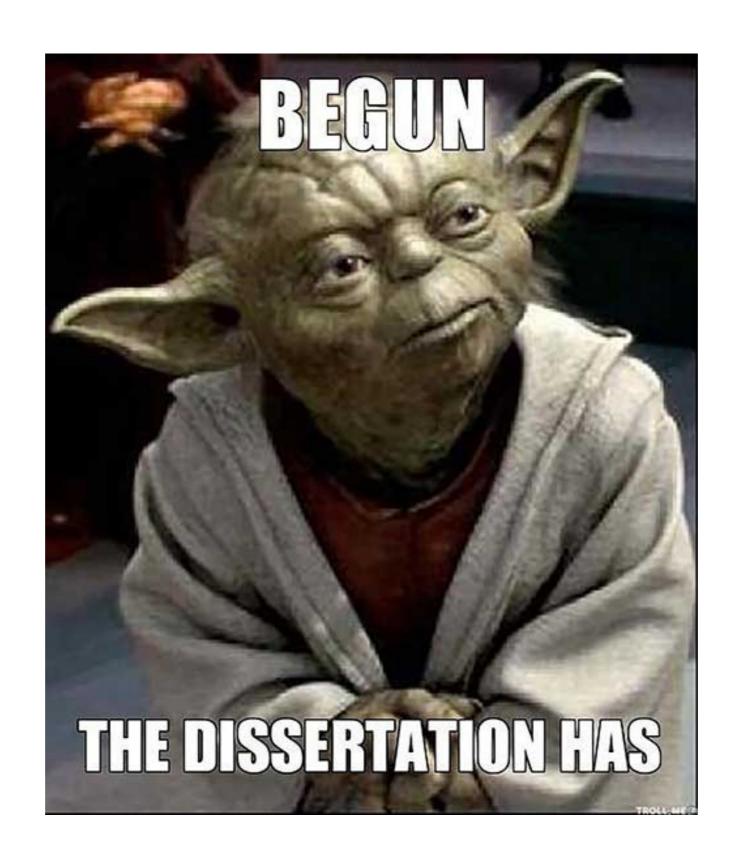


INFO SESSION MASTER'S DISSERTATION

Chantal Hongenaert

27/03/2023



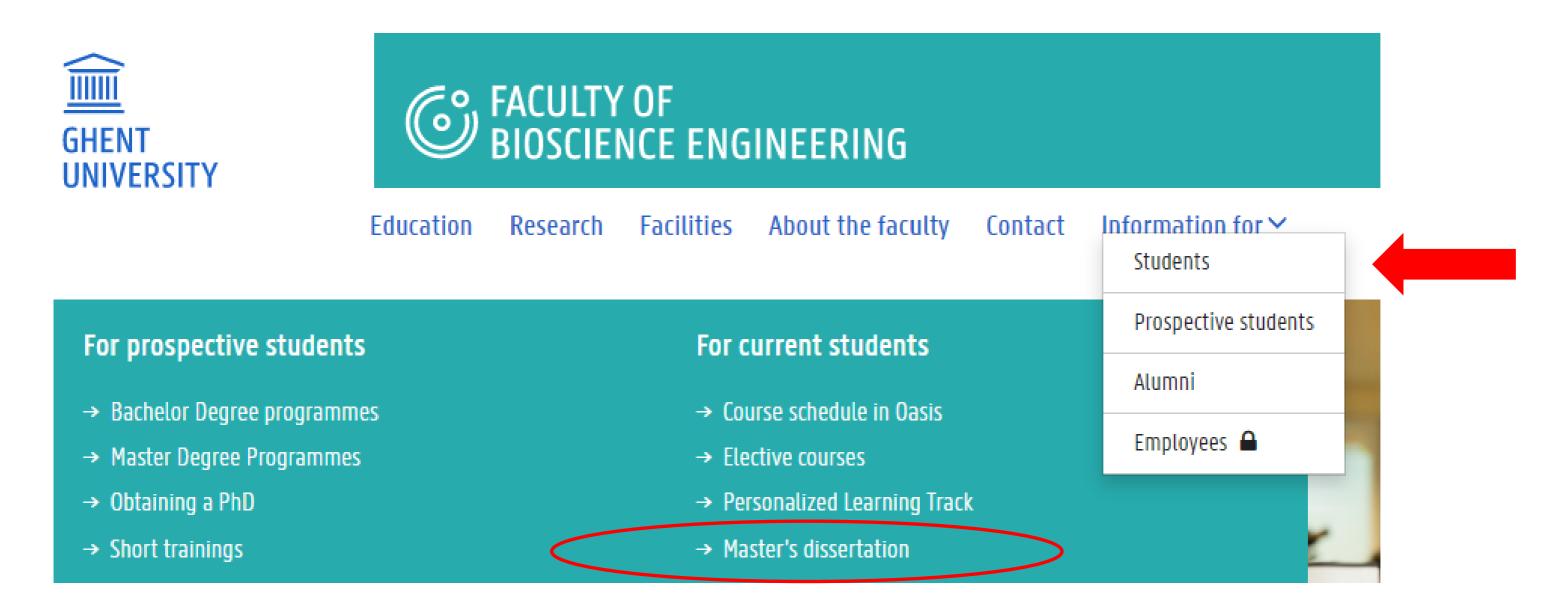




- Timeline: what do you do when?
- How does the selection and assignment process work?
- How do we communicate?
- What is the master's dissertation aiming for (competences)?
- What can you expect from a promotor and tutor?
- What are your student rights and obligations?
- Scientific communication (Galileo, scientific integrity, template)?
