Doctoral School Sciences for Engineers
(Ecole Doctorale Sciences Pour l’Ingénieur SPI-072)

D1Day

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Session 1 and 2 November 2020
Scheme

- SPI doctoral school
- Training Courses
- Individual Monitoring Committee
- PhD Defence
- PhD via ADUM
- Questions
SPI Doctoral School
PhD student

- prepares the doctorate (in 3 years) of
- has a student card of

is member of

Institution

is directed by

1 Supervisor or 2 co-supervisors

is managed by

is employed by

is managed by

15 Specialities

ED SPI

Doctoral college

Institution, company, association
546 accredited supervisors

Laboratory

is member of

Supervisor (HDR)

has chosen

Institution

is Associate Professor, Professor, Researcher, Research Director of

15 Specialities

ED SPI

Doctoral college

belongs to
5 institutions in north side of Hauts de France

ULille, CLI and UGE

UPHF

IMT
Laboratories in north side of Hauts de France

INRIA, CRIStAL, Painlevé, IEMN, L2EP, LAMCUBE, LGCGE, LMFL, UML, GEMTEX, LEOST, ESTAS

IEMN, LAMIH, LAMAV, LMI

CERI SN, MP et EE
LGCGE
Thematic perimeter

**Organisation in 6 disciplinary fields**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Director</th>
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</thead>
<tbody>
<tr>
<td>Inf : Computer science</td>
<td>Pr. L. JOURDAN</td>
</tr>
<tr>
<td>MPMA : Mathematics</td>
<td>Pr. P. POPESCU-PAMPNU</td>
</tr>
<tr>
<td>GE : Electrical science</td>
<td>Pr. N. IDIR</td>
</tr>
<tr>
<td>MNTAT : Electronics science</td>
<td>Pr. H. HAPPY</td>
</tr>
<tr>
<td>MGCEM : Mechanical science</td>
<td>Pr. D. CHICOT</td>
</tr>
<tr>
<td>AGITSI : Control science and Image analysis</td>
<td>Pr. L. BELKOURA</td>
</tr>
</tbody>
</table>

- **1 DED (Director of the Doctoral Studies of a disciplinary field) and 1 office with at least 1 member/labo.**
  - Review the application to doctoral studies (academic document, funding...).
  - Manage the individual monitoring committees D1-D3.
  - Organize meetings for PhD students.
## 15 Doctorate specialities for 6 SPI

**Disciplinary fields**

<table>
<thead>
<tr>
<th>Disciplinary field - DED</th>
<th>Doctorate speciality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer - L. JOURDAN</td>
<td>Informatique et applications</td>
</tr>
<tr>
<td>Mathematics – P. POPESCU-PAMPUM</td>
<td>Mathématiques et leurs interactions</td>
</tr>
<tr>
<td>Electrical – N. IDIR</td>
<td>Génie Electrique</td>
</tr>
<tr>
<td>Electronics – H. HAPPY</td>
<td>Electronique, photonique</td>
</tr>
<tr>
<td>Electronics – H. HAPPY</td>
<td>Electronique, microélectronique, nanoélectronique et micro-ondes</td>
</tr>
<tr>
<td>Electronics – H. HAPPY</td>
<td>Micro-nanosystèms et capteurs</td>
</tr>
<tr>
<td>Electronics – H. HAPPY</td>
<td>Acoustique</td>
</tr>
<tr>
<td>Mechanical – D. CHICOT</td>
<td>Génie civil</td>
</tr>
<tr>
<td>Mechanical – D. CHICOT</td>
<td>Energétique, thermique, combustion</td>
</tr>
<tr>
<td>Mechanical – D. CHICOT</td>
<td>Mécanique des milieux fluides</td>
</tr>
<tr>
<td>Mechanical – D. CHICOT</td>
<td>Mécanique des solides, des matériaux, des structures et des surfaces</td>
</tr>
<tr>
<td>Mechanical – D. CHICOT</td>
<td>Mécanique, énergétique, génie des procédés, génie civil</td>
</tr>
<tr>
<td>Control – L. BELKOURA</td>
<td>Automatique, productique</td>
</tr>
<tr>
<td>Control – L. BELKOURA</td>
<td>Traitement du signal et des images</td>
</tr>
<tr>
<td>Control – L. BELKOURA</td>
<td>Informatique, Automatique</td>
</tr>
</tbody>
</table>
722 PhD students of SPI (2017-2018)

