

INTREE INTERFACES FOR AERONAUTICS ENERGY AND ENVIRONMENT

# **GRADUATE SCHOOL**

Working together towards sustainable innovation





Université de Poitiers



### CONTACTS

### **IntREE Team**



PR. PATRICIA PATRIER

Co-Director, Professor & Head of Education



**JUSTINE PAIR** 

Physics department and IntREE's secretary 05.49.49.68.35



PR. PIERRE-OLIVIER RENAULT

Co-Director & Professor



**ZOÉ ETIEN** 

Communication manager 05.49.36.22.62 + 🕓



**EMMANUELLE LE BRUN** 

Project manager 05.49.36.22.61



**EUR INTREE** 

eur.intree@univ-poitiers.fr



### OPENNESS TO INTERDISCIPLINARITY



IntREE offers you a master's degree + a research label



### **5 MASTERS**

- Materials sciences
- Energy, Fluids et Interfaces
- Engineering mechanics



Advanced clay sciences / Minerals Materials















**P**prime

### **RESEARCH LAB**

### **Physics and Engineering Sciences**

- fluids
- mechanics of materials
- energetics



mechanical engineering

• 300 researchers

- 150 staff
- 250 PhD
- 50 Post-Doc



RESEARCH INSTITUTES

### **RESEARCH LAB**

**Chemistry and geosciences of the surface** Institute of Chemistry of Materials and Media of Poitiers











## CAMPUSES

- 30 000 students
- 1600 researchers
- 1400 staff





Physical sciences
Mathematical sciences
Mechanical sciences
Computer sciences





IS B C INSIGNATION OF TEXTS OF

City Center IntREE Office



### **EAST CAMPUS**









#### ae Poltler's

### Plan du Campus de Poitiers

#### Composantes pédagogiques

Faculté de Droit et sciences sociales

Faculté de Sciences économiques Institut de préparation à l'administration générale

A3 Faculté de Lettres et langues

Faculté de Sciences humaines A4 et arts / Géographie et psychologie

Maison des sciences de l'homme et de la société

B1-B17 École nationale supérieure -B16 d'ingénieurs de Poitiers

B2-B3-

B5-B7-

B8-B24- Faculté de Sciences B27-B28- fondamentales appliquées

B30-B31-B35-B39

B20 Institut national supérieur du professorat et de l'éducation

C6 Faculté de Sciences du sport

Institut universitaire de technologie C8-C16

D1 Faculté de Médecine et pharmacie

#### **Complexes sportifs**

B9 Gymnase universitaire

C5 Halle des sports

C7 Complexe sportif

#### Cités et résidences universitaires

A9 Rés. Francine-Poitevin

B10 Cité Rabelais

B23 Rés. Francine-Poitevin

C20 Cité Descartes

C21 Rés. Jules-Caisso

#### Services aux étudiants

A6 Maison des étudiants

A7 Division vie étudiante [Crous]

Centre-ville

Pôle des solidarités / Service

POCCUS service social et culturel [Crous]

B19 Maison des langues

Service i-médias (informatique et multimédia)

SAFIRE (Service

d'accompagnement à la B25 formation, l'insertion, la réussite et l'engagement), UP&Pro

B32 CAP Vélo

Service de santé universitaire et service social

Service universitaire des activités physiques et sportives

#### Bibliothèques universitaires

A1 Droit-économie-gestion

La Ruche (reste du bâtiment fermé pour travaux)