- How will you be assessed?
- What do you do if something goes wrong?



— All information can be found on the faculty website: https://www.ugent.be/bw/en





https://www.ugent.be/bw/en/for-students/curriculum/master-dissertation



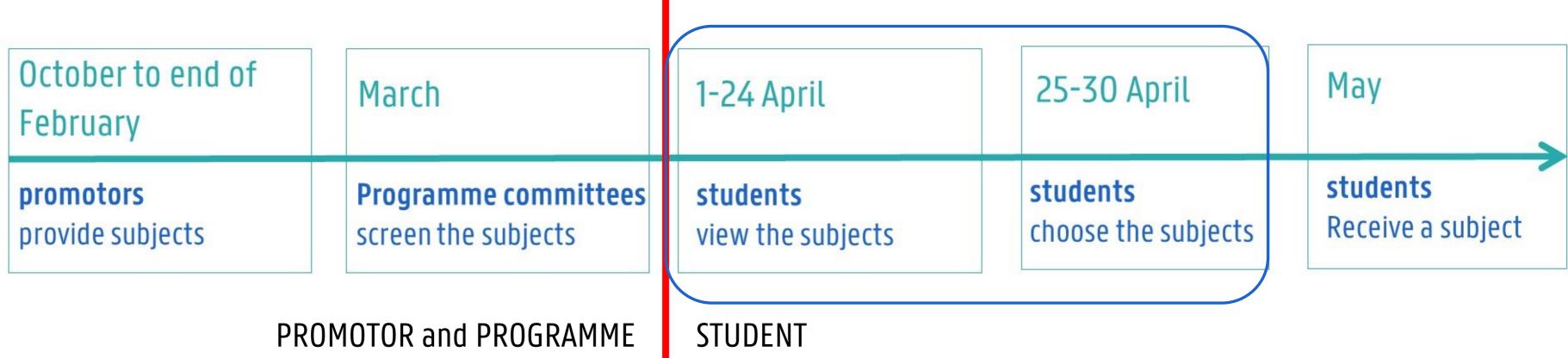
How will we communicate?

> Via mail

Masterdissertation.fbw@ugent.be

- > Via Ufora
 - > Faculty infosite
 - Master infosite
 - → check your announcements!