According to the place where the Master’s degree was obtained

- **Highlights:**
  - 71% of PhD students come from outside Hauts de France region.
  - 67% of foreign students.
  - Attractivity of the laboratories (at national and international levels).

- **France** 64.9%
- **Europe** 6.9%
- **Afrique** 10.4%
- **Asie** 9.3%
- **Proche & moyen orient** 4.6%
- **Amériques nord & sud** 3.9%

including 44% from the region HdF
722 Phd students of SPI (2017-2018)

By institution

- Ulille: 53.6%
- UPHF: 18.4%
- IMT: 5.4%
- ULCO: 11.2%
- ECL: 3.7%
- UA: 7.6%

By funding

- Institutional contract: 47.0%
- Contract de recherche: 26.2%
- Foreign: 8.3%
- Salariés: 3.7%
- Privés: 4.3%

By disciplinary field

- Control: 19.8%
- Electrical: 6.1%
- Computer: 20.2%
- Mechanical: 25.5%
- Electronics: 19.5%
- Maths: 8.9%
Organisation and governance

- Director and deputy director.
- 6 institution referents.
- 6 DED (supported by the office).
- A board of 26 members.
- An office (12 members).
- An executive committee (7 members day to day business).
- An executive assistant (T. N’Guyen-Prinet) and a secretary (M. Debuysschère) (ULille P3).
PhD student team at Board

Abdel-karim Abdel-karim (IEMN)
Antonin Durey (CRIStAL)
Imane Akjouj (Painlevé)
Jimmy Petit (CRIStAL)
Rock Akiki (IEMN)
Main missions of Doctoral school

- Agreement for PhD registration in one of the 6 co-accredited institutions
  - Documents needed for an application to doctoral studies (transcripts, motivations,...)
  - Funding (proof of funding for the PhD duration)
  - Support letter from the proposed supervisor and agreement of the laboratory director
  - Agreement for the joint supervision and awarding of a double doctoral degree
- Selection of PhD candidates on doctoral contracts awarded by the institutions
- Individual Monitoring Committee (CSI) (at D1 for D2 and at D3 for D4)
- Doctoral trainings (with Doctoral College)
- International mobility grants for PhD students (with Doctoral College)
- Agreement for the PhD defence
  - PhD committee and reviewers
  - Reports by reviewers before defence
Not supported by Doctoral school

- PhD annual registration in the institution (ECL, Ulille, IMT, UPHF, UGE).
- Mobility grants for participation to doctoral trainings or conferences.
- Organisation of the PhD defence.
- Doctoral degree printing.
SPI politics

SPI admission rules

- Topic is defined by the supervisors and research unit.
- HDR supervisors manage a limited number of doctoral students (4 supervised or 8 co-supervised students).
- Employment contract of 36 months for doctoral study is required.
- Applicants are selected by SPI through a well defined process and according to demanding academic criteria.
SPI politics

- SPI doctoral students in computer, control, electrical, electronics, mechanical and mathematical sciences
  - conduct training-by-doing research, under the scientific and personalized direction of supervisors within 36 months.
  - are young researchers integrated in research units.
  - develop skills beyond their area of scientific expertise.
SPI politics

- SPI rules
  - Before D2 (or D3 for 2020): agreement of the individual monitoring committee (CSI).
  - Before defence: a number of training hours (120 h on thematic-methodology and language-professional skills) must be validated.
  - D4 is exceptional and needs a new CSI.
Training courses
Training courses

- The number of credits (CFD) to be collected depends on the PhD type:
  
  - **60 CFD** including at least 20 CFD on professional training for a **full time** PhD student.
  