B4 Sciences, techniques et sport

B20 Éducation et formation

D1 Médecine et pharmacie

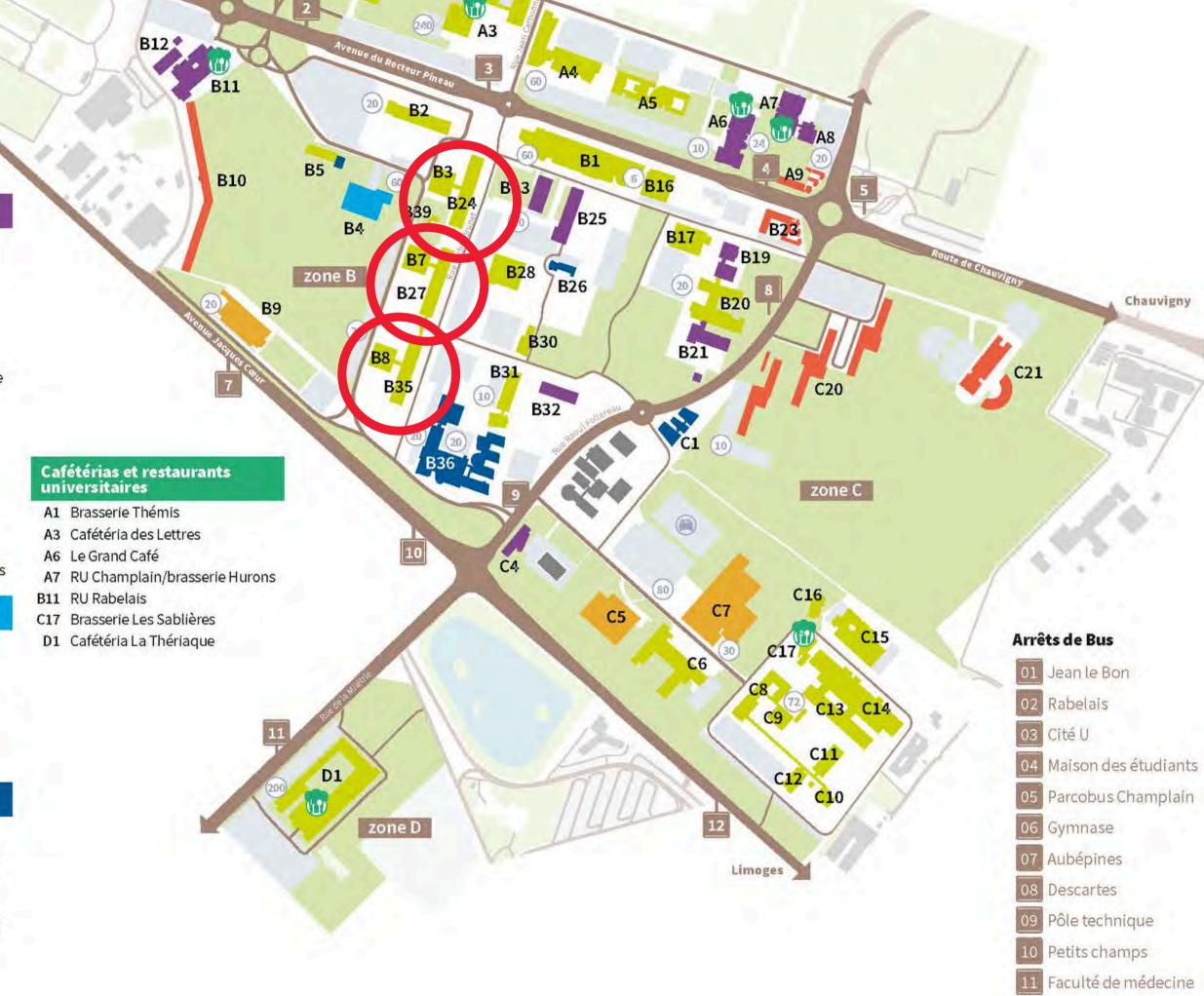
#### Administration et recherche

B5 Faculté de Sciences fondamentales appliquées

Service du partenariat et de la valorisation de la recherche

B36 Pôle Biologie Santé

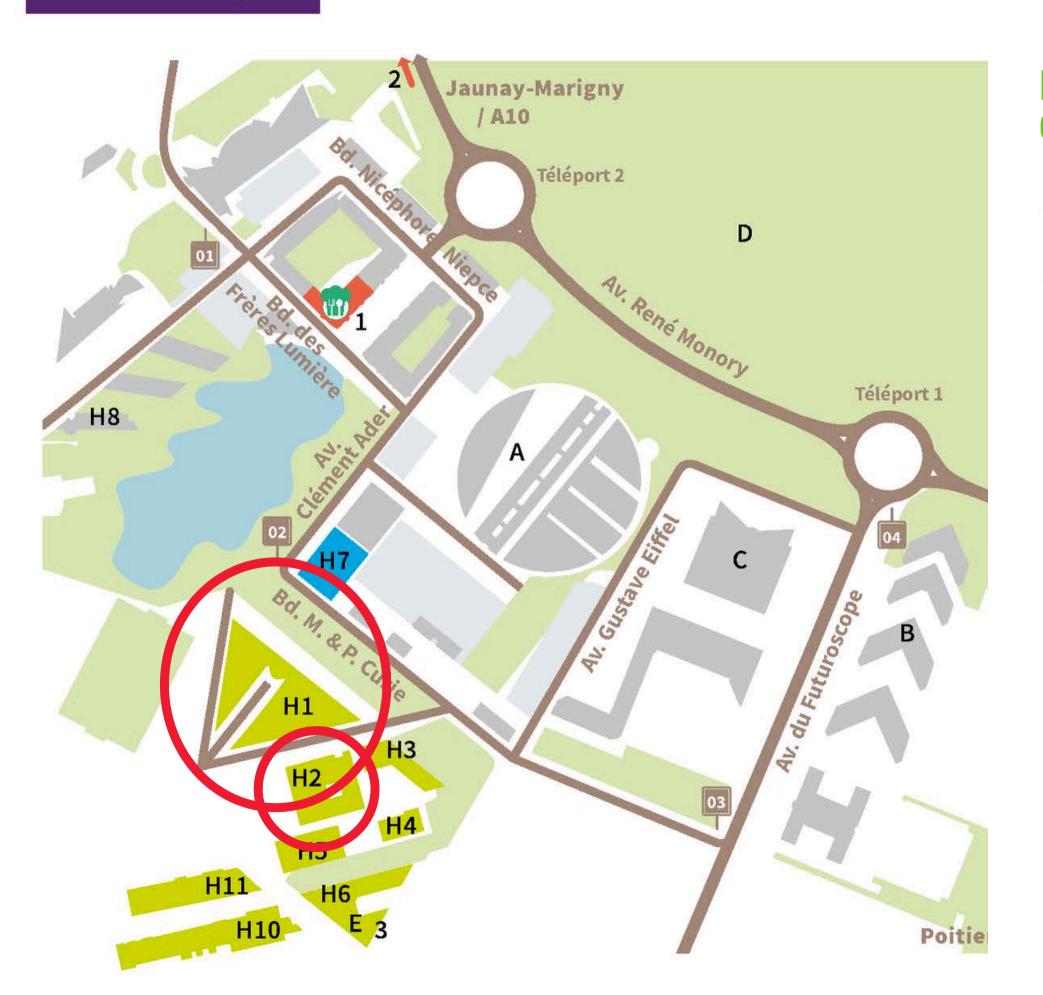
Direction de la logistique et du patrimoine immobilier