1-24 April

students

view the subjects

View the subjects in the <u>application</u>:

https://masterthesis-bw.ugent.be/en/onderwerpen/aanbod



1-24 April

students view the subjects View the subjects in the <u>application</u>:

MASTERTHESIS-BW



Overview master's dissertation topics



Using the tabs on this page, you can search for subjects by :

- Promotor
- Department
- Keyword



1-24 April

students view the subjects Make a shortlist of prefepromotor):

Title

Faithful attraction: Predicting Ulva reproduction based on temporal shifts in bacterial densit

Anaerobic co-digestic

canic fraction of municipal solid waste and sewage sludge: Eval

A clean getaway, ident

g microbes escaping stressed biofilms

Drinking water research on a pilot scale

Nutritional role of bacteria in the different life stages of benthic copepods

Overheersen ijzer-oxiderende en sulfaat-reducerende bacteriën het kanaal Gent – Terneuzer

Fast-screening tools to detect changes in the quality of drinking water

Let's get radical?! Degradation of organic pollutants by microorganisms and their enzymes.

Self-healing bio-based materials

Faithful attraction: Predicting Ulva reproduction based on temporal shi...



Keywords: aquaculture; seaweed; Ulva; microbiome; flow cytometry; quorum sensing Description:

The green macroalga Ulva is of economic (edible seaweed) and ecological (green tides) importance in Asia. Unraveling the role of *Ulva*-microbiome interactions in reproduction is crucial to advance commercial aquaculture. The accumulation of quorum sensing (QS) signaling molecules, which depends on bacterial density, plays a role in *Ulva* development. However, it is not known whether QS signaling affects Ulva reproduction. An experiment will be set up where temporal changes in bacterial density and community composition during *Ulva* reproduction will be followed using flow cytometry and 16S rRNA gene sequencing. Wet lab experiments will be performed during summer at Ghent University Global Campus, Songdo, South Korea. Depending on the progress of the experiments further analyses can be performed at CMET in Ghent University, Ghent, Belgium.

Promotor(s): Nico Boon, Thijs Van Gerrewey

Tutor(s): Thijs Van Gerrewey

Confidential: No

For students of the programmes: IMCEGB, IMCHEM, IMLAND, IMMITE

Number of topic: 17

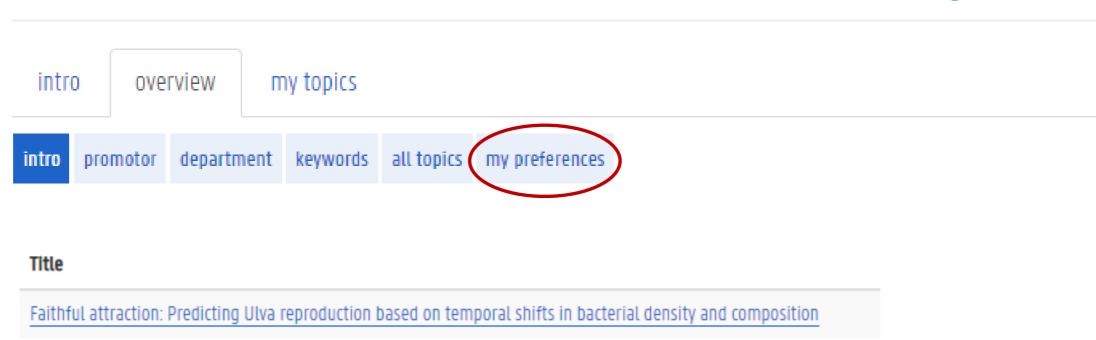
Number of students: 1

Part of the fieldwork is outside Flanders - exchange programme (Erasmus,...)





