

# Information meeting 2022-2023

## Doctoral school IAEM Lorraine

Didier Maquin

Professor at Université de Lorraine

Director of the Doctoral School IAEM Lorraine





## Didier Maquin

Professor of Automatic Control (CNU 61)  
Université de Lorraine

Ecole Nationale Supérieure d'Electricité et de Mécanique  
Ecole Nationale Supérieure des Mines de Nancy

Centre de Recherche en Automatique de Nancy

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Location : ● Maison du doctorat – Campus ARTEM

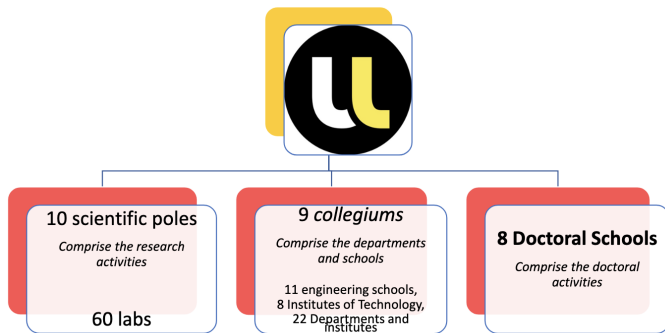
2 rue Léonard de Vinci, Bâtiment Recherche Mines Nancy  
BP 14234 – 54042 Nancy Cedex

- ENSEM bureau **116 jaune**

More details?

Personal Web pages : <http://www.cran.univ-lorraine.fr/didier.maquin>

Laboratory web site : <http://www.cran.univ-lorraine.fr>



AM2I – M4 – EMPP – BMS

IAEM

- 1 BioSE (Biologie, santé et environnement)
- 2 C2MP (Chimie, mécanique, matériaux, physique)
- 3 HN-FB (Humanités nouvelles - Fernand Braudel)
- 4 IAEM (Informatique, automatique, électronique-électrotechnique, mathématiques)
- 5 SIMPPÉ (Science et ingénierie des molécules, des procédés, des produits et de l'énergie)
- 6 SIRENa (Science et ingénierie des ressources naturelles)
- 7 SJPEG (Sciences juridiques, politiques économiques et de gestion)
- 8 SLTC (Sociétés, langages, temps, connaissances)

≈ 1850 PhD students



## ▶ Disciplines

Computer Science, Automatic Control, Electrical Engineering, Mathematics and Architectural Sciences

## ▶ Abutment

11 research laboratories or research teams

co-accreditation with CentraleSupélec – association with INRIA Grand-Est

around 560 academics or researchers of which 300 HdR (research directors)

## ▶ Headcount (November 19, 2022)

269 registered PhD students

(1Y: 47; 2Y: 81; 3Y: 78; 4Y: 48; 5Y: 15; 6Y: 0)

## ▶ Average annual flow of 85-90 PhD diplomas (6 mentions) – 85 last year– 90 this year

- computer science;
- automatic control, signal and image processing;
- mathematics;
- electrical engineering;
- electronic systems;
- architectural sciences.

# Web site of the Doctoral School

<http://doctorat.univ-lorraine.fr/fr/les-ecoles-doctorales>

The screenshot displays the website for the Doctoral School of the University of Lorraine. At the top left is the University of Lorraine logo and the text 'UNIVERSITÉ DE LORRAINE DOCTORAT'. To the right are social media icons for 'dun', 'f in', and a search bar labeled 'Rechercher'. Below this is a navigation menu with the following items: 'LE DOCTORAT', 'FUTURS DOCTORANTS', 'INTERNATIONAL', 'LES ÉCOLES DOCTORALES' (highlighted in purple), 'ÊTRE DOCTORANT', 'ÊTRE ENCADRANT', and 'ET APRÈS ?'. Underneath the menu is a sub-header 'Les Écoles Doctorales'. The main content area features a grid of eight colored boxes, each representing a doctoral school:

- 8 ÉCOLES DOCTORALES**: A light blue box with the number 8 and the text 'ÉCOLES DOCTORALES'.
- BioSE**: A blue box with a globe and various scientific icons.
- C2MP**: A green box with a molecular structure and circuitry.
- Humanités Nouvelles - Fernand Braudel**: An orange box with a stack of books and a laptop.
- IAEM**: A purple box with a hand holding a glowing blue particle.
- SIMPPÉ**: A green box with a circular arrow diagram and icons for H<sub>2</sub>, CO<sub>2</sub>, and a recycling symbol.
- SIReNa**: A yellow-green box with a landscape featuring a mountain and a river.
- SJPEG**: A red box with a statue of a person and a large white Euro symbol.
- SLTC**: A blue box with a desk setup including pens, books, and laboratory glassware.

