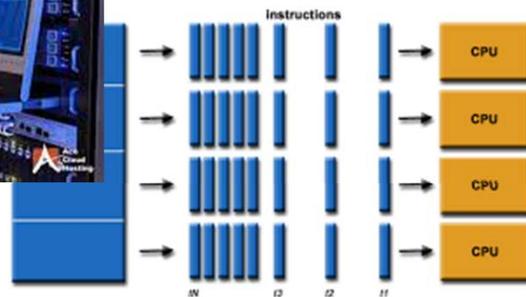
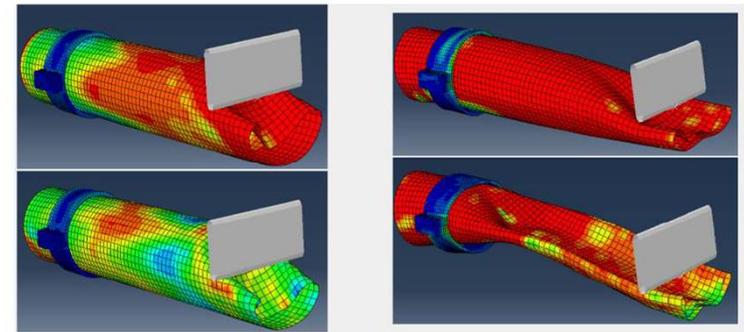
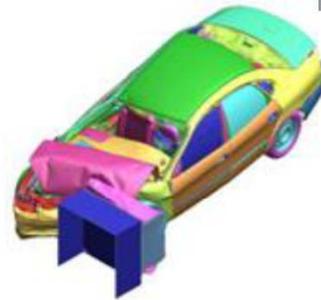
Mastering numerical models and tools for Fluid Mechanics -Modeling of compressible and incompressible flows, Turbulence, Complex fluids, Particulate methods



Advanced Modelling of Structures



Mastering numerical models and tools for Structural Design -Fatigue & Fracture, Elasto-plasticity & Damage, Fast dynamics



High Performance Computing for Mechanics :

Mastering numerical models and tools for scientific computing in mechanics -Algorithms and parallel computing, meshing techniques, inverse problems

Telecom

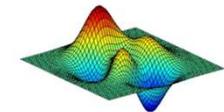
Software engineering for telecom networks (GLRT) :
Web and mobile applications, software archi., bigdata, cloud.



Networks, Security and Connected Objects (RSC) : IOT, IS security, video streaming, mobile rx, programmable, cloud.



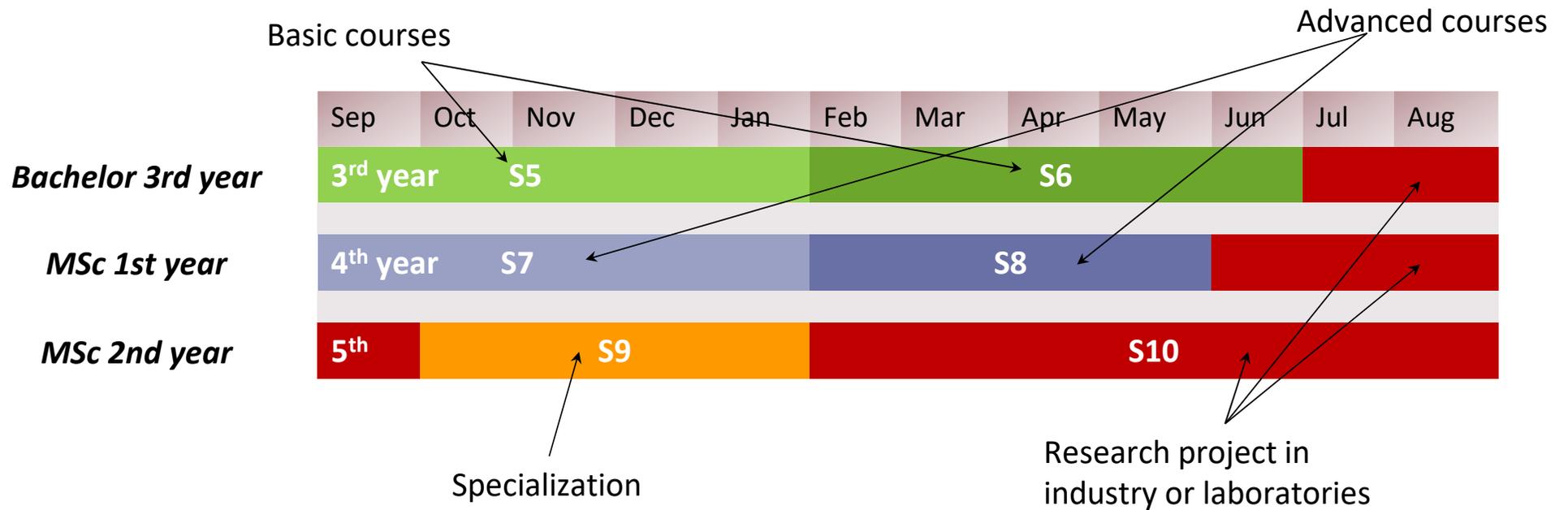
Learning, Image, Signal and Communications (I2SC) : Signal/image processing, 3D video, 5G, radar, GPS, biomedical, machine learning.



ENSEIRB-MATMECA

Training program overview

- 3rd year of Bachelor → 1st year
- 1st and 2nd year of Master → 2nd and 3rd year



Our exchange program

I want go to Bordeaux during ...

- Less than 2 months: **Short Term Program**
 - Bordeaux Institute of Technology **Summer schools**
- Up to 6 months: **Mid Term Program**
 - **Research project** in our research Labs
 - **Academic Semester** (Master Level)
- One/Two years : **Long Term Program**
 - Double Degree

Main Contacts:

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