  - **30 CFD** in three training areas for a PhD student with a joint supervision between two institutions of different countries (**co-agreement**).
  
  - **40 CFD** distributed in the area of thematic training and research methodology for **CIFRE** PhD Student.
  
  - One course about **ethics** must be followed
Training courses

- All PhD students must collect a number of credits following their participation in doctoral training in the three areas:
  - Thematic training (summer schools, master classes, training courses organized by the laboratory or SPI, technical courses);
  - Training related to language, research methodology or research tools (organized by SPI or Doctoral College);
  - Professional training (organized by Doctoral College).
- One course about ethics must be followed
  - 2020-21: 20 CFD can be obtained by MOOC.
  - 2 hours -> at least 1 CFD.
Registration to training courses (ADUM)

You must have an ADUM account number!
Registration to training courses (ADUM)

- **Training module list**
  - Trainings courses offered by SPI
    - French foreign language
    - English
    - Scientific trainings.
  - Transversal training courses offered by Doctoral College
    - Doctors and companies
    - Training courses in English.

- **Your ongoing training modules of list**
  - 3 states: Enrollment asked, Enrollment accepted, Registered and given credits.
Registration to training courses (ADUM)

- Add an external training module
  - Master class, MOOC, summer or thematic school, Member of organization committee of conferences...
  
  - Give the title- category – university and city – topic.
  
  - Add a PDF file with attendance certificate and detailed training program, so that SPI can give credits to you (1 CFD/ 2 hours).
D1 Individual Monitoring Committee (CSI)
For all PhD students, an Individual Monitoring Committee (CSI) is set up.

At minimum the committee includes:
- The supervisor and co-supervisors.
- A member of the Doctoral school SPI who will be the chairman of the CSI meeting.
- A HDR member who is conducting research activities in the domain of the thesis but who is not a member of the host team, and who will be chosen by the supervisor.
CSI paper

- The PhD student provides a paper on its work, two weeks before the meeting to all members of the CSI.

- This paper will include a minimum of 7 pages;
  - Brief description of the thesis subject and its goals (min 1/2 page);
  - Main references - state of the art (min 1 page);
  - Progress work in accordance with goals and key results (min 3 pages). A statement of policy regarding results dissemination in terms of publications and software production;
  - A roadmap for the next two years with the expected contributions and a schedule, (min 2 pages);
  - Doctoral Training modules achieved;
  - Professional project.
D1 Individual Monitoring Committee (CSI)

- Meeting with CSI includes
  - Presentation in 20 mn + questions.
  - Meeting between members of CSI and the supervisor (and co-supervisors).
  - Discussion between members of CSI (without the PhD supervision) and the PhD student.
  - At the end of the meeting, a collective report will be written under the authority of the CSI chairman. This report is sent to the DED by email to be posted in ADUM.

- Calendar 2021
  - CSI constitution before July 1rst, 2021
  - CSI paper has to be sent 15 days before the meeting.
  - CSI meeting before September 15th, 2021.

- To register in D2 and D4
  - The CSI report with favorable decision is necessary.
PhD Defence
Planning (important dates)

- **D – 9 weeks**: Supervisors send the PhD reviewers and committee to the Doctoral School SPI.
- **D – 8 weeks**: Doctoral school SPI checks the required CFD and gives its agreement about PhD reviewers and committee.
- **D – 8 weeks**: Student sends the thesis to the reviewers (and to committee members).
- **D – 4 weeks**: Reviewers send their review to the Institution and the Doctoral School SPI.
- **D – 3 weeks**: Doctoral school Director and Research President of the Institution give their agreement about the PhD defence.
- **Defence**: Committee President sends the defence report to the Institution.
- **D + XX**: Student sends the final version of the thesis to the Institution.
Committee for full-time or CIFRE PhD

- 2 reviewers (minimum)
  - Must be accredited (HDR). A full professor or French research director is accredited. Foreign reviewer’s CV is required.
  - Must be outside ‘Hauts de France’ region. No work and paper with supervisors and PhD student during PhD duration.