Overview master's dissertation topics

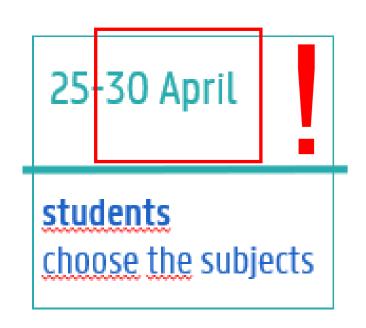


>Shortlist of topics will appear under 'my preferences'

To do:



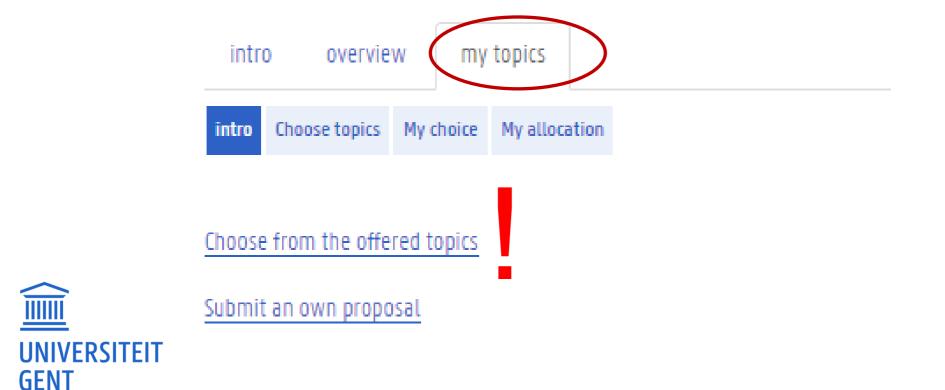
Contact the promotor and tutor before you choose!



Choose the subjects in the <u>application</u>:

https://masterthesis-bw.ugent.be/en/onderwerpen/aanbod

Choose 3 subjects from the <u>list</u> in order of priority or submit your own subject





- Find your own promotor
- Mail to <u>masterdissertation.fbw@ugent.be</u>
- Screening by OC
- Release by FSA

10

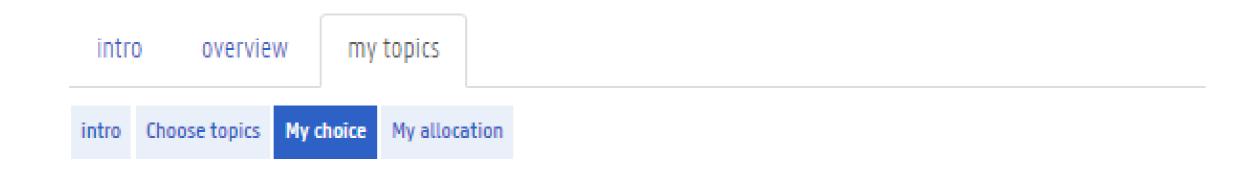
ENTRY SCREEN 3 CHOICES

intro overv	riew my	y topics				
intro Choose topio	s My choice	My allocatio	ın			
I want to propose a	an own topic	in stead				
Choice 1 (highest p	oriority)					
Biogeochemical	recovery of s	secondary for	rests in the Congo Basin			~
Motivation choice	1					
Choice 2						
Evaluating grour	nd measuren	nents of tree	height in the Congo Basin	through comparison wit	n airborne data	~
Motivation choice	2					
Choice 3						
	erdominance	e in Congoles	e tree flora using soil char	rcoal identification		•
Motivation choice	3					
						//



11

PREVIEW SCREEN 'MY CHOICE'