Centre hospitalier

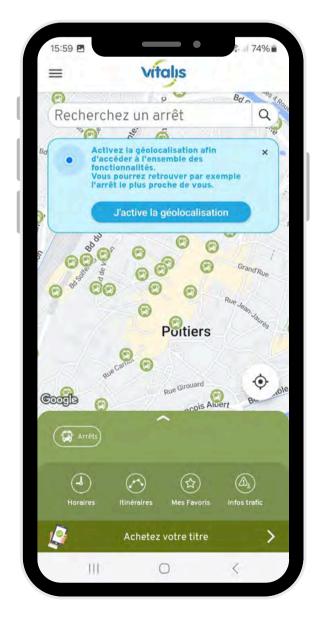
zone A

### **Futuroscope**



### DOWNLOAD VITALIS, THE CITY BUS APPLICATION.







# CLASS OF 2026: 4TH PROMOTION

	M1	M2
2020-2021	14	
2021-2022	19	14
2022-2023	14	17
2023-2024	21	12
2024-2025	16	15

Class of 2022

Class of 2023

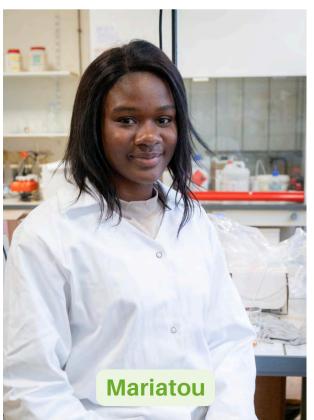
Class of 2024

Class of 2025









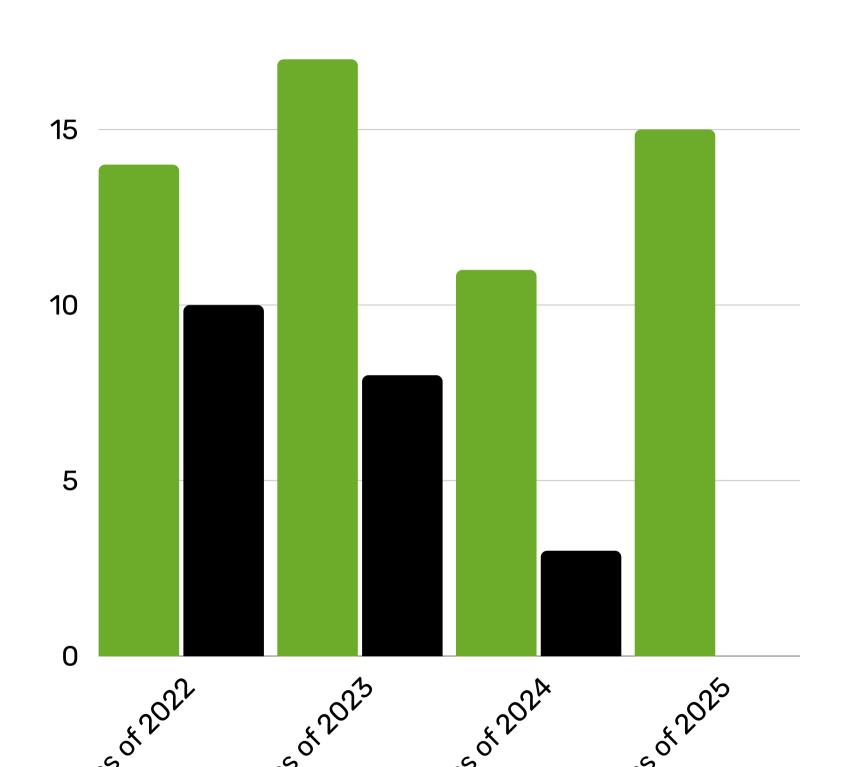




# TRAINING TOWARDS RESEARCH

70% of the class of 2022 and 50% of the class of 2023 went on to a PHD.