- 1 LORIA (CNRS INRIA UL) UMR 7503 (97)
- 2 IECL (CNRS INRIA UL) UMR 7502 (83)
- 3 CRAN (CNRS UL) UMR 7039 (55)
- 4 LGIPM (UL) EA/UR 3096 (14)
- 5 GREEN (UL) EA/UR 4366 (13)
- 6 LCOMS (UL) EA/UR 7306 (13)
- 7 IJL (UMR CNRS UL) UMR 7198 – Mesures et Architectures Electroniques team (9)
- 8 IRL GeorgiaTech (CNRS GeorgiaTech) IRL 2958 (3)
- 9 IADI (UL INSERM) U947 (3)
- 10 MAP (CNRS MCC) UMR 3495 – CRAI (EAN Nancy) (2)
- 11 LCFC (UL Arts et Métiers) EA/UR 4495 (1)

Total HdR 293

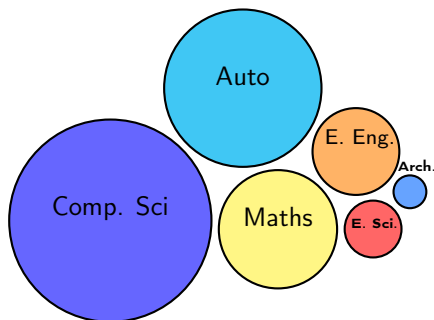
# Distribution of 2021 PhD

## By research unit

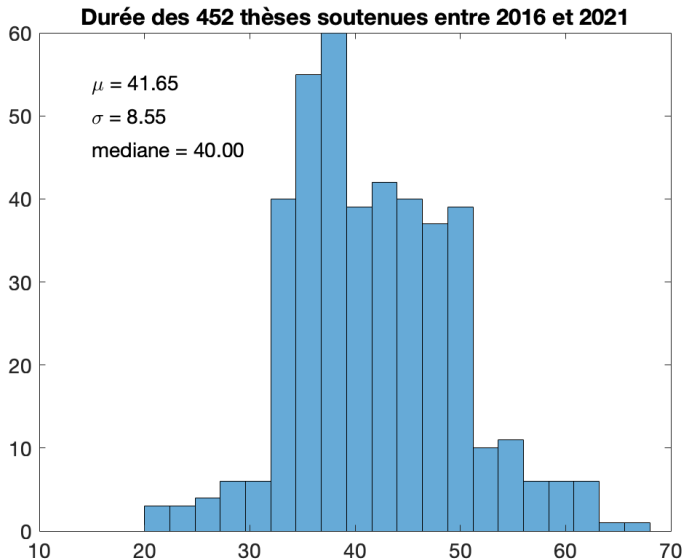
Loria	CRAN	IECL	GREEN	LGIPM	LCOMS	IADI	IJL	G-Tech	CRAI	LCFC
37	13	13	7	6	3	2	1	1	1	1

## By speciality

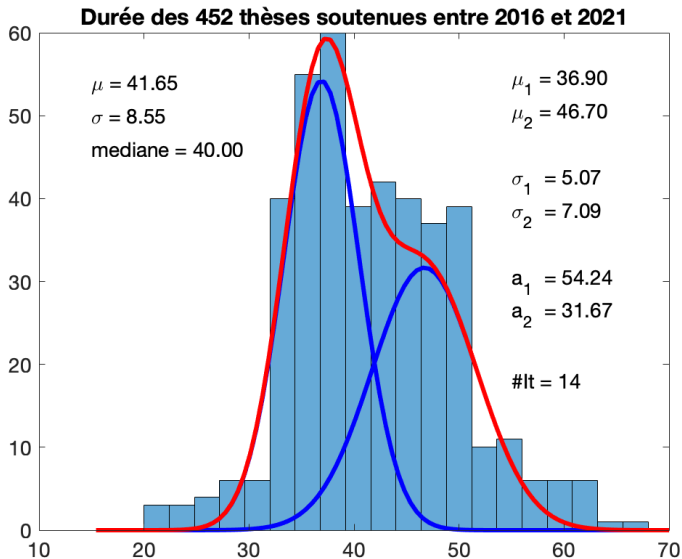
Comp. Sci.	Auto	Maths	Elect. Eng	Electron. Sci.	Arch. Sci.	Total
38	23	13	7	3	1	<b>85</b>
45%	27%	15%	8%	3%	1%	100%