Choice 1

Biogeochemical recovery of secondary forests in the Congo Basin

Choice 2

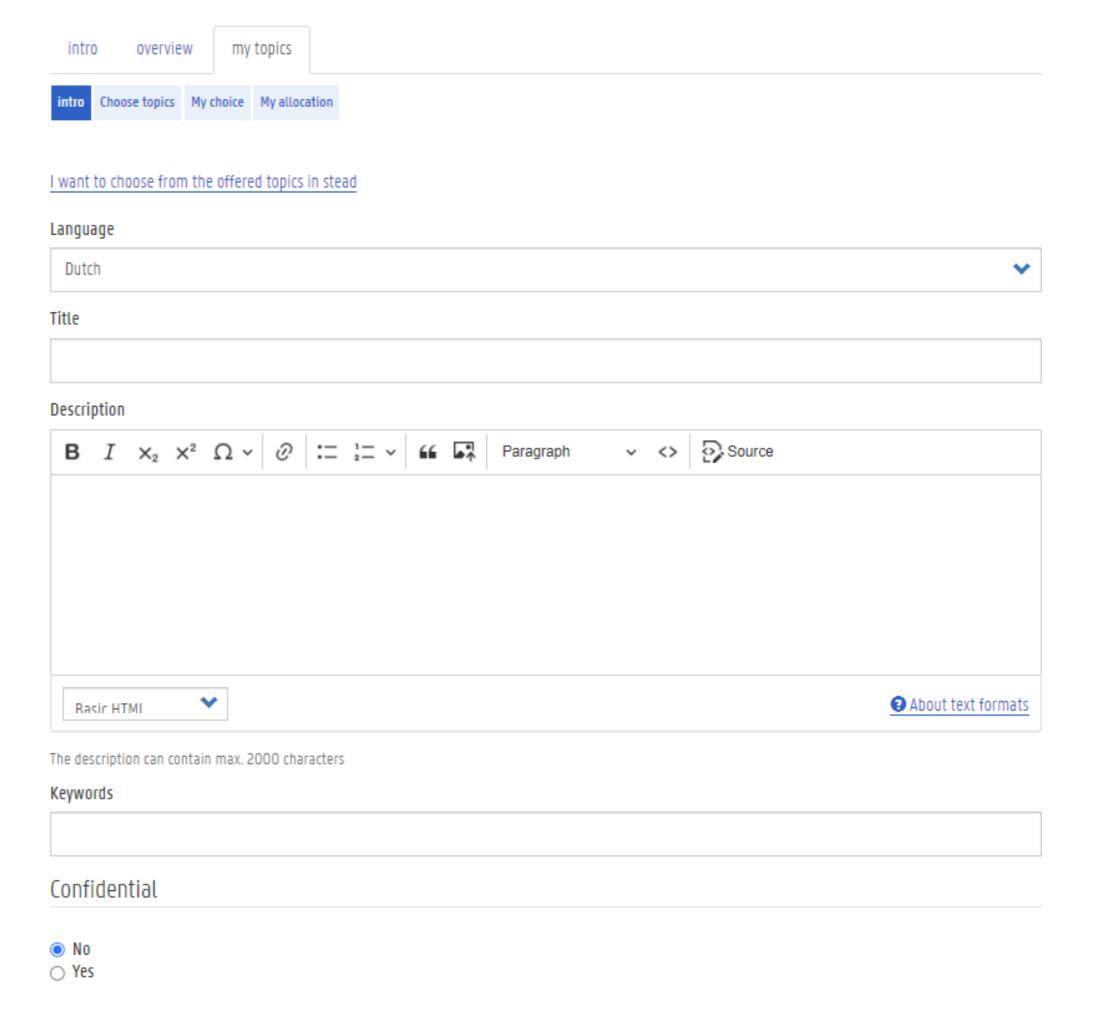
Evaluating ground measurements of tree height in the Congo Basin through comparison with airborne data

Choice 3

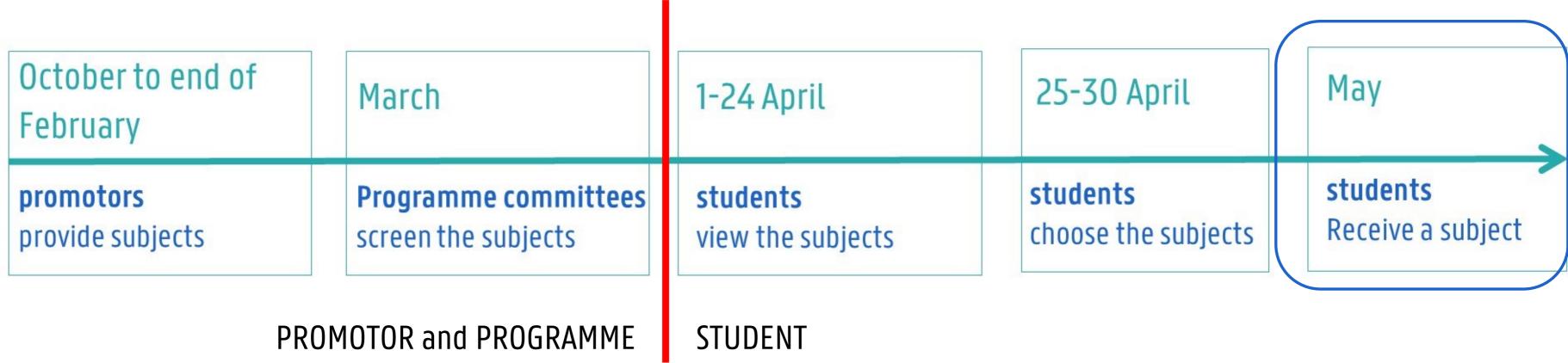
Evolution of hyperdominance in Congolese tree flora using soil charcoal identification



