



Information  
and knowledge  
society

# Graduate Programme « Information and Knowledge Society »

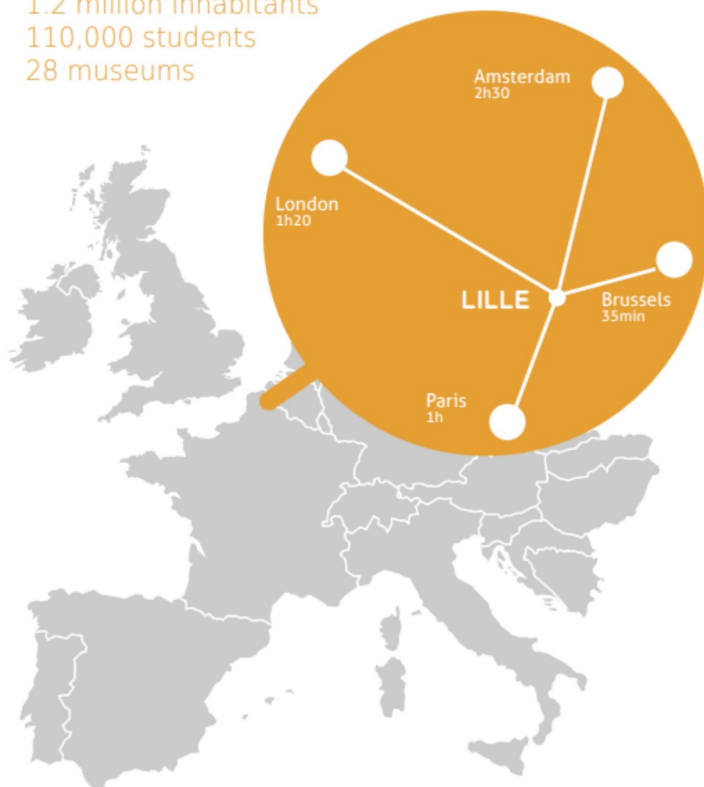


Conseil ED SPI, 08-06-2021



### LILLE, A VIBRANT CITY AT THE HEART OF NORTHERN EUROPE

1.2 million inhabitants  
110,000 students  
28 museums



# 4 Graduate Programmes of excellence in Lille

PRECISION HEALTH

SCIENCE FOR A CHANGING PLANET

INFORMATION AND KNOWLEDGE SOCIETY

CHANGING CULTURES, SOCIETIES, PRACTICES



# Strengths of the programme

The programme provides a **stimulating environment** tailor-made **for Master and PhD students** in order to build a successful career and raise the main scientific challenges of our time.

**“Learn by doing research”**

Training programmes are built on a stimulating, competitive, innovative scientific environment.

## 3 key principles

- international,
- interdisciplinary,
- successful career path



# Advantages

- **interdisciplinary** scientific trainings and events such as seminars and summer schools in data science and artificial intelligence, internet of things, electronics, photonics, mathematics, scientific computing, cognitive sciences, philosophy,...).
- proven **professional english skills**: all courses are taught in english, internships abroad, paid TOEIC examination on demand.
- several **professional experiences**: internships in research labs and/or in companies, practicals on cutting-edge equipments.
- **financial supports** : scholarships for students having the highest academic records, mobility grants.
- **personalised assistance** to define her/his professional project all along her/his academic path.
- **professional network** to interact with researchers, engineers from public and private sectors in scientific fields that students can consider a career in.
- **international network** offered by several research partnerships, joint master and several Erasmus Mundus joint programmes.





# Human-friendly digital world

The Graduate Programme “Information and Knowledge Society” is aligned on the scientific themes of the research Hub “Human friendly digital world”, a concentration of local excellence.

## Objective:

developing the infrastructure and concepts to build a digital world suited to humans and easy to live in.



