UBFC
UNIVERSITÉ
BOURGOGNE FRANCHE-COMTÉ

EIPHI graduate school

Cross-disciplinary, Science & Technology

EIPHI graduate school

University Bourgogne Franche-Comté
France

- 5 outstanding programs
- Worldclass research labs
- Close connection with industry
- Broad mobility opportunities
- Tutoring and mentoring
- Scholarships

TO APPLY
Apply online before June 23, 2018

http://gradschool.eiphi.univ-bfc.fr/

5 integrated MSc/PhD programs

- PHYSICS, MATHEMATICS and APPLICATIONS
- ENERGY
- COMPUTER SCIENCE
- SMART SYSTEMS & STRUCTURES
- MATERIAL SCIENCE

EIPHI graduate school

Engineering and Innovation through Physical Sciences, High-technologies, and cross-dIsciplinary research

EIPHI provides 5 interdisciplinary programs based on 9 Masters that will enable outstanding students to acquire a solid background in various topics, ranging from fundamental to applied sciences, allowing them to build a successful career in R&D sectors.

PHYSICS, MATHEMATICS and APPLICATIONS

Both theoretical and experimental physics and mathematics for physics, providing knowledge and lab expertise in photonics, non-linear physics, time & frequency metrology, micro/nano- and quantum technologies.

> 3 Masters: PPN, PICS, Maths4Phys

COMPUTER SCIENCE

Research aspects of network applications (web, distributed, mobile, the Internet of Things) and quality assurance (verification and validation) of the systems

> Master Computer Science

SMART SYSTEMS and STRUCTURES

Mix training in mechanics, electronics and control for the smart systems and structures of the future (vibroacoustics and composites, microtechnology, control and embedded electronics...)

> 3 Masters: GreenM, MEETING, MIR

ENERGY

Integration of thermal, electrical and hydrogen-based systems in stationary and transportation applaications, with the final aims of increased efficiency and of sustainable development.

> Master H3E

MATERIAL SCIENCE

Chemistry of materials, interfacial electrochemistry, physical-chemistry, inorganic chemistry with a focus on materials requiring specific approaches (polymers, hybrid materials, ceramics...).

> Master CDM

EIPHI curriculum

Each EIPHI program is divided into lectures, exercises, practical and projects activities and most of them are taught in English. The master's program provides complementary courses in both disciplinary and interdisciplinary knowledge as well as broad digital, societal, cultural, environmental, and entrepreneurial skills.

PhD	Research Project	*ECTS*
with personal mentor and advisors	Individual Training Program (transferrable soft skills, scientific/technical tools, specific graduate courses, industry courses, laboratory & technology courses)	
	Networking (career events, International conferences, International mobility / secondment to a partner, outreach events, alumni association/Student Chapter)	
	Personal supervision activity (Tutor of a M.Sc. Student of UBFC)	
	PhD total training program only (corresponds to 150h of class and/or activities)	*15*
Master 2	Specialization courses including Advanced research project (2 days/week in the lab: 6 ECTS)	*24*
60 ECTS	Soft Skills	*6*
	Research Internship (full time in a R&D company or in a lab - international exchanges)	*30*
Master 1	Core sciences courses (including research project 1 day/week in the lab: 6 ECTS)	*33*
60 ECTS	Interdisciplinary courses	*12*
	Soft Skills (foreign languages, digital skills, transversal skills, entrepreneurial skills)	*9*
	Research internship or longtime project (full time in a lab during 4-8 weeks - international exchanges)	*6*

Tutoring & Mentoring

Each EIPHI graduate student will be advised and personally guided by a mentor throughout his/her professional training. Compared to an advisor, a mentor is responsible for developing a personal relationship with his/her student ensuring that he/she becomes sophisticated in a field of study, able to think critically, and aspires to create new knowledge.

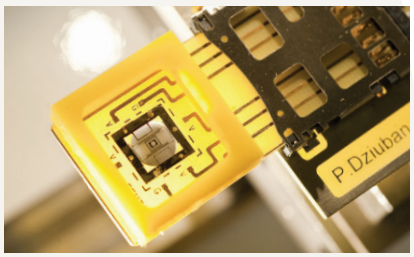
Mentoring gradually transforms the student into a colleague.