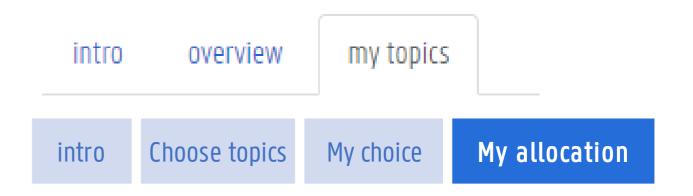
ENTRY SCREEN SUBMISSION OWN PROPOSAL







- → Promotor assigns the subject!
- \rightarrow Announcement via UFORA \rightarrow application





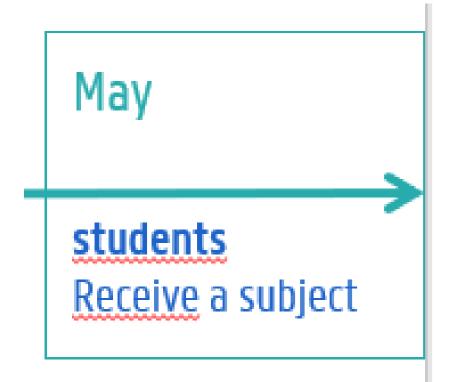
May

students
Receive a subject



ENGAGEMENT BETWEEN PROMOTOR AND STUDENT





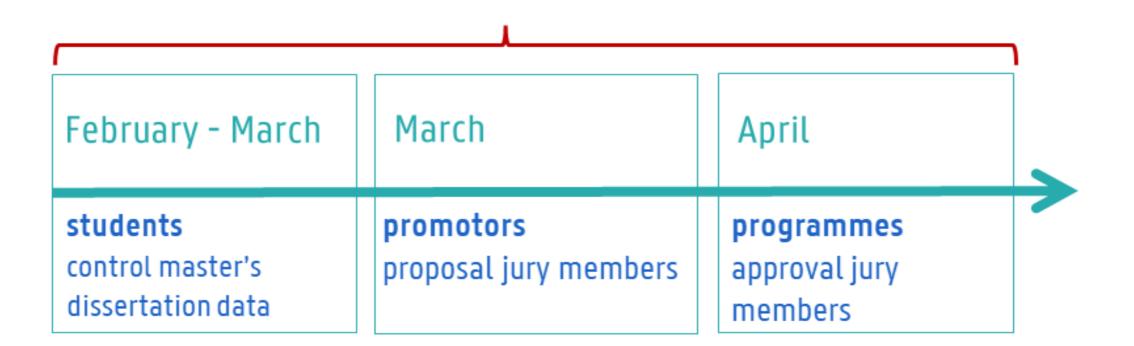
Contact your promotor and tutor for further arrangements

- > Send a mail in the week of the catch-up activities
- > Set the starting date
- > Special status and related facilities?
- **Ethics approval?**
- > Collaboration with a company > master's dissertation contract

