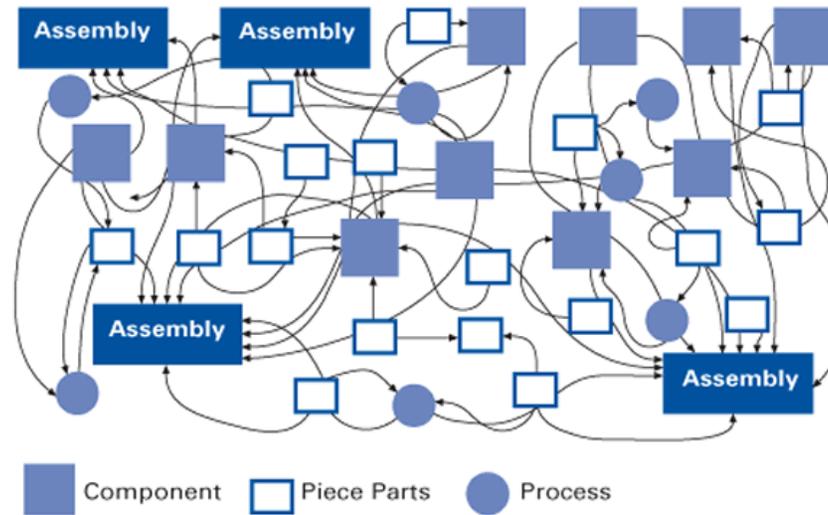


Master Parisien de Recherche en Informatique

Kick-off meeting, September 11, 2017

Olivier Carton

ORGANIZATION



Example of a spaghetti chart for product flows along value streams.

Institutions

3 main partner Universities/Schools

- Univ. Paris Diderot (**UPD**, coordinating institution)
- École Normale Supérieure, Paris (**ENS Ulm**)
- Univ. Paris Saclay (**UPS**). Includes : École Normale Supérieure de Cachan (**ENSC**), École Polytechnique (**X**), École Nationale Supérieure des Télécommunications (**Telecom Paris Tech**).

To get the MPRI Master diploma, you must be registered in one of these universities/schools.

Associated academic partner Univ. Pierre et Marie Curie
(**UPMC**).

Associated research partners **CNRS, INRIA, CEA.**

People

Master Director : Olivier Carton **UPD**

General Secretary : Nicolas Loisel **UPD**

Executive Board :

- Sophie Laplante **UPD**, study director
- Pierre Senellart **ENS Ulm**, study director
- Gilles Schaeffer **UPS at X**, study director
- Petr Kuznetsov **UPS at Telecom ParisTech**, study director
- Gilles Dowek **UPS at everything else**, study director
- Christophe Dürr **UPMC**
- Claude Marché **U. Paris Sud**
- Didier Rémy **INRIA**

Contact information, including secretaries, on the WIKI (see next).

Main sources of information

Pedagogical server

https://admin.dptinfo.ens-cachan.fr/serveur_pedagogique/. Study plan, grades, course evaluations, internship reports... Access is **protected** by a password. Follow instructions *premier login*...

WIKI <https://wikimpri.dptinfo.ens-cachan.fr/doku.php?id=start>

Calendar, timetable, pedagogical documents, ... Access is **free**.

Mailing list Synchronization messages: study plan, internship selection, report deadlines,... Please **avoid reply all**.

CALENDAR



First semester: research training



Second semester: research practice

Dates

Semester 1 (mid-Sept.–mid March)	Semester 2 (mid-March–beginning Sept.)
Period 1 (12 weeks)	Requests for exams: (before end of April)
Period 2 (12 weeks)	Retake exams: (before end of July)
End of year break (2 weeks)	Deposit report: (around August 20)
	Defenses: (beginning of Sept.)

Detailed informations on the WIKI.

First semester: periods' organization

- 1 period = 12 weeks.
- **teaching** takes place in the **first 10 weeks** only (possibly less).
- **written exams** take place in the **last 2 weeks** only (usually one of the last 2 weeks).
- a written exam takes place in the **time slot of the course**, therefore you should **not** include in your study plan two courses that take place at the same time.

