

Master of Science in Industrial and Applied Mathematics (MSIAM) M2

# Msc Thesis Internships rules

Edouard Oudet - Pierre Etoré

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# Master thesis project

- **Research or industrial project in applied mathematics**
- Academic laboratories (from UGA, G-INP, Inria)
  - In Grenoble: LJK, TIMC, LIG, GIPSA,...
- Research centers in industry
  - In Grenoble: Orange labs, CEA, ST Microelectronics, Schneider Electric, Xerox Research Center, Hewlett-Packard, ...
- In France or abroad

## Key dates

- Full-time: from February to June
- Defenses first round: around June 29<sup>th</sup> and July 3<sup>rd</sup> (if applying to PhD research grants from doctoral school MSTII)
- Possible extension: from July to August
- Defenses second round: end of August
- No internship should extend after August 31 (not after the jury for diploma)
- Minimum duration: 20 weeks for Ensimag students, 14 weeks otherwise
- Standard duration: 5 months

# How to choose a project

- List of master thesis proposals on MSIAM webs
- <https://msiam.imag.fr/proj:2020>
- (see also pcarre)
- Many other subjects available on the web or by personal contact
- Contact possible supervisors, discuss with them
  
- Then proceed with the administrative part: Edouard Oudet deals with UGA students and the MSCl track, Pierre Etoré with G-INP students and the DS track, but more precisely :  
[see next slide]

## How to choose a project (2)

- If you are in the track Data Science, contact Pierre ETORE for validation of the scientific project of the internship
  - a) If you are from G-INP he follow you with the G-INP procedure (see slide [Project internship agreement])
  - b) If you are from UGA he will email Edouard Oudet to say your internship is validated; E.O. will follow you with the UGA procedure.
- If you are in the track MSCI, contact Edouard OUDET for validation of the scientific project of the internship
  - a) If you are from UGA he will deal with the UGA procedure
  - b) If you are from G-INP he will email Pierre ETORE to say your internship is validated; P.E. deals with the G-INP procedure.

## How to choose a project (3)

- Students undertaking a project outside a local (i.e. in Grenoble) academic laboratory or an industrial project must find a local tutor (teacher, researcher, ...)
- Only student who will undertake a project in some academic laboratory in Grenoble do not need that local tutor.

# Criteria for validation

- To be validated, the project description should include:
  - ∅ The context of the work, what is to be done and to which extent this is new, what has been done in this field before (with references), why there are still difficulties to address and how the student and supervisor plan to solve them.
  - ∅ The lab or company, and the name and email of the supervisor.
- The project should involve some applied mathematics (not just programming) - at least one item among:
  - ∅ Obtaining new theoretical results (proving theorems...)
  - ∅ Mathematical modelling (to build and study a new model, or use existing models in a new framework, with some validation.
  - ∅ Experimental / numerical comparison or validation of several models or numerical methods

# Project internship agreement

***In any case, once you have got the agreement of P.E. or E.O. you will have to go on with the administrative procedure:***

- **INP students: contact** [lea.castejon@grenoble-inp.fr](mailto:lea.castejon@grenoble-inp.fr) (ENSIMAG or non ENSIMAG students)
  - The online agreement must be completed as least 4 weeks before the beginning of the internship
  - More details on internships on Ensimag Intranet: "Etudes/Stages" and « PFE/Master students intership »  
(You will have to pass through <https://e-stages.grenoble-inp.fr/>)
- **UGA students : contact** [sophie.urban@univ-grenoble-alpes.fr](mailto:sophie.urban@univ-grenoble-alpes.fr), [Carole.Durand@univ-grenoble-alpes.fr](mailto:Carole.Durand@univ-grenoble-alpes.fr)
  - The *Internship information form* is available online
  - More information on the Intranet page
  - <https://im2ag.univ-grenoble-alpes.fr/menu-principal/formation/stages-et-relations-avec-les-entreprises/vous-effectuez-un-stage-ou-ter-/vous-effectuez-un-stage-ou-un-ter--98100.kjsp?RH=1475137620752>



# Project report

- Written in English
- Structure: introduction, problem description, state of the art, implementation, evaluation, conclusions, bibliography
- Writing: vocabulary, spelling, grammar
- Style: clear, concise, illustrated and readable
- Size: 30 +/- 10 pages
- Send report, one page and one slide presentations (download templates) to [\[pierre.ettore\\_edouard.oudet\]@univ-grenoble-alpes.fr](mailto:pierre.ettore_edouard.oudet@univ-grenoble-alpes.fr) and bring 2 printed copies at your defense (or sooner if requested by reviewer)

# Information

- MSIAM website:  
<https://msiam.imag.fr/aboutmasterproject>
- MSIAM billboard in Ensimag's lobby
- Lea's office: Ensimag D103<sup>(1)</sup>
- Sophie and Carine's office: UFR IM2AG Registrar's office "scolarité"

(1) E001 being used at the beginning of the school year only, as registrar office

# Plagiarism

- You have to respect the laws of intellectual property-such as copyright
- No one is allowed to appropriate the labor of the original author

**=> University disciplinary commission**

# Plagiarism

- <http://en.wikipedia.org/wiki/Plagiarism> (especially sections 2, 3.1, 3.3)
- <http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize>
- <http://www.writing.utoronto.ca/advice/using-sources/paraphrase>
- <http://www.writing.utoronto.ca/advice/using-sources/quotations>
- Gipp, Bela (2014). Citation-based Plagiarism Detection: Detecting Disguised and Cross-language Plagiarism using Citation Pattern Analysis. Springer Vieweg. ISBN 978-3-658-06393-1. p.10
- **In short:**
  - Use citations when presenting definitions, theorems, models, results obtained by someone else.
  - Use citations and quoting marks when copying some expression, sentence or paragraph.
  - If you do not cite anyone, this is either personal original work or plagiarism.

# Development Council

- University rules require that we found a development council (MSIAM M1+M2)
- Aims at improving students training, connections with industry, ...
- Two student representatives and two deputies needed (2 in M1, 2 in M2 - maybe a foreign student?)
- To apply please contact the heads. Vote if multiple applications?



# PhD fellowships

Webpage describing the French system of PhD fellowships: [https://ensiwiki.ensimag.fr/index.php?title=Various\\_kinds\\_of\\_PhD\\_fellowships\\_in\\_France](https://ensiwiki.ensimag.fr/index.php?title=Various_kinds_of_PhD_fellowships_in_France)



Thank you for your attention !

Questions ?

ZOOM meeting:

The 1st of december 2020 at 11h20 at:

<https://univ-grenoble-alpes-fr.zoom.us/j/8725611834>

Otherwise email us:

[pierre.etore@univ-grenoble-alpes.fr](mailto:pierre.etore@univ-grenoble-alpes.fr)  
[edouard.oudet@univ-grenoble-alpes.fr](mailto:edouard.oudet@univ-grenoble-alpes.fr)