# Highlights



**13 LABORATORIES**



**709 PHD STUDENTS**



**612 PERMANENT RESEARCHERS**



**INTERNATIONAL ENVIRONMENT**



**638 PUBLICATIONS PER YEAR**



**CUTTING-EDGE EQUIPMENT FOR:**

Optical fibre manufacturing,  
nanotechnologies, computing, robotics  
and intelligent transport, cognitive  
technologies, virtual reality



**INDUSTRIAL PARTNERSHIPS:**

Prysmian, Alcatel submarine networks,  
Nokia, Thalès, CEA, ST Microelectronics,  
Horiba, Total, Scalair, Vekia



# Scientific challenges

The students will be the future experts of the human-friendly digital world.

They are prepared to tackle the main challenges associated with hub 3 :

**(1) Humanise digital  
society**



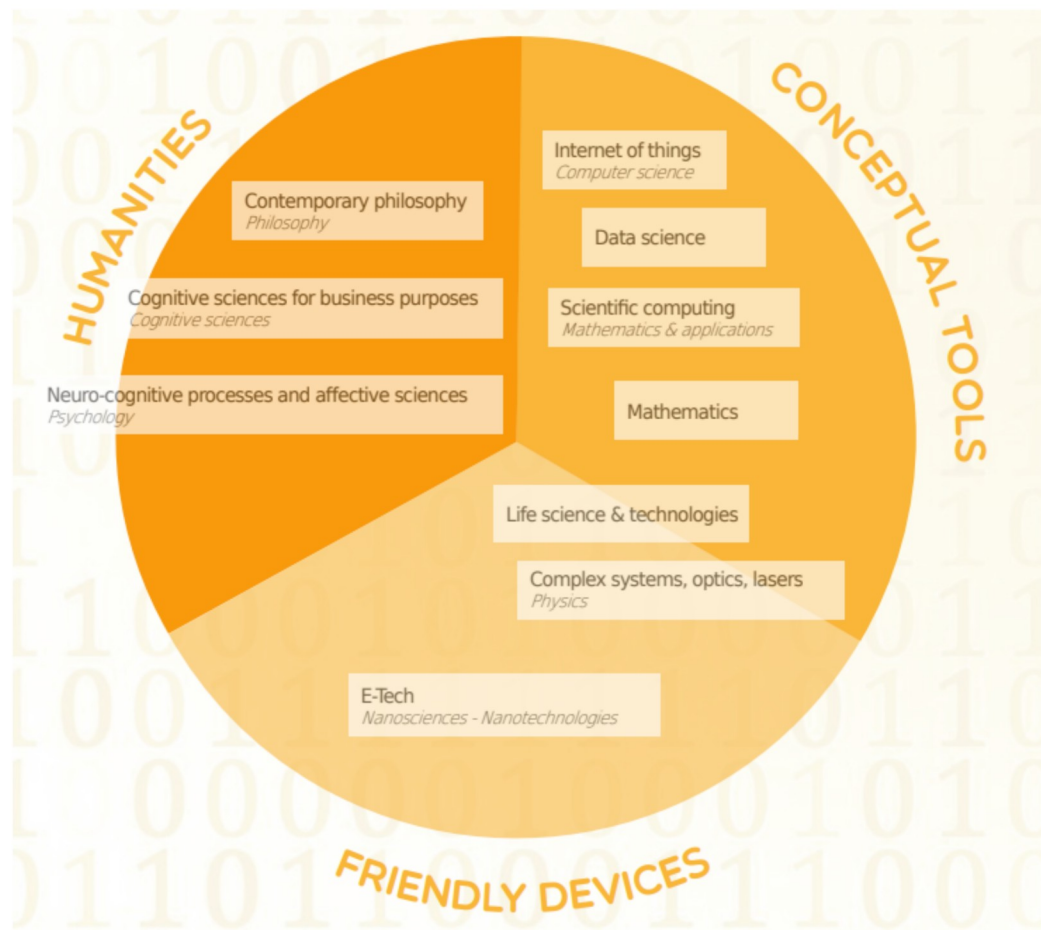
**(2) Master complexity with  
innovative conceptual tools**

**(3) Design disruptive technologies  
for friendly devices**

These challenges are addressed by **13 research units** belonging to the Hub “Human friendly digital world” with international recognition in their field, in which students will be able to discover research .



