

EIPHI GRADUATE SCHOOL

A UBFC Graduate School
in Engineering and Physical Sciences

EIPHI
32 avenue de l'observatoire
25000 Besançon - France
school.eiphi@ubfc.fr
<http://gradschool.eiphi.ubfc.fr>



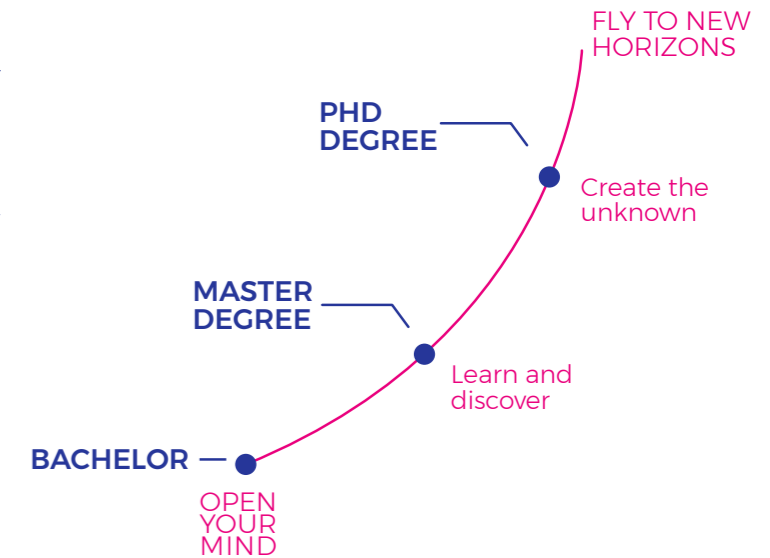
$e^{i\Phi}$ EIPHI

Engineering and Innovation through
Physical sciences, High technologies
and cross-disciplinary research

The EIPHI programme for your future professional lives






EIPHI is the international graduate school of the University Bourgogne Franche-Comté that coordinates the university's Master and PhD degrees. EIPHI offers five Master programmes in the sciences (all taught in English) with a high level of cross-disciplinary training between the different programmes. Each programme will provide:

- State of the art training through courses and hands-on laboratory experience taught by internationally-renowned scientists and carried out in world class academic research groups
- Access to world class clean room and fabrication platforms and high-tech industries
- Broad experience of the latest scientific and technical advances, and opportunities to take part in international collaborations and exchanges within a worldwide academic network;
- Supportive and personalized tutoring and mentoring for each student in a welcoming environment that will provide a wonderful experience of French culture
- Exposure to a broad range of neighboring scientific areas, with the aim of preparing students to be adaptable and flexible in future professional activities;



Where is 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 high-tech French industry centres for the high speed TGV, car industry, and precision manufacturing for the clock industry, jewelry, and medical devices. Building on the world class academic research developed by the FEMTO-ST and ICB laboratories, EIPHI offers state of the art training in optics & photonics, microwave technology for time & frequency metrology, robotics, micro-mechatronics, material sciences, applied mechanics, thermic machines, energy and fuel cell systems, software & system engineering, mathematics for physics.

	 Physics, mathematics & applications	 Energy	 Computer Science	 Smart systems & structures	 Material Science
Scientific domains	Advanced Photonics Ultrafast optics Quantum technologies Nanobioscience Nonlinear Nanophotonics Optical instrumentation & sensors Complex systems Black holes geometry & physics Co-homological field theories	Hydrogen energy systems Advanced modeling of energy systems Artificial intelligence & control Optimization of energy systems Renewable energies Electrical & thermal systems Numerical engineering	Model-driven engineering Advanced network Multi-tier architecture Programming in distributed systems Artificial intelligence Advanced functional programming Distributed algorithm Non functional testing	Energy efficient systems Biomedical micro-systems Acoustic micro-systems Micro-robotics Micro-characterization Vibro-acoustics Nonlinear mechanics Advanced mechanics of materials	Reactivity of solids Features of materials Physical-chemistry of surfaces Nano-materials Thin films & coatings Simulation of materials Synchrotron & neutrons Techniques Diffusion processes
Target economic sectors	Photonics, nano-technology, Time & Frequency Metrology, aeronautics, space industry, industrial consulting, numerical analysis for industrial applications, big data analysis	Energy, Renewable Energies, Hydrogen Energy, Electrical Vehicles, Eco-neighborhood	Computer sciences: software development, web, network, embedded software in mechatronic system, Assurance quality, Test	Aeronautics and space industry, ground transportations, energy, luxury watches, micro-technology, Time & Frequency instrumentation, robotics, control, classical manufacturing, R&D in automotive, large machines design & development	Transportation (automotive, aeronautics), energy (production, transportation), glass industry, cement & concrete, galenic