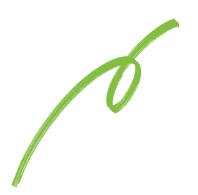
Students

Went on to a PhD

### 2-YEAR MASTER

2 years of innovative pedagogy

= 120 ECTS



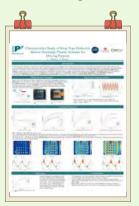




#### **1ST SEMESTER**

Research Project

2 days a week in the lab



Poster presentation

### **2ND SEMESTER** Internship

3 to 5 months + Abroad possible

### **3RD SEMESTER**

Practicum

2 weeks



Video presentation

### 4TH SEMESTER

Internship

The whole semester + Abroad possible

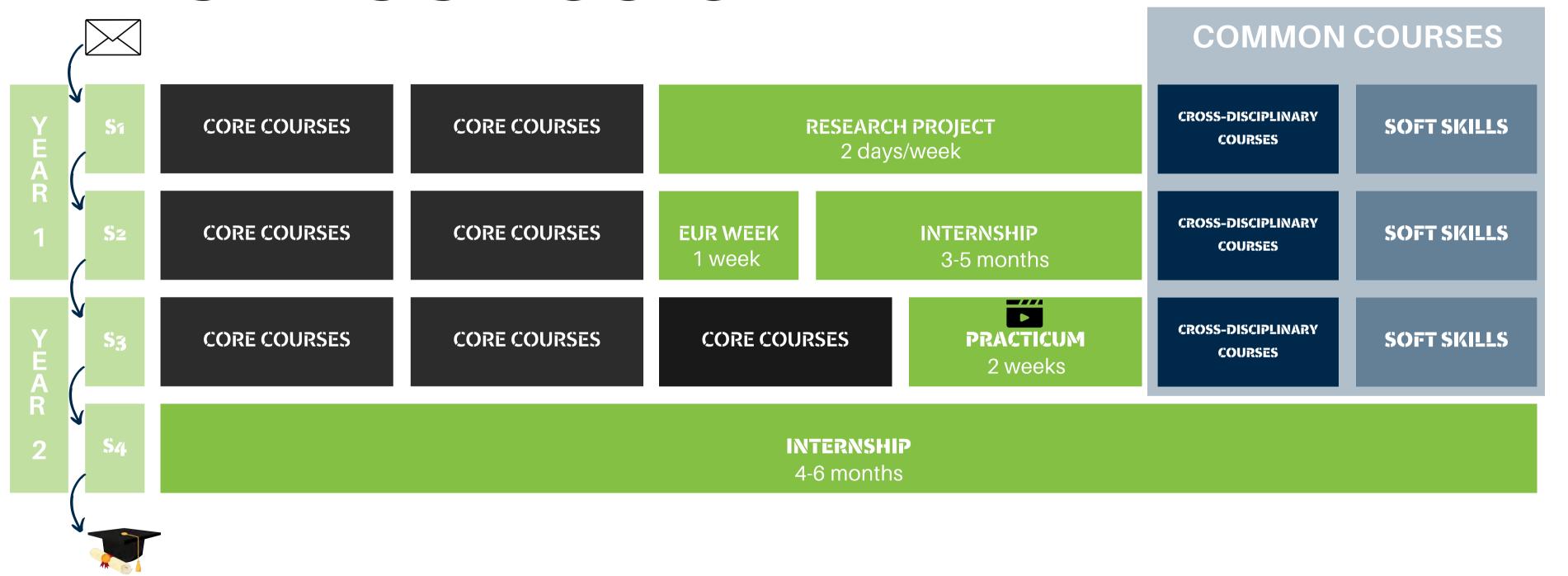




**Soft skills:** management, English, communication, data management







**S**1

**CORE COURSES** 

**CORE COURSES** 

RESEARCH PROJECT 2 days/week **COMMON COURSES** 

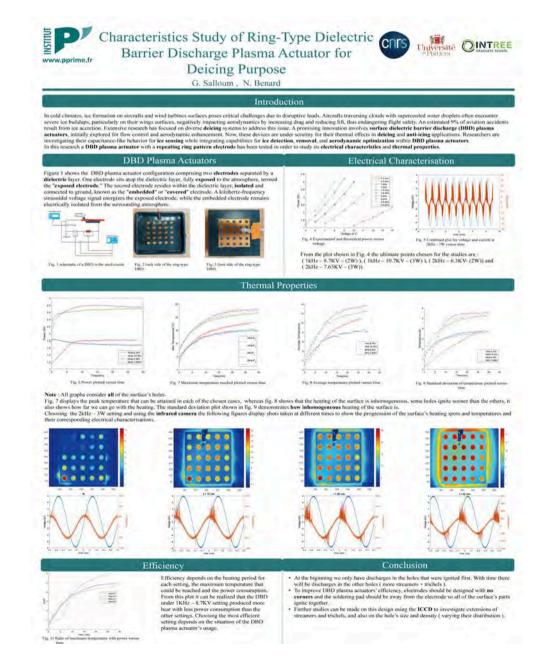
CROSS-DISCIPLINARY
COURSES

**SOFT SKILLS** 





- In your field (physics, chemistry, etc.)
- Poster presentation to a jury (beginning of January)
- Grant: €550 (received after the poster presentation)



Y E A CORE COURSES CORE COURSES RESEARCH PROJECT CROSS-DISCIPLINARY COURSES SOFT SKILLS

1 CORE COURSES CORE COURSES EUR WEEK 1 week 1 week 3-5 months

3-5 months

CROSS-DISCIPLINARY COURSES SOFT SKILLS

### YEAR 1 - S2: INTERNSHIP

- 3-4 months starting from April 14 th
- In a company / laboratory / abroad
- Choice of internship from a list of subjects
- Discipline different from your own
- Grant for international internships
  - In France: €4,35/hour for a 35-hour contract
  - Abroad: €500/month + €1000 mobility allowance
- Internship report and oral defense at the end of June

From 30th March 2025 to 05th April 2025.

**COMMON COURSES** 

### **FUNDAMENTAL COURSES**

• Ethics, entrepreneurship, RMN, ...