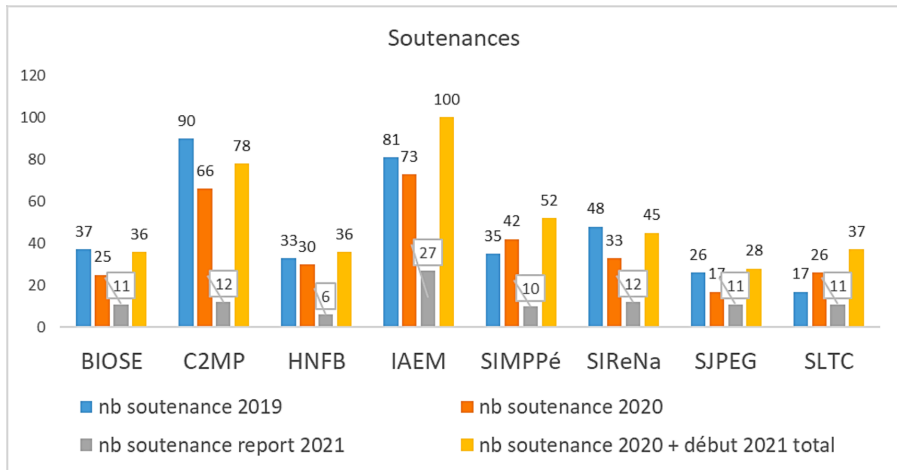
# Duration of PhD preparation - 452 PhD from 2016 to 2021



# Duration of PhD preparation - 452 PhD from 2016 to 2021



## Figures from all the EDs



# defenses 2019 : 367, # defenses 2020 + report : ~ 412

Every year, the Université de Lorraine conducts graduate integration surveys. The latest survey is based on data collected from December 2021 to April 2022 from PhD graduates during the calendar year 2018 (from January 1 to December 31). They were asked about their professional situation on December 1, 2021. You can find the results of the survey at:

<http://insertion.univ-lorraine.fr/doctorat/2018/Doctorat.htm>

This link is also accessible from the ED website, item “doctoral student” (doctorants).

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You can also access the latest evaluation report of the Doctoral School by HCERES:

<https://hal-hceres.archives-ouvertes.fr/hceres-02029731/document>

The evaluation interviews by Hcéres for the Doctoral School took place yesterday!



# Doctoral school : IAEM Lorraine

## MDD - Maison du Doctorat à Metz

Maison de l'université - rez-de-chaussée  
Ile du Saulcy 57045 Metz cedex 1

mettis ligne B : arrêt Saulcy



# Doctoral school : IAEM Lorraine



## MDD - Maison du Doctorat à Nancy

campus Artem - bâtiment recherche Mines Nancy  
2 rue Léonard de Vinci BP 14234 54042 Nancy cedex

tram T1 : arrêt campus Artem  
bus ligne 7 : arrêt campus Artem



# Doctoral school : IAEM Lorraine



# Doctoral school (main) tasks

*Decree of May 25, 2016 related to doctoral education, article 2*

“Under the responsibility of the accredited institutions, doctoral schools or doctoral colleges organise the training of doctoral students and prepare them for their professional activity at the end of the doctoral training.”

- ▶ Implement an admission policy for PhD students;
- ▶ Organize scientific exchanges between PhD students and with the scientific community;
- ▶ Ensure that each doctoral student receives training in research ethics and scientific integrity;
- ▶ Raise doctoral students' awareness of the challenges of open science and the dissemination of research work in society (new !)
- ▶ Ensure a quality procedure to training (setting up individual monitoring committees for the PhD student);
- ▶ Define and implement support measures for pursuing the professional activity;
- ▶ Contribute to European and international openings