Additional deadlines during the first semester

- Deposit **study plan**: September 30.
- Ask for **modifications of study plan of period 1**:
November 15.
- Ask for **modifications of study plan of period 2**: January
15.
- Deposit **internship proposal**: January 31.

If you really need an extension contact your Study Director.

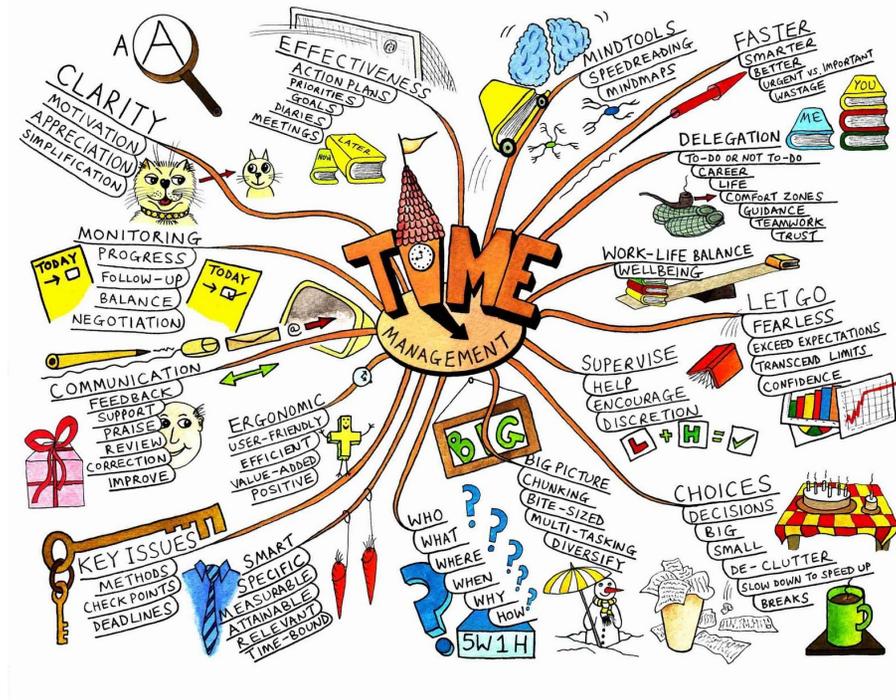
Second semester organization

Mind the dates:

- **Requests to retake exams** before April 30.
- **Retaking exams** before July 31.
- **Uploading report** before August 21.
- **Defenses** from September 1 to September 12 (made more precise in Spring).

If you really need an extension contact the Master Director.

STUDY PLAN



Choosing modules (1)

The WIKI server provides the list of level 2 MPRI modules, including the teaching language and the format.

Modules can have **different formats**, e.g.

6 credits

- $2 \times 8 \times 3$ hours + optional practice/exercise
- $2 \times 10 \times 2.5$ hours

3 credits

- $2 \times 8 \times 1.5$ hours
- $1 \times 8 \times 3$ hours
- $1 \times 10 \times 2.5$ hours.

More information on the WIKI.

Warning: a module with less than 5 M2-MPRI students may not open.

Choosing modules (2)

- You may select modules from other masters, see WIKI for a list of possible masters. The number of **MPRI-equivalent credits** is decided by the **Master Director**.
- If coherent with your study plan and background, you may also select **MPRI level 1 modules**.

In each case this is **subject to the approval of your Study Director**.

Choosing modules (3)

- There are 6 credits **breakable modules** for which you may register only the first (resp. 2nd) part. This is different from 2 times 3 credits.
- The WIKI gives some **examples of consistent choices** of courses. This is **not** an obligation.
- The **default schedule** of the lectures is on the WIKI but look for **special announcements** on the WIKI pages of the courses. E.g., certain courses start the second week, and/or at 9:15,...
- There is **no general presentation** of the modules content.

Advice: attend first lecture of all modules you are interested in.

Choosing modules (4)

- You will have an **entry on the pedagogical server**. You will be informed by e-mail of the server set-up. Your **login** is the e-mail address given for the MPRI registration.
- **You must submit a study plan by September 30**. Your Study Director may accept/reject your selection. Only accepted selections are valid.