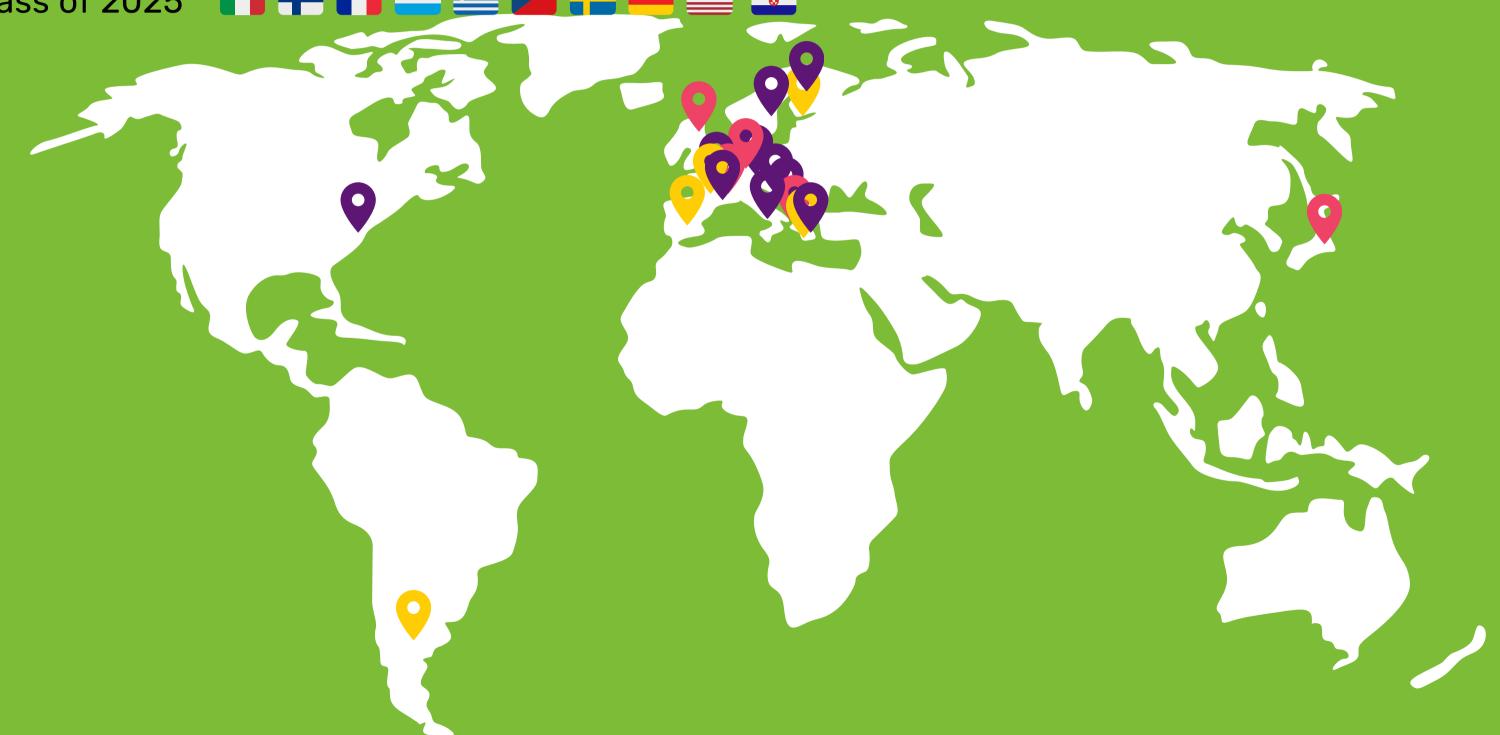
# OUTGOING MOBILITY

• Class of 2024

24 💽 🚞 🎇 💳 🚺 🛨

In the 1st year of the Master's programme, internships can be carried out abroad.

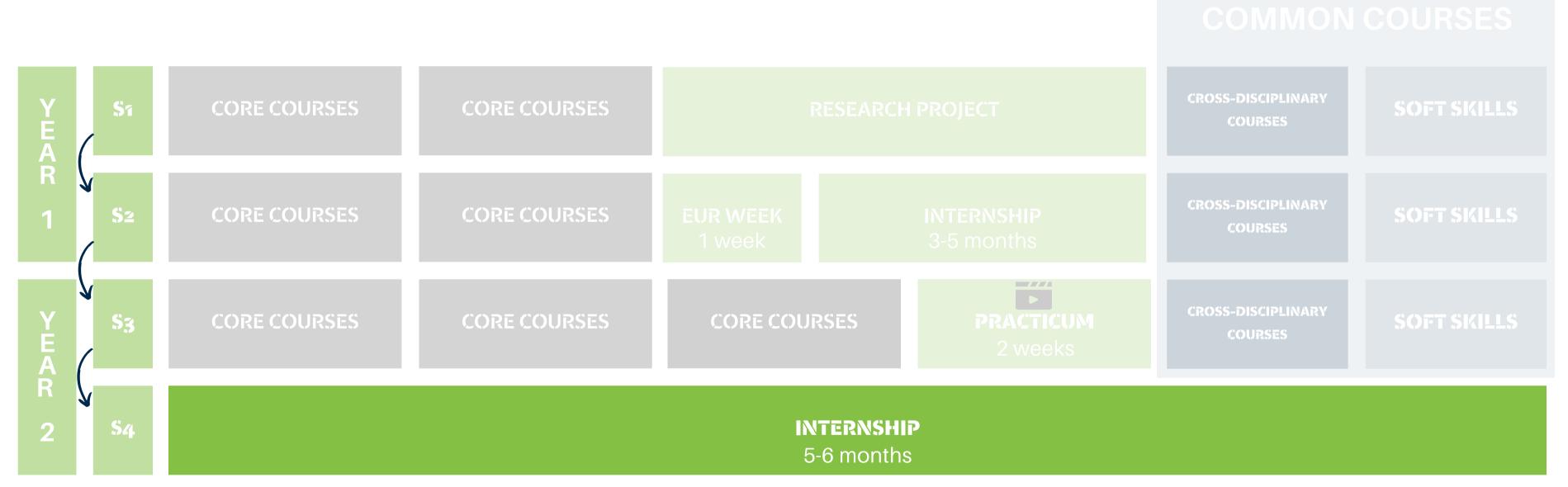
Here's where our students have gone:





- 2 weeks
- A team of students from different Masters programmes
- Video presentation
- Organization : Zoé in support
- Grant: €300 (received after the presentation)





### YEAR 2 - S4: INTERNSHIP



- 5-6 months
- Company or laboratory-paid internship
- Report & Defense at the end of August



### **CROSS-DISCIPLINARY COURSES**

- E-matter Interactions
- Radiation matter interactions
- Numerical tools
- Surface chemistry
- Life cycle analysis

- Spectroscopies at interfaces
- Heterogeneous catalysis
- Surface topography
- Electrical phenomena at inter.