# Doctoral school organization

- ▶ A director: Didier [Maquin](#)  
(appointed in 2017, renewed for 2018-2023, possibly in operation until 2024)
- ▶ Executive committee – 9 membres ([current management](#))
- ▶ Four mention commissions
  - Informatique (François [Charoy](#) & Emmanuel [Jeandel](#))
  - Automatique (Eric [Levrat](#) & Nathalie [Sauer](#))
  - Electronique – Electrotechnique (Melika [Hinaje](#) & Philippe [Poure](#))
  - Mathématiques (Frédéric [Robert](#) & Victor [Nistor](#))
- ▶ Council – 20 membres ([the wise men – or women ! –](#))
- ▶ Three support secretaries
  - Educational administrator: Souad [Boutaguermouchet](#)
  - School administrator (Nancy): Aurore [Tranchina](#)
  - School administrator (Metz): Stéphane [Lebreton](#)

# Doctoral School Organization – The Council

12 members representing the institutions among which:

- ▶ the 8 mention commission responsables
- ▶ Doctoral school partner representatives
  - Konrad Szafnicki (Head of the Metz CentraleSupélec Campus)
  - Bruno Levy (Head of the INRIA Grand Est Research Center)
- ▶ 2 administrative staff representatives
  - Souad Boutaguermouchet (Educational administrator)
  - Aurore Tranchina (School administrator)

4 PhD student representatives (titular / alternate)

- ▶ Olivier Lindamulage de Silva / Baparou Danhane (Automatic control)
- ▶ Ghazi Hajiri / Rémi Dorget (Electrical Engineering)
- ▶ Pierre-Antoine Rault / Dylan Marinho (Computer sciences)
- ▶ Clara Derand / David Zheng-Xu (Mathematics)

and 4 external personalities

- ▶ Dominique Daloz (Former head of the doctoral school C2MP: Chimie, Mécanique, Matériaux, Physique)
- ▶ Rezak Ayad (Head of the Doctoral School SNI: Sciences du Numérique et de l'Ingénieur de l'Université de Reims Champagne-Ardenne)
- ▶ Pierre-Jean Krauth (ArcelorMittal – Digital Lab Director)
- ▶ Manuel Fendler (CEA Tech – MAPP platform: Future of Factory Lorraine)

# Main tasks of the executive committee

- ▶ Examine candidates' admission files and registration renewal beyond the fourth year, after examination by the mention commissions
- ▶ Validate the jury proposal made by your thesis director and provide a recourse function in case of difficulty in the management of this jury
- ▶ Define the training courses to set up
- ▶ Advise and assist the Director in what concerns animation, communication, ...



# The mention commissions

- ▶ **Commission perimeter**: determined by the attachment of each laboratory
- ▶ **Commission members**: holders of a HdR (“Habilitation à diriger des recherches”)
- ▶ **Operation**: general meeting and representative board
- ▶ **Current decisions**: representative board ou general meeting depending of the internal arrangements
- ▶ **Role**
  - Instruction of admission to doctoral training
  - Follow-up of the training of PhD students (progress of the thesis, individual assessment of validated courses in terms of credits, renewal of registration in 2nd and 3rd year, exceptional registrations in 4th or 5th year)
  - Scientific evaluation of thesis work (choice of reviewers, dissertation committee, examination of thesis reports, opinion on the defense)

The College of Doctoral Schools (in french *Collège Lorrain des Ecoles Doctorales: CLED*) is a coordination structure of the 8 Doctoral Schools of the University of Lorraine.

Its missions consist of proposing to the Scientific Council:

- ▶ a policy on doctoral training;
- ▶ to strengthen the visibility, attractiveness and transversal positioning of the doctorate;
- ▶ to improve the organisation and management of doctoral training.

Under the chairmanship of Clotilde Boulanger, Deputy Vice-President for Doctoral Strategy, the CLED Board is composed of the directors of doctoral schools, doctoral students (one per school council and one for the Scientific Council) and two representatives of the Research and Development Department.

# Decree of May 25, 2016 related to doctoral education

Modified by the decree of August 26, 2022

① **Establishment of the individual monitoring committees** (since 2012)  
decree of May 25, 2016 (Article 13) and decree of August 26, 2022 (Article 11)

## ► **Composition**

- **At least two persons** (members of the Université de Lorraine or external to the Université de Lorraine – without any link with the thesis supervision, proposal : 1 “scientific” evaluator + 1 “HR” human resources evaluator (e.g. team leader in a research lab))
- The doctoral student must be consulted on the constitution of this committee (he can possibly choose one of the two members)
- the thesis supervisor and co-supervisors cannot be involved

## ► **Mission**

Audition the candidate (face-to-face or video-conf) and prepare an annual report

- **1 report before each administrative registration from the second**, to assess the progress of the scientific work and to estimate the time required to complete the PhD defense (**mandatory**)

# Decree of May 25, 2016 related to doctoral education

Modified by the decree of August 26, 2022

## ① Individual monitoring committee

The College of Doctoral Schools has adopted a common text for all the Doctoral Schools.