- From 4 to 8 committee members
  - More than 50% of members are outside ‘Hauts de France’ region. All members must be PhD.
  - More than 50% of Full Professor or equivalent (Research Director in France).
  - Member categories: 1 or 2 supervisors (registered at ADUM), 2 reviewers and examiners
    - At least 1 member of each gender for a committee with 4, 5 or 6 members.
    - At least 2 members of each gender for a committee with 7 or 8 members.

- Committee President must be in the same room as the PhD student during the defence. All other members can participate via video-meeting.
Committee when co-agreement with foreign institution

2 reviewers (minimum)

- Must be accredited (HDR). A full professor or French research director is accredited. Foreign reviewer’s CV is required.
- Must be outside ‘Hauts de France’ region and the foreign institution. No work and paper with supervisors and PhD student during PhD duration.
- More than 50% of members are outside ‘Hauts de France’ region and the foreign institution.
  All members must be PhD.

From 4 to 8 committee members

- More than 50% of Full Professor or equivalent (Research Director in France).
- Member categories: 2 supervisors (registered at ADUM), 2 reviewers and examiners.
  At least 1 member of each gender for a committee with 4, 5 or 6 members.
  At least 2 members of each gender for a committee with 7 or 8 members.
- Committee President must be in the same room as the PhD student during the defence. All the other members can participate via video-meeting.
To prepare your career after PhD

- Participation at STARTDOC 24/11/2020
  https://twitter.com/CDoctoralULNF

Contact your Professional referee

Join LinkedIn group of SPI PhD students (535 members today)

https://www.linkedin.com/groups/12416555/
PhD via ADUM (http://edspi.univ-lille1.fr/index.php?id=5)
Registration Process for D1

1) Create a temporary ADUM ID for academic submission.
   - Read carefully diagram available at SPI website.

2) With your supervisor and laboratory contact
   - Carefully fulfil the PhD application form.
     - Civil status must be the same as in your passport.
     - Thesis progress (research unit, supervisor, ...) cannot change each year.
   - Merge the required documents (marks, proof of funding for the PhD project,.. ) to provide for an application to doctoral studies at SPI.

3) SPI review (sorry for delay...)
   - Check diploma and academic marks, administrative form, funding and supervision conditions.
   - DED gives agreement so that student can print the documents.

4) Signatures
   - PhD student obtains the signatures of supervisor, co-supervisor and laboratory director.
Registration Process for D1

4) **Final SPI review (sorry for delay...)**
   - Submit SPI registration with original signed documents: RGPD, registration forms: ‘demande d'authorisation d'inscription’, 'la charte du doctorat' and 'la convention individuelle de formation'.
   - DED and SPI director give an agreement.

5) **Administrative registration at your institution**
   - Go to the PhD office of your institution.
   - Pay registration fees and obtain your student card.
   - Obtain your **final ADUM ID** from your institution.

**Operations by ADUM**
   - Register at training courses available at ADUM. Credit number is managed by ADUM.
   - CSI is managed via ADUM (chairman, download CSI report).
Planning

D2 and D3:
- On line register at SPI (see diagram on SPI web site).
- Obtain your student card from your institution. Online registration via ent.univ-lille.fr for University of Lille.
- Register at training courses available at ADUM.
- Add external training modules.
- Build your Portfolio (validated courses, teaching, PhD title...).
- Prepare your career: upload CV and scientific productions to be displayed via ADUM.

Defence via ADUM (University of Lille, CLI and IMT):
- Enter the PhD committee.
- Upload the PhD Thesis.
- Download reviewer reports and defence documents.
Important Deadline 2020-2021

- 24 November 2020 : STARTDOC
- 4 December 2020: Registration at ED SPI
- 18 December 2020 : Administrative registration at your Institution
- Obtain your final ADUM ID from your institution as soon as possible
- 1 July 2021-8 dec. 2021 : Registration 2021-2022
- 15 September 2021 : D1-CSI
The PhD : an exciting job that combines training and research.

Enjoy your PhD!

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