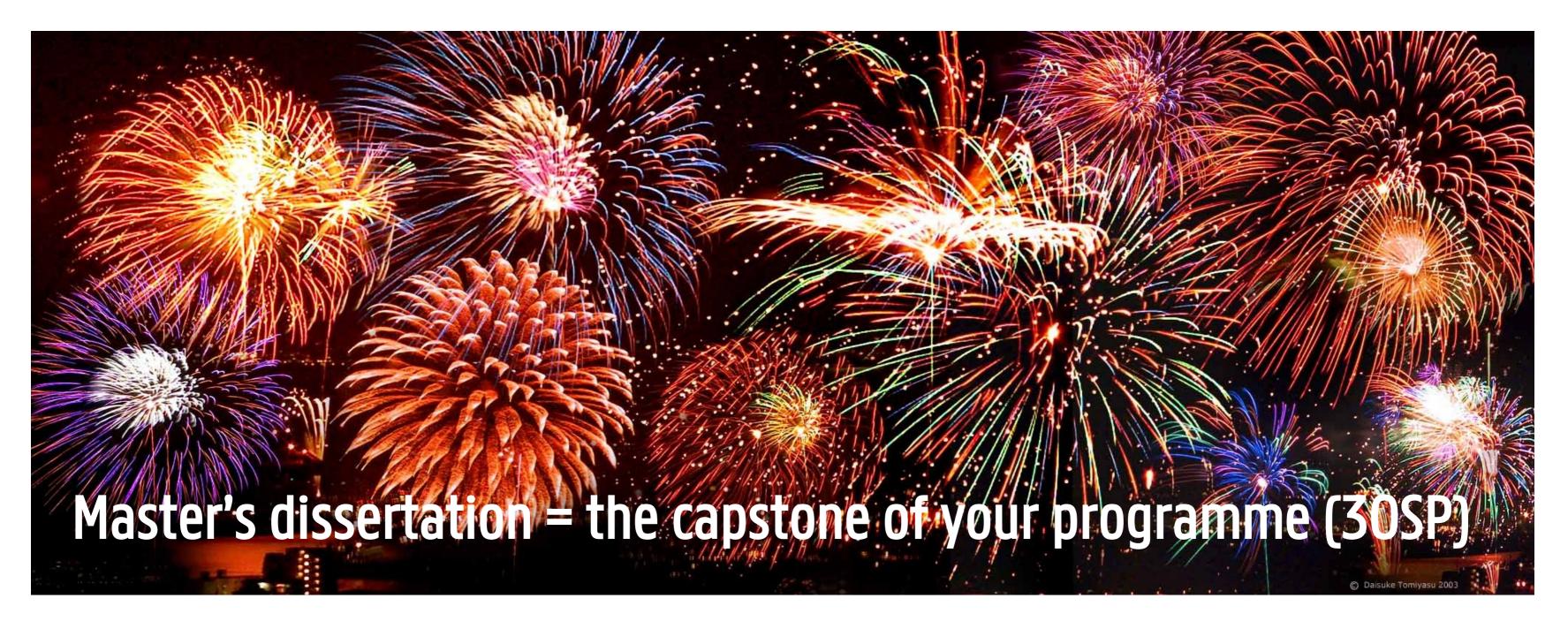


GETTING STARTED WITH YOUR MASTER'S DISSERTATION: THE PROCESS

Aug, Sept, Oct	start academic year	Christmas recess	Easter recess	6 June	25/6, 26/6, 27/6
students start dissertation	students infosession scientific integrity and communication	students literature review + feedback	students 2e feedback moment	students submission dissertation	student dissertation defense