- ▶ The composition of your individual monitoring committee must be declared using your individual account on ADUM at late six months after your first registration. → for all of you before May 2023.
- ▶ Whatever the date of your first enrollment in the PhD cycle, the deadline for your re-enrollment for the next university year is fixed to September 30.
- ▶ Be careful to obtain the report from your individual monitoring committee before that date. Remind your thesis supervisor!
- ▶ **Advice** : Convene your committee in June or early July.
- ▶ The report of your committee must be uploaded on ADUM by July 14.

# Decree of May 25, 2016 related to doctoral education

Modified by the decree of August 26, 2022

## ② Individual Training Agreement (article 12 of the decree)

### Article 1: The PhD student

Identity (surname, name, date of birth, email, address, n° INE)

### Article 2: The doctoral project

Doctoral school, mention, subject, research team, thesis supervisor

### Article 3: Running conditions of the doctoral project

Working time, remuneration, type of contract

#### Provisional timetable of the research project (revisable)

Modalities of supervision and environment (number of meetings, regular seminars)

Laboratory part (pre-filled)

Doctoral school part (pre-filled)

Université de Lorraine part (pre-filled)

# Decree of May 25, 2016 related to doctoral education

Modified by the decree of August 26, 2022

## ② Individual Training Agreement

### Article 4: Professional project of the PhD student

Description and justification of the choice

### Article 5: Training of the PhD student

Formalization of the individual plan

### Article 6: Promotion of the research works

Confidentiality

Promotion objectives

### Article 7: Description of the thesis in preparation

Title, abstract, key words (french and english)

Signatures of the Phd student and his thesis supervisor

- ▶ The College of the Doctoral Schools has standardized the practices of the various doctoral schools ([common scheme for all the doctoral schools](#)).
- ▶ The main objective is to comply with the provisions of the decree, to align with the practice of other “major” universities and to offer all the necessary tools to PhD students to carry out their work and prepare their professional future
- ▶ A credit system has been adopted and the trainings have been gathered in three groups
  - Scientific valorization
  - Thesis support
  - Post-thesis preparation
- ▶ 30 credits will be necessary to be authorized to defend his thesis

## LA FORMATION DOCTORALE A L'UNIVERSITE DE LORRAINE

### LA THÈSE

Travail personnel aboutissant à la rédaction d'une thèse, accompagné par des encadrants



### UN PARCOURS de FORMATION

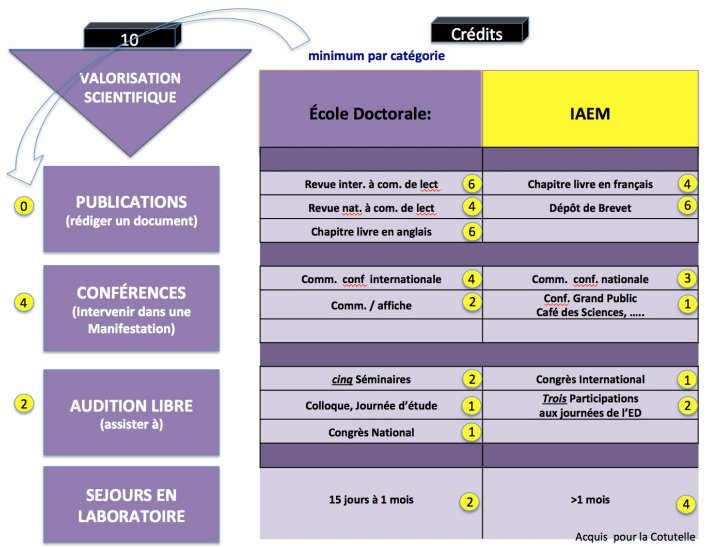
**Validé par l'obtention de 30 crédits**

parmi les items suivants :