# 10 Master degrees







# 10 Master degrees

Fields	Master Degrees
Philosophy	Contemporary philosophy
Psychology	Neuro-cognitive processes and affective sciences
	Cognitive sciences for business purposes
Biology	Life Science and Technology
Computer Science	Computer science, speciality Internet of things
Mathematics	Mathematics for research
	Scientific computing
Nanosciences and Nanotechnologies	Nanosciences and Nanotechnologies, speciality E-tech *
Physics and optics	Physics, speciality Complex systems, optics, lasers
Computer Science, Mathematics, Electrical engineering	Data science *



# Financial supports for Master students

- **Scholarships for the academic year**  
criteria: master students studying in one of the 10 MSc of the Graduate Programme  
having the highest academic records  
deadline: 15<sup>th</sup> March (1<sup>st</sup> call) // 20<sup>th</sup> June (2<sup>nd</sup> call)  
amount: 3 500 euros /year
- **International or National relocation grants**  
criteria: student who is awarded the « scholarship for the academic year », having the highest academic records,  
newly arrived in Lille  
deadline: 15<sup>th</sup> March (1<sup>st</sup> call) // 20<sup>th</sup> June (2<sup>nd</sup> call)  
amount: from 1 750 to 3 500 euros /year
- **Mobility grants: internship abroad**  
for: master students studying in one of the 10 MSc of the Graduate Programme  
criteria : scientific project of mobility  
deadline : November (1<sup>st</sup> call) // March (2<sup>nd</sup> call)  
amount : travel and lodging expenses, maximum amount : 3 000 euros
- Several **PhD projects** are financed each year.



# Graduate programmes and doctoral students

**Each year, the GP will enroll a number of doctoral students, based on the matching of the subject with the thematic priorities of GP IKS and of the “Human-friendly digital world” hub, and independently of the funding scheme.**

PhD students will be asked to develop their skills in different domains:

- **International mobility** (one stay abroad during the thesis, at least attendance at one international conference).
- **Interdisciplinarity** (participation in interdisciplinary events organized by the GP: thematic conferences, student-run conferences, possibly research seminars,...) : make contact with students with different expertises.
- **Preparation for the career path:**
  - awareness about the professional environment (participations in courses organised by the doctoral college, with focus on GP themes, graduate schools or the graduate programme, internship in a company,...)
  - Community actions (sponsor a master student, engage in scientific mediation,...)

## **Mobility grants: internship abroad**

criteria : scientific project of mobility

deadline : November (1<sup>st</sup> call) // March (2<sup>nd</sup> call)

amount : travel and lodging expenses, maximum amount : 3 000 euros



# Recruitment of doctoral students in GP

**2 different missions : enroll in the program and allocate GP-specific grants.**

The GP IKS naturally interacts with 3 doctoral schools (4 Graduate schools):

- SPI (computer science, nanotechnologies, mathematics,...) to become MADIS/ENG SYS,
  - SMRE (physics, optics) and
  - SHS (cognitive sciences, philosophy).
- **Starting next year** : two-stage process based on selection of a subject-candidate pair :
    - 1) call for subjects in january, at the same time as calls from the Region and from the University. PhD advisors apply. Subjects are “pre-tagged”.
    - 2) Call for PhD students in may-june, shortly before the ED councils. Candidates apply.

Candidates selected for a pre-tagged subjected and which have a good academic record will be enrolled in the GP.

**2 PhD grants (for the 4 relevant GS) will be allocated to the selected subject-candidate pairs.**

- **This year** : a posteriori selection based on the results from the councils of doctoral schools.

2 PhD grants available for the 3 relevant doctoral schools.





Information and  
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## More information and contacts

**Graduate Programme's Office:**  
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