

# International Program

Telecom Physique Strasbourg

FRANCE



Telecom Physique Strasbourg is a **top-level French graduate engineering school** for training highly-qualified multidisciplinary engineers specialized in R&D. Our students are able to meet the technological demands in many sectors, particularly in Information and Communication Technologies (ICT) for Health.

## Technologies & Imaging for Healthcare



**Technologies & Imaging for Healthcare** is a novel, rapidly developing engineering track offering a broad scope of training that suits the needs of both industry and research. In a context of increasing healthcare costs, personalized medicine and digital health, engineers with training and experience in healthcare applications are becoming highly desirable.

**Telecom Physique Strasbourg** (Telecom PS) is at the forefront of engineering for healthcare owing to its unique location in the European landscape. In particular, Telecom PS faculty are experts in technologies for health that work with world-renown institutions located in Strasbourg, such as IRCAD ([www.iracd.fr](http://www.iracd.fr)), and the University Hospital Institute ([www.ihsu-strasbourg.eu](http://www.ihsu-strasbourg.eu)), both specialized in novel and innovative technologies for health.

**The International Program** of Telecom PS is taught in English by former top-tier US institutions faculty (Johns Hopkins, Harvard Medical School) that chose to establish their research and teaching activities in Strasbourg. Telecom PS proposes a forward-looking and innovative degree course in France which combines healthcare knowledge with the technical, biomedical and engineering skills needed for engineers to be more competent and efficient in today's professional world.

## Course Offering

### Engineering

Medical Instrumentation & Robotics  
Medical Image Processing  
Photonics & Healthcare

### Social sciences

French Language  
French Culture

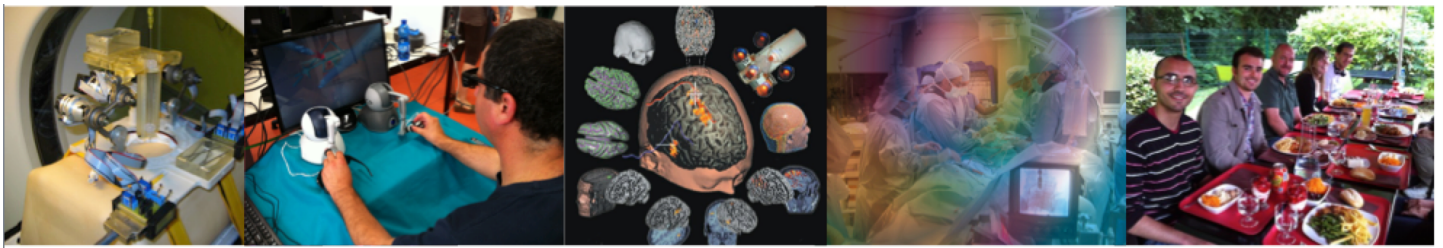
### Research

Research Project  
Paid Internship



UNIVERSITÉ DE STRASBOURG





## Spring Semester

During the spring semester, students will choose at least 2 engineering courses and 1 social sciences course:

ENGINEERING		
<b>Medical Instrumentation &amp; Robotics</b>		<b>4 Credits</b>
<i>Medical imaging basics</i>		
<i>Medical robotics</i>		
<i>Clinical translation</i>		
<b>Medical Image Processing</b>		<b>4 Credits</b>
<i>Biological image processing and bioinformatics</i>		
<i>Computer vision</i>		
<i>Deep learning</i>		
<b>Photonics &amp; Healthcare</b>		<b>4 Credits</b>
<i>Photonics instrumentation for Health</i>		
<i>Biophotonics</i>		
<i>Biomedical optics</i>		

SOCIAL SCIENCES		
<b>French Language</b>		<b>2 Credits</b>
<b>French Culture</b>		<b>2 Credits</b>

RESEARCH		
<b>Research Project</b>		<b>4 Credits</b>

## Summer Semester

During the summer semester, Telecom PS laboratories offer paid internships in healthcare technologies research:

RESEARCH		
<b>Paid Internship</b>		<b>8 Credits</b>



## Telecom Physique Strasbourg: International Excellence in health

Telecom Physique Strasbourg is part of the internationally recognized University of Strasbourg. Telecom PS is also a member of the "institut MINES-TELECOM", along with Telecom Paris Tech. Finally, Telecom PS is affiliated to ALSACE TECH, bringing together the main Engineering and Management Schools in Alsace at the heart of scientific and technological Europe, in association with the New Civil Hospital of Strasbourg and the world-renowned EITS/IRCAD institute.

### Pr Jacques MARESCAUX EITS/IRCAD president

"The new health ICT diploma offered by Telecom PS fits in perfectly with one of the strategic priorities fixed by the city of Strasbourg, which concerns medical devices development.

The recruitment of students through the national competitive exam Telecom INT-MINES- PONTs will enable us to train high-level engineers, real leaders in biomedical engineering who will be able to foster technology transfer and promote the creation of startups.

This school will be the most attractive in France in a sector which has been left by the wayside, until now.

The way we work at the EITS/IRCAD, the fact that these engineers are able to talk to surgeons, doctors and radiologists on a daily basis, their immersion in the biomedical domain will represent a real added-value."



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