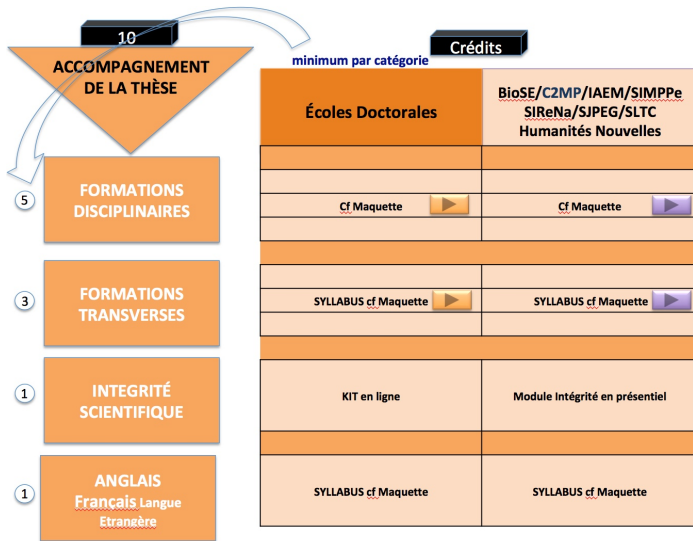
VALORISATION SCIENTIFIQUE (10 crédits minimum)	ACCOMPAGNEMENT DE LA THÈSE (10 crédits minimum)	PREPARATION A L'APRES-THÈSE (5 crédits minimum)
Publications	Formations disciplinaires 5	<b>MODULES</b> - Aide à l'insertion prof. - Enseignement supérieur - Innovation, Entreprise - Médiation scientifique .....
Conférences	Compétences transverses 3	Possibilité de parcours pédagogiques et préparation à des LABELS
Auditions libres	Intégrité scientifique 1	Séjours en Entreprise ou Collectivité
Séjours en laboratoire	Langues : Anglais-FLE 1	Responsabilités collectives
+ 5 crédits flottants (fonction de l'ED de rattachement)		



# PhD student duties – Scientific valorization



# PhD student duties – Thesis support



- ▶ Disciplinary trainings: 2 modules of about 20h each ( $2 \times 2.5$  credits)
- ▶ Transversal trainings: each module has its own number of credits

Internal training offer:

<http://www.adum.fr/as/ed/lorraine/formations.pl?site=lorraine>

- ▶ Fi4 305B Culture of scientific integrity/ *Culture de l'intégrité scientifique* (Mandatory: May 25, 2016 decree (article 3.3) → MOOC)
- ▶ For foreign speaker students: French as foreign language module(s)
- ▶ For french speaker students: The presentation of an English language level certificate is required to validate the credits
- ▶ For PhD students funded in whole or in part by the Grand Est Region, the participation to “Doctoriales” is mandatory

## FORMATIONS TRANSVERSES

(3 crédits minimum)

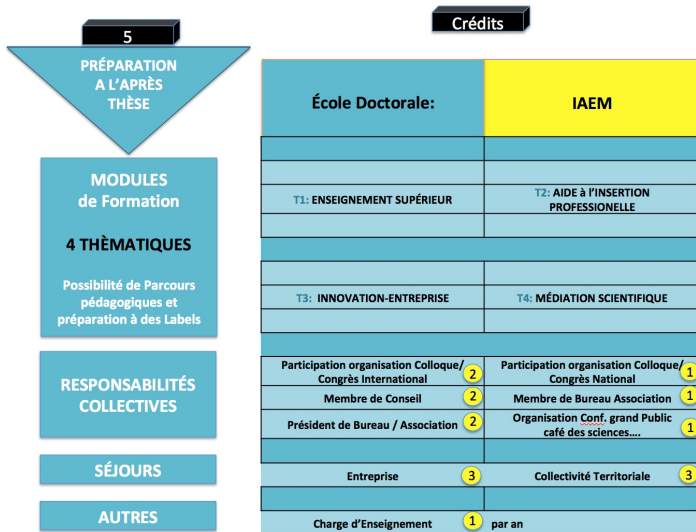
THÈME DOMPTEZ LA DOC		THÈME COMMUNICATION	
①	Trouver et organiser sa documentation	②	Formation à la communication orale et corporelle en milieu professionnel (Nancy)
①	Rédiger, valoriser et publier son travail de recherche	②	Développer ses capacités à communiquer et à manager
THÈME HYGIÈNE ET SECURITÉ		½	Outils numériques pour réaliser des présentations
½	Sauveteur Secouriste du Travail (SST)	①	Maîtriser les situations interculturelles : les comprendre, gérer les interactions au sein d'une équipe, prendre conscience des présupposés scientifiques de sa culture
½	Formation à la culture de prévention	THÈME PROJETS	
THÈME PROJETS		①	Montage de projets Européens
①	Découverte des propriétés intellectuelles (FI4 235)	② à ④	Gestion de projet (MOOC) 18 à 36h (parcours classique ou avancé).
①	Droit et numérique		