GETTING STARTED WITH YOUR MASTER'S DISSERTATION





Learning outcomes

Quantitatively in case of non bio-engineer programmes



1	Establish a	well-defined	research	problem
---	-------------	--------------	----------	---------

- 2 Define/Formulate clear research questions and/or hypotheses
- Establish a suitable methodology in accordance with the prevailing scientific standards of the research field
- 4 Systematically collect, search, critically interpret and integrate scientific literature
- Collect data in an accurate way (existing and/or obtained through personal laboratory and/or fieldwork and/or surveys)
- 6 Process data in a correct way
- 7 Analyze data critically in a scientific context
- Adjust independently the research process based on feedback from experts and critical self-assessment
- 9 Summarize and present data in a concise manner
- Write a report on scientific and technical information, materials and methods, results and findings
- Handle a problem critically, creatively from an engineering perspective with attention for ethical, social, international and sustainability aspects
- Act according to the principles and good practices of scientific integrity
 - Show independence, motivation, commitment, a drive for innovativeness and creativity, initiative and perseverance to achieve learning outcomes 1 to 12
- Present, defend and frame the research results vis-à-vis peers and experts

GETTING STARTED WITH YOUR MASTER'S DISSERTATION: THE PROCESS





GETTING STARTED WITH YOUR MASTER'S DISSERTATION: YOUR RIGHTS

YOUR master's dissertation \rightarrow you are not in it alone

- → <u>Guidance</u> → identify planning and deadlines
- → <u>Galileo</u>
- → <u>Dissertation report</u>
- > Feed up, feedback, feedforward

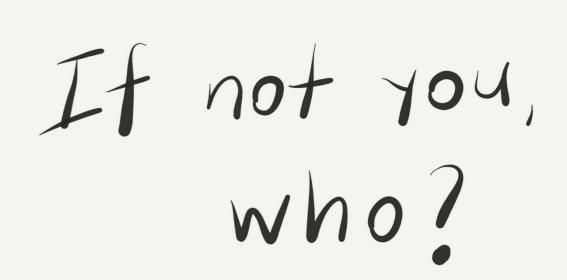




GETTING STARTED WITH YOUR MASTER'S DISSERTATION: YOUR OBLIGATIONS

YOUR master's dissertation \rightarrow take control

- > Follow information and communication: <u>facultary website</u> / <u>UFORA</u>
- Respect the agreements made in the lab/company
- \rightarrow Respect agreements with promotor/tutor \rightarrow Record them!
- → Use Galileo
- → Act with (scientific) integrity
- →You do the work
- → Ask for help





GETTING STARTED WITH YOUR MASTER'S DISSERTATION: OUTPUT

Written dissertation

- requirements: see <u>website</u>
- → Personal work, some form of freedom
- → <u>Galileo</u>

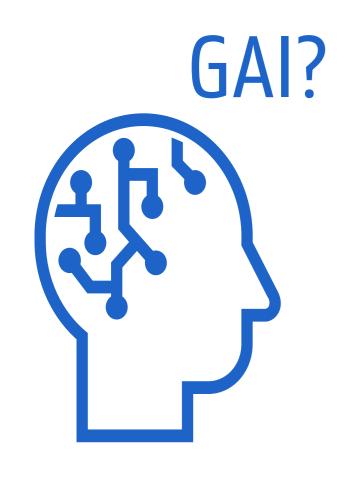


6 June

students submission dissertation



AAN DE SLAG MET JE MASTERPROEF: OUPUT



- > Use it responsibly
 - ✓ Check the guidelines: dissertation report and GAI
- Respect the basic principles of scientific integrity:
 - ✓ Be transparant
 - ✓ Correct usage of sources and references
- > Know the basic scientific literature
- ➤ Be careful with confidential and personal privacysensitive information



GETTING STARTED WITH YOUR MASTER'S DISSERTATION: OUTPUT

Defense

- requirements: see <u>website</u>
- → Personal work, some form of freedom
- → <u>Galileo</u>

25/6, 26/6, 27/6

student dissertation defense



GETTING STARTED WITH YOUR MASTER'S DISSERTATION: ASSESSMENT







PROCESS (30%)

Promotor (with input of tutor)

REPORT (40% - 30%)

Reading commissioners

DEFENSE (30% - 40%)

Full jury

- Chairman
- Secretary
- Promotor
- 2 commissioners



GETTING STARTED WITH YOUR MASTER'S DISSERTATION

What to do with problems?



Working environment
Relation with promotor/tutor
Scientific integrity
Student rights and obligations

•••

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