Advice: a selection between **36** and **42** credits
with **at least 24 credits** relative to M2-MPRI courses.

Choosing modules (5)

- Modifications and Cancellations are allowed, again subject to the agreement of your **Study Director**.
- Requests deadlines:
 - First period: November 15.
 - Second period: January 15.

ESCAPE LANES

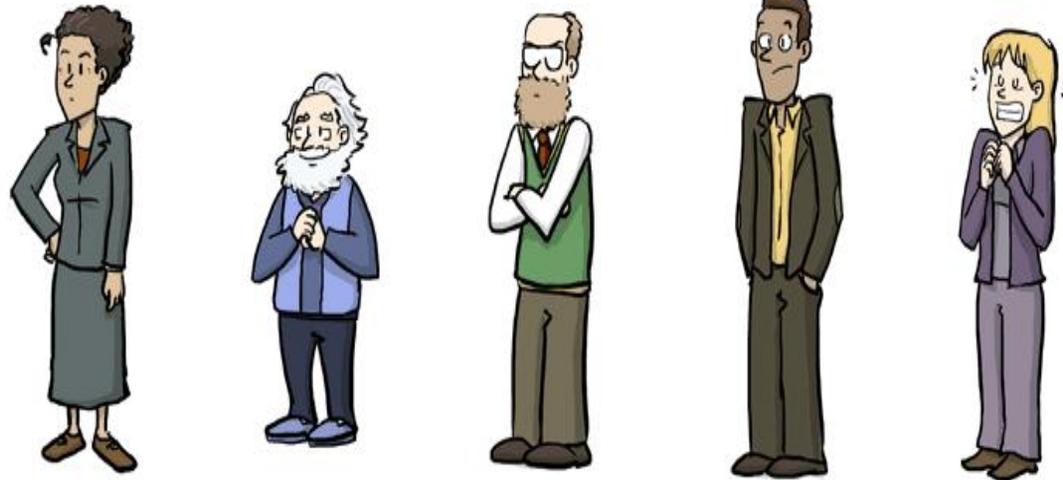


What if...

- Courses are too hard, too easy, too theoretical, too practical,...
- Courses are ok, but now you want to cash your expertise...
- Research is not what you want to do anyway...
- Any other reason...

Advice: contact your Study Director as soon as possible!

CHOOSING AN ADVISOR (AND A TOPIC)



Choosing an internship

- A list of **offered internships** is published on the WIKI (previous years offers are available too).
- There is **no moderation** of the list and you may choose an internship which is **not** in the list.
- You must **submit an internship choice** by January 31. The choice may be discussed with your Study Director who in the end has to approve it (or not). **New rule: no more than 2 students/advisor.**

Advice: do have a second choice.

- An **agreement** must be signed between the host institution and your school/university. This must be ready by the time the internship starts.
- In France, you should receive an **economic gratification**. See: <http://vosdroits.service-public.fr/professionnels-entreprises/F20559.xhtml>.

What kind of internship?

- Theoretical vs. Experimental.
- Academic environment vs. Industrial environment.

Do not get confused

- Experimental work vs. Engineering work.
- Scientific motivation vs. Economic motivation.

Some necessary ingredients of a research work

- The motivation (can be economic if clearly stated).
- The state of the art.
- The problem considered.
- A good idea!
- The rigorous presentation of the result obtained.
- The analysis of the result (to what extent does it improve on the state of the art?).

Advice: a part of the **report** should be understandable by your **referee** and a part of the **presentation** should be understandable by all the **members of the jury**.

Main criteria we use to evaluate an internship

- Contents.
- Quality of the Report.
- Quality of the Presentation.
- Ability to situate the scientific problem (answer to questions).

Rule of thumb: if you can't explain it simply,
you don't understand it well enough!

Internship in an industrial environment

This can be **difficult**. Typical recurring problems:

- Topic is fuzzy.
- Motivations change along the way due to non-scientific constraints.
- Presentation is opaque (or is opacified on purpose).

It can also be **exciting**:

- Working on real systems.
- Pushing one's research to production systems.
- Prospects for *R&D* positions.

NB Pierre Senellart (Executive Board) offers advice (in addition to the advice of your Study Director).