Offre à consolider dans les 6 mois

# PhD student duties – Thesis support

FLE				
①	FI4 132 A - Vivre en France, à Nancy (semaine intensive)			
① à ②	FI4 131 A - Français de la vie quotidienne (débutants) Nancy/Metz			
① à ②	FI4 131 B - Français Langue étrangère : oral, niveau (intermédiaire) Nancy/Metz			

# PhD student duties – Post-thesis preparation



- ▶ This system appears to be rather complicated
- ▶ The credits allocated to modules proposed by the internal (UL) training offer are fixed and are the same for all doctoral schools
- ▶ For the other modules, the doctoral school remains in charge of the allocation of credits
- ▶ The main objective is clearly not to force you to follow (too) many training modules but to offer you what is necessary for the accomplishment of your thesis work and to force you to think about the after-thesis
- ▶ Credits will be allocated for mandatory actions (e.g. your participation today to this meeting)

## Annual PhD students conference IAEM Lorraine

(Very disrupted by the COVID19 pandemic ... last edition in 2019!)

In general, a half day in October. PhD students beginning their 3rd year are asked to prepare a poster describing their research work. These posters are submitted through a conference management system.

Use of EasyChair (free version)

In 2019, 58 posters were submitted

Each poster is “rated” by two reviewers of the program committee

Participation in this event will result in the awarding of credits



# Financial support

## By the doctoral school

If you wish to participate in an external training (with regard to UL), first ask for financial support from your laboratory but do not hesitate to ask the Doctoral School by presenting a (small) file clearly explaining the expenses (registration, travel, accommodation). The average support provided to each doctoral student remains modest (about 400 euros).

## By LUE - Lorraine Université d'Excellence



## International Mobility Grant

<http://doctorat.univ-lorraine.fr/en/international/dream-en>

If you are facing any difficulty of any kind (personal or professional) or if you are in conflict with your coaching many people can probably help you:

- ▶ First, talk to your supervisor, your research team/department responsible, your laboratory director
- ▶ Second, get in touch with the persons in charge of the mention commissions, or with your elected PhD student representatives on the board of the doctoral school
- ▶ Finally, get in touch with me via Souad Boutaguermouchet.

Do not stay inactive and do not let a situation get worse  
(especially if it's a tense relationship with your supervisor)

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If you experience serious problems (conflict, harassment...), you can, depending on your situation, find assistance from various people.

Sexual harassment and discrimination :

[harcelement-sexuel-discrimination@univ-lorraine.fr](mailto:harcelement-sexuel-discrimination@univ-lorraine.fr) or 06 38 97 73 91

Keep your ADUM profile up-to-date (May 25, 2016 decree (article 15))

- ▶ Don't forget to enter two email addresses in your profile
  - a professional one using the suffix @univ-lorraine.fr
  - a permanent private one (@gmail.com, @outlook.com, @orange.fr, ...)
- ▶ Regularly update your scientific production
- ▶ Upload your training and professional module certificates
- ▶ Upload the reports of your monitoring committee

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Regularly consult the different web sites

<http://doctorat.univ-lorraine.fr/fr>

<http://www.adum.fr/as/ed/lorraine/formations.pl?site=lorraine>

Prepare your after-thesis - think about your future

SOIP: University Orientation and Professional Integration Service

<https://www.univ-lorraine.fr/orientation-insertion-professionnelle/vous-etes-doctorant-e/>

PEEL: Student entrepreneurship cluster of Lorraine

<http://peel.univ-lorraine.fr/>

DocPro: The professional profile of PhD-holders

<http://www.mydocpro.org/en>

ALUMNI Université de Lorraine

<https://alumni.univ-lorraine.fr/>

Maintain your (professional) network (during and after your PhD)

<https://www.docteurs-spi.org/>

Join the IAEM Doctoral School LinkedIn network

<https://www.linkedin.com/in/doctoral-school-iaem-lorraine-29a35010b/>

