Graduate Programme « Information and Knowledge Society »
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 the students can consider a career in.

- **international network** offered by several research partnerships, joint master’s and several Erasmus Mundus joint degree 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, Scalar, 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 data world” with international recognition in their field, in which students will be able to discover research.
10 Master degrees
# 10 Master degrees

<table>
<thead>
<tr>
<th>Fields</th>
<th>Master Degrees</th>
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<tbody>
<tr>
<td>Philosophy</td>
<td>Contemporary philosophy</td>
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<tr>
<td>Psychology</td>
<td>Neuro-cognitive processes and affective sciences</td>
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<td></td>
<td>Cognitive sciences for business purposes</td>
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<tr>
<td>Biology</td>
<td>Life Science and Technology</td>
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<tr>
<td>Computer Science</td>
<td>Computer science, speciality Internet of things</td>
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<td>Mathematics</td>
<td>Mathematics for research</td>
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<td></td>
<td>Scientific computing</td>
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<tr>
<td>Nanosciences and Nanotechnologies</td>
<td>Nanosciences and Nanotechnologies, speciality E-tech *</td>
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<tr>
<td>Physics and optics</td>
<td>Physics, speciality Complex systems, optics, lasers</td>
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<tr>
<td>Computer Science, Mathematics, Electrical</td>
<td>Data science *</td>
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<td></td>
<td>Engineering</td>
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* MSc co-accredited between the University of Lille and the Engineering School Centrale Lille
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: 15th March (1st call) // 20th June (2nd 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: 15th March (1st call) // 20th June (2nd 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 (1st call) // March (2nd 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\textsuperscript{st} call) // March (2\textsuperscript{nd} 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/ENGSYS,
- 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 subject 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.
More information and contacts

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