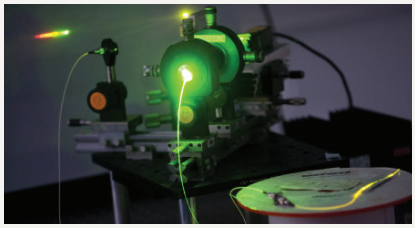
Top reasons to join EIPHI graduate school

- **Fellowships** for the best bachelor degree students and direct access to the PhD program for successful MSc students
- An **individual supervision** all along your curriculum, combining a personal project/thesis advisor and a mentor, to build a customised high-level training
- **Practical training** supervised by high level scientists, featured with high-tech platforms and through internships in companies and labs
- Flexibility of mind and **openness** to cross-pluridisciplinary sciences and engineering, a key ability required for a successful career
- An inspiring international research environment and many **mobility** opportunities due to the broad international network of EIPHI (European projects, several ERC grants…)
- Numerous **networking** activities such as mini-schools, conferences, technology and industry seminars

Excellence in research, a few examples of currently running projects

As a EIPHI graduate student, you will be involved in world class research with FEMTO-ST, ICB and their partners by contributing or initiating pluridisciplinary and innovative projects in close connection with industry. Guided by a personal supervisor, you will be regularly exposed to extensive hands-on-lab experience, get access to cutting-edge technology platforms and work in an international environment.





The EIPHI scientific program is mainly structured around 3 main topics:

Monitoring & Prediction of complex systems
- Prognostic & Structural health monitoring/management
- Multifunctional sensors & (wireless) networks
- Photonic neuromorphic computing

(Self)-adaptive architectures
- Active metacomposites & metamaterials
- Active micro-nano-mechatronics
- Programmable matter

Compact, active and agile information processing devices
- Integrated micro-nanophotonic and phononic components
- Smart nonlinear and quantum systems at micro-nano-scale
- Ultrafast control
- Time-frequency microdevices

Life at EIPHI

Bourgogne Franche-Comté is a region in eastern France, next to the Swiss and German borders. It is a historical area of science, culture, gastronomy, and nature, where Victor Hugo and Louis Pasteur were born. You will discover its natural beauty in the unspoiled forests, Jura mountains and the famous vineyard landscapes of Burgundy (world heritage site by Unesco). The region also hosts celebrated hightech French industry centres for the high speed TGV, car industry, and precision manufacturing for the clock industry, jewelry, and medical devices.

University Bourgogne Franche-Comté

ENTERED THE WORLD UNIVERSITY RANKINGS IN 2016

9 000 employees

54 laboratories including national research institutions

60 000 students

1 900 PhD students

3 000 master degrees/y.

HOW TO APPLY?

The 5 EIPHI programs lie on 5 Master taught in English, 4 Masters partially in French and 2 doctoral schools which are located in different cities (Dijon, Besançon, Belfort-Montbéliard).

EIPHI welcomes applications for admission from individuals holding a BA, BS, or equivalent undergraduate degree (for prospective international students, a three- or four-year undergraduate degree). All degree candidates are admitted for full-time study beginning in September.

Lifelong training is also available.

Application deadlines: June 23, 2018
Find out more about application forms:
http://gradschool.eiphi.univ-bfc.fr

CONTACT US

gradschool.eiphi@ubfc.fr
http://gradschool.eiphi.univ-bfc.fr

Please feel free to get in touch with us, no matter the nature of your inquiry:

- Admissions, tuition fees and scholarships
- Applications and progression
- Thesis examinations
- Accomodation, insurance....
- Specific assistance to international students for housing, visa application, enrolment and Social Security

EIPHI graduate school
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UBFC UNIVERSITÉ BOURGOGNE FRANCHE-COMTÉ — cnrs — ISITE-BFC — femto-st SCIENCES & TECHNOLOGIES — ICB Laboratoire Interdisciplinaire Carnot de Bourgogne

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