- Pore network analysis
- **\$3** Rheology
  - Environmental remediation 2
  - Design of experiment
  - Fun Mooc "open science"

https://www.fun-mooc.fr/fr/cours/la-science-ouverte/



### **SOFT SKILLS**

- **S** 1
- English
- Communication

- **S2**
- Management
- Environmental aspect assessment
- **S3**
- Data analysis
- English

### EVALUATION & ASSESSMENT PROCESS



#### **CORE COURSES**

• According to the associated-Master: 3/6 ECTS/unit

#### **COMMON COURSES**

• 3 ECTS cross disciplinary + 3 ECTS soft skills (no second session)

#### **RESEARCH PROJECT**

- Poster presentation: 12 ECTS
  - The projects are proposed by the master's supervisor

#### **INTERNSHIP**

- 1 mark (oral, written rapport, supervisor): 12 ECTS
  - The training projects are proposed by researchers via the website
  - EUR proposes you internships subjects

#### **EUR WEEK**

Compulsory attendance

• M1 (1ST YEAR)

### EVALUATION & ASSESSMENT PROCESS



#### **CORE COURSES**

• According to the associated-Master: 3/6 ECTS/unit

#### **COMMON COURSES**

• 3 ECTS cross disciplinary+ 3 ECTS soft skills (no second session)

#### **PRACTICUM**

- Video 3 to 5 min max: 1 mark 6 ECTS
  - The projects are proposed by the teaching committee

#### **INTERNSHIP**

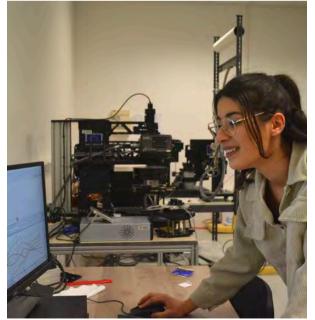
- 1 mark (oral, written rapport, supervisor): 30 ECTS
  - You have to find your internship by yourself, as in all masters programs

• M2 (2ND YEAR)

# EVALUATION & ASSESSMENT PROCESS

In France, grades are given on a scale of 0 to 20, 20 being the highest grade, an equivalent to Excellent or A+. Hence a 18 is reserved for the truly exceptional students, and grades typically range from 8 to 15, 15 being itself a remarkable achievement.

Hence, students across French universities should be compared based on their honors and their ranking within their class.







FRENCH GRADE	CAMPUS FRANCE EQUIVALENT
16 to 20 /20	A+
14 to 16 /20	A
12 to 14/20	В
10 to 12 /20	С
8 to 10 /20	D
≤ <b>7/20</b>	F

### STUDENT AGREEMENT

#### STUDENT AGREEMENT IN DUPLICATE

- 1. READ
- 2.SIGN 💉
- 3. KEEP A COPY
- 4. GIVE BACK THE SECOND COPY



Any behaviour that does not comply with these rules may result in the loss of the financial support from the EUR (if awarded on acceptance)







### DO & DON'T



#### DO

- Respond to emails or messages from the team
- Be transparent with the team
- Respect class schedules



#### **DON'T**

- Ignore emails from teachers and staff
- Hesitate to share your concerns with others
- Hesitate to ask the team a question

#### **REALLY DO!**

- Register for an activity other than the university library
- Participate in student association activities
- Share with us if something is bothering you
- Be careful of internet scams (housing, dating, buying, selling, etc.)

#### **REALLY DON'T!**

- Go to an appointment alone with lots of cash to buy a phone found on the Internet from people you don't know
- Carry lots of cash (50€ max)

# STUDENT TESTIMONY

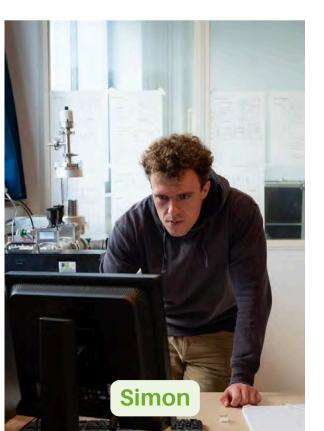
#### **EXPERIENCES FROM PREVIOUS CLASSES**

Testimonials, anecdotes, surprises, culture shocks

- the best of what others have experienced before you.