EXAMS AND CREDITS



Exams and credits

- Each module fixes the **modalities of the exams** (in principle on the WIKI, otherwise ask the teacher).
- Passing an exam gives either 3 (24 hours courses) or 6 credits (48 hours courses) for MPRI lectures. For other courses, the Master Director decides **case-by-case**.
- You must get at least **30 credits including at least 18 credits from level 2 MPRI courses** (+ 30 credits for the internship) to get the diploma. No automatic compensation!
- You must ask to **retake exams** before April 30 and actually retake them between April and July 31. Maximal mark: 10/20.
- Failed internships **cannot** be retaken.
- Redoubling means waiting one full year to get the official diploma: **no jury** at the end of the first semester.

Marks and ranking (1)

- Marks are between 0 and 20. The teachers marks are modified by the executive board for **harmonisation**.
- The **average mark** is computed on the level 2 MPRI marks, taking into account the best marks of modules whose total value is 30 credits. (All marks, if the total of level 2 MPRI credits is between 29 and 24).
- Courses other than level 2 MPRI courses are **not** taken into account when computing the average.

Marks and ranking (2)

- If you do not attend an exam of a module to which you registered you still get **0/20**.

Advice: if you do not intend to attend an exam,
cancel the registration on time.

- If you got **at least 24 credits** in level 2 MPRI courses, the average mark is used to compute your ranking (sometimes required in grant applications).

Harmonisation principles

- Each **course** has an average grade (very low grades are disregarded).
- Each **student** has an average grade which depends on the level 2 courses (s)he took (again very low grades are disregarded).

The harmonisation algorithm is an iterative algorithm with **two goals**:

1. Have the average grade of each course converge to the average grade of the students who took that course.
2. Have the general average of all the courses and the general average of all the students converge to 14/20.

Average and PhD grant

- Your average at the end of the first semester has an important impact on the strategy you should adopt to get a **PhD grant**.
- If your average is **above 14/20** you have a good chance of getting a PhD grant from an **Ecole Doctorale** or **your school** (AMN, AMX,...).
- If you are **below 14/20** you should also explore alternative ways of financing your PhD studies (ANR, EU projects, CEA, INRIA,...)

Advice: ask **your advisor** about the perspectives for a PhD grant.

FEEDBACK



Feedback

- Discuss with your peers. Don't remain isolated!
- Speak to your Professors, Study Director, Master Director.

- Fill in the **course evaluation forms**. This is compulsory!

They are **anonymous** (but in principle I can know if you did fill the evaluation form) and have a **real impact** on the course planning for the following year. Instructions will be sent in due time.

Advice: look at last year evaluations on the pedagogical server.

Writing style

- The style of your **internship report** should approach the style of a (good) **scientific paper**.
- In the same way, the style of the **courses' evaluations** should approach the style of a (good) **scientific report**. Golden rule:

You should not be ashamed of signing your evaluation/report.

You can exercise (motivated) criticism without being offensive/unrespectful to the teachers.

Example (appeared in *Mathematical reviews*)

This paper gives **wrong** solutions to **trivial** problems. The basic error, however, is **not new**.

This is **OK**, provided you explain **wrong** (point to mistake) and **not new** (provide references). Justifying **trivial** might be more tricky... *E.g.*, special case?

Electronic communication

- Provide the pedagogical server with the requested informations.
- Visit regularly the WIKI.
- Read regularly your mail.

LOGISTICS



Some logistics on campus

Food CROUS restaurant in building **Halle aux Farines**.

CROUS coffee shops in **Grands Moulins** and **Olympe de Gouges**.

Internet eduroam on campus.

Libraries general one in **Grands Moulins** building and research one in **Sophie Germain** building (nice environment!).

Sport <http://www.univ-paris-diderot.fr/sc/site.php?bc=sport&np=accueil> Nice gym is located in the basement of **Sophie Germain** building.

Everything else Housing, Foreign Languages,... see http://www.univ-paris-diderot.fr/sc/site.php?bc=vie_etudiante&np=Vie_pratique (for some of this, registration to UPD may be necessary).

NB These slides are available on the wiki.

QUESTIONS ?