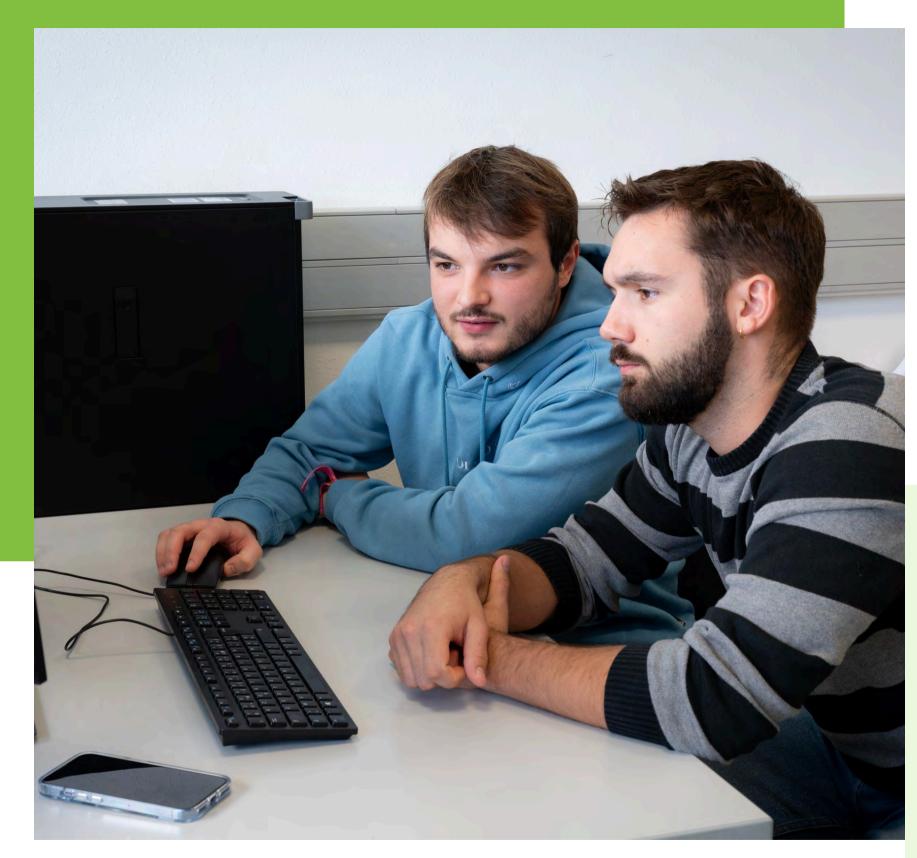












Siméo & Alexis during their internship at the physics lab

## TEACHING SUPPORT

You are a student at IntREE: You are an university student

Free pack Office: use Microsoft 365 from ENT

YOUR TIMETABLE IS UPDATED REGULARLY

Go to ENT-Université de Poitiers



Mon Bureau / Planning des cours

## WELCOME ENVELOPE

#### **LIST OF DOCUMENTS**

To obtain the bank transfer, please send all this documents to Justine Clerté & Emmanuelle Le Brun :

justine.clerte@univ-poitiers.fr cc emmanuelle.le.brun@univ-poitiers.fr

- Bank document details with the bank logo and Swift / IBAN
- ID card or passeport
- Student card or registration certificate
- Social insurance certificate
- Proof of civil insurance
- For international students : VISA or residence permit







### CONTACTS

### IntREE master's supervisors



PR. CHRISTOPHE TROMAS

Materials science
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PR. LAURENCE PIRAULT-ROY
Green Chemistry, Catalysis & Environment
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PR. ERIC MOREAU

Energy, Fluids et Interfaces
eric.moreau@univ-poitiers.fr



PR. PATRICIA PATRIER

Advanced clay sciences / Minerals Materials patricia.patrier@univ-poitiers.fr



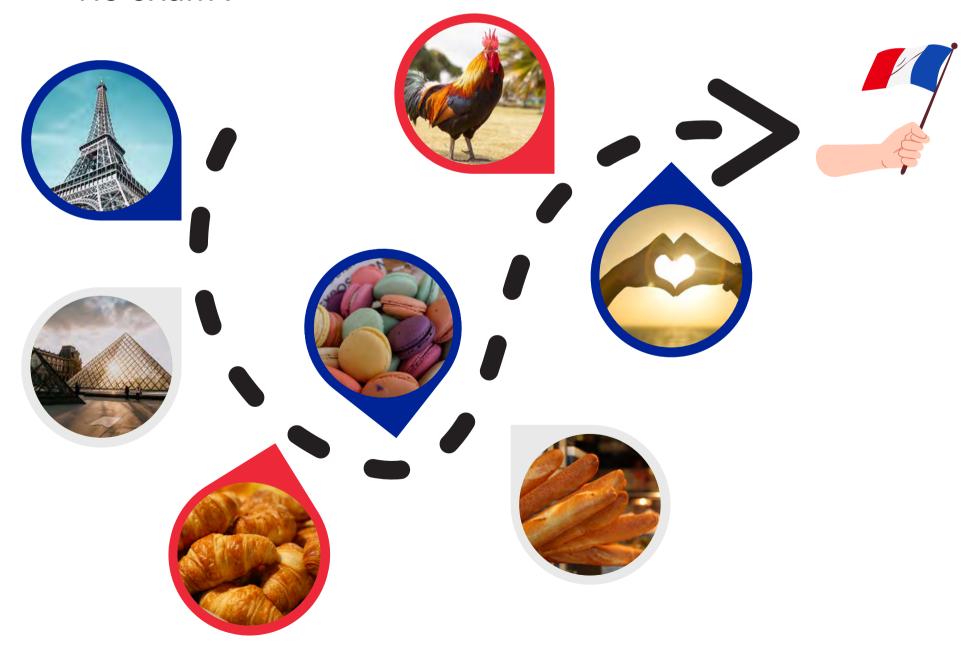
PR. VALERY VALLE
Engineering mechanics
valery.valle@univ-poitiers.fr



- 1st class on Thursday 12th September
- On the Campus
- Building A then C (Lettres et Langues)
- Room to be confirmed

# FRENCH LESSONS

- Free for IntREE students
- 20 sessions during the year
- Thursday, from 6:00 pm to 8:00 pm
- No exam!



# EVENTS FOR OUR STUDENTS AND THE TEAM

ASSOCIATIVES OUTINGS



**WELCOME DAY** 



INDUSTRIAL PARTNER VISITS



SCIENCE CO'LAB

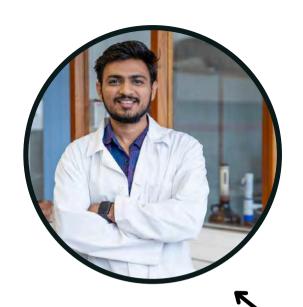


All year long

September: back-to-school

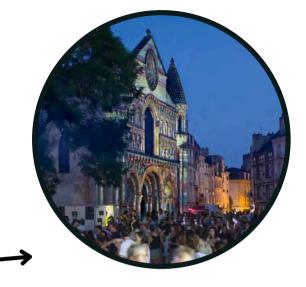
Start of school year

End of school year











EVERYTHING IS ON OUR











### PROMOTING INTREE

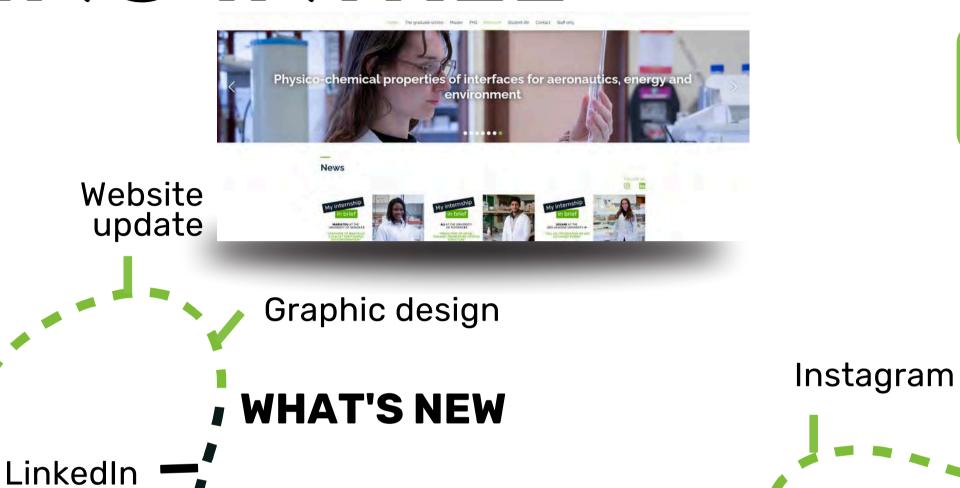
**WITH YOU** 



Lab photoshoots 4

### **UPDATING SUPPORTS**





Presentation

of internships

Student

fair

**FUTURE PROJECTS** 

Promoting researchPosters

- Practicum video
- Scientific collaborations











JOIN THE ASSOCIATION NOW!

### JOIN US TO:

- Promote exchanges between the IntREE students
- Help the newcomers to adapt to their new life here
- And more!







The association's last trip to the Futuroscope





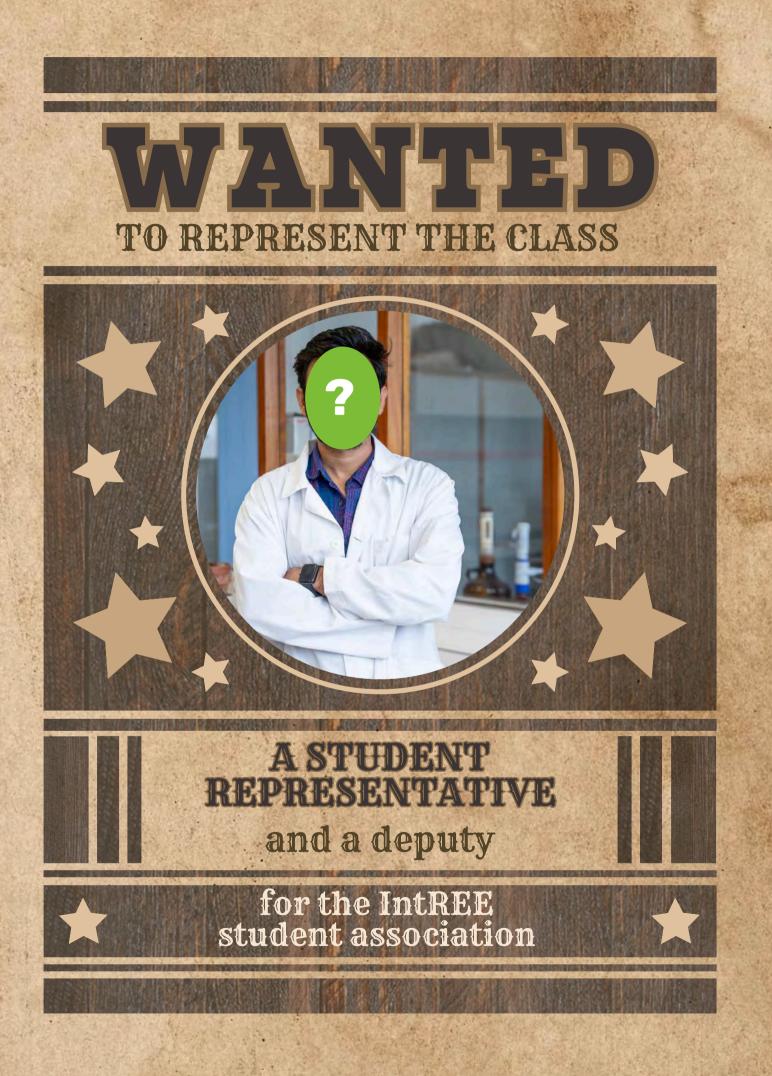
### **LET'S ORGANISE OUTINGS TOGETHER**

- Low registration fee for the whole year
  The association is funded by IntREE
- Ideas are welcome
- New board members are wanted
- Most outings are **free** of charge



#### **GOOGLE FORM FOR REGISTRATION**





### JOIN THE ASSOCIATION

#### AND TAKE PART IN INTREE'S PEDAGOGICAL LIFE

- A student representative and a deputy (or a duo)
- For 4 meetings a year with the Pedagogic Committee (run by your teachers)

First purpose: to discuss and improve points with the teaching staff and the class.

Second purpose: to have an overview of the decisions discussed by the team.





Pedagogic committee

### THANK YOU

FOR YOUR ATTENTION

