Organization of master's thesis 2018-2019

Dear students,

This document aims to explain the way in which the master's thesis for the following programs is organised:

- Master of Science in de Ingenieurswetenschappen: Computerwetenschappen
- Master of Science in Applied Sciences and Engineering: Computer Science
- Master of Science in de Toegepaste Informatica

The official description of the respective course units can be viewed in the student self-service. This document complements these official descriptions. Each course unit has a Canvas-space in which additional information may be found and additional announcements may be made. By registering for a course unit via the student self-service, you automatically get access to the corresponding Canvas-space. For students of the M.Sc. Ingenieurswetenschappen: Computerwetenschappen and the M.Sc. Applied Sciences and Engineering: Computer Science, the relevant course units are called 'Masterproef Computerwetenschappen' and 'Research Training'. For students of the M.Sc. Toegepaste Informatica, the relevant course unit is called 'Masterproef Toegepaste Informatica'.

The rest of this document discusses (1) choosing a topic for your thesis, (2) performing your research, (3) writing your thesis, (4) submitting your thesis, and (5) defending your thesis.

1. Choosing a thesis topic

The first step in writing a thesis is choosing a thesis topic. If you are a student of the M.Sc. Ingenieurswetenschappen: Computerwetenschappen or the M.Sc. Applied Sciences and Engineering: Computer Science, your topic should be situated in the same domain as the profile in which you intend to graduate: for example, if you choose the Artificial Intelligence profile, your thesis topic should be situated in the domain of Artificial Intelligence. Therefore, it is a good idea to start looking for a thesis topic at the research labs associated with each of the four profiles. You can find a listing of all topics **here**.

- Artificial Intelligence profile: Artificial Intelligence Lab
- Multimedia profile: Electronics Department
- Software Languages and Software Engineering profile: Software Languages Lab
- Web and Information Systems profile: Web and Information Systems Engineering Lab

If none of these topics interests you, and/or if you would rather define your own thesis topic, you should contact one of the professors or researchers of the respective research lab. Each thesis must have a supervisor, which should be a professor who is teaching a course within the respective profile. The supervisor will likely assign one of his/her researchers to provide you with day-to-day guidance.

If you are a student of the M.Sc. Toegepaste Informatica, you may perform your thesis research within a company (for working students, this may be their employer). You should, however, still find a professor willing to serve as your supervisor: it is best to start looking in the research lab most closely related to your intended thesis topic.

You should register your thesis topic **before Wednesday 31 October 2018** with the Department of Computer Science by filling out the 'Master's thesis registration form', which can be downloaded from Canvas, and having it signed by your supervisor. The title and subject you provide on this form are provisional, and may change later: the form is merely aimed at keeping track of whether and where our students are performing their thesis research. Working students, or students who are abroad on some exchange program, may submit their form via e-mail to **masterproef@dinf.vub.ac.be**. Students who were already registered for their master's thesis during the previous academic year should submit a new form to confirm their registration for the current academic year.

2. Performing your research

You will spend most of the year performing your research under the guidance of your supervisor and his/her researchers. You should discuss the organisational aspects of all of this with your supervisor: where will you perform your research (e.g., within the research lab), how will you provide status updates and receive feedback (e.g., via biweekly meetings with one of the researchers and by participating in the lab's research meetings), etc. While performing your research, it is a good idea to keep notes on discussions with researchers, on papers you have read, on your ideas, etc., as this will facilitate turning your research into a written thesis later on. If your research includes the development of some software artefact, it may be a good idea to use a versioning system (e.g., Git or SVN) provided by the lab.

If you are registered for the 'Research Training' course of our 2-year master programs, part of your research should qualify for this course. Typically, this will be the initial part of your research, in which you for example perform a literature study.

3. Writing your thesis

As the academic year progresses and your research matures, the time will come to start writing the actual text of your master's thesis. Again, you should do this under the guidance of your supervisor and his/her researchers, with whom you could for example discuss the outline of your thesis, the contents of various chapters, etc. There are no specific requirements in terms of minimum or maximum number of pages: you should choose the level of detail that is most appropriate to the topic at hand. When in doubt, consult your supervisor. Concrete guidelines regarding academic writing are provided as part of the 'Methods for Scientific Research' course, which is a compulsory course in each of our master's programs.

Your thesis should have a title page similar to the one available as part of our LaTeX template, which can be downloaded from the Department of Computer Science's **website**. Students writing their thesis in English should put the English title page first, and the Dutch title page second. Students writing their thesis in Dutch should only use the Dutch title page. Regardless of the language of the title page, you should **not** translate the name of your program: for example, if you are a student of the Master of Science in Applied Sciences and Engineering: Computer Science, the name of this program should be mentioned in English on both the English and Dutch title pages. After your title page(s),

you should include an abstract of your thesis. Your thesis should be bound, but you can choose the mechanism by which this is done (e.g., glued or comb binding).

4. Submitting your thesis

There are three important deadlines with regard to submission of your thesis:

- The first is submitting your thesis's title page via e-mail to masterproef@dinf.vub.ac.be.
- The second is handing in 6 (hard)copies of your thesis at the department's administrative office (room Pleinlaan 9 office 3.03; the office closes at 4 PM).
- The third is the actual defence of your thesis. Students can defend their thesis in the first exam session (June) or in the second exam session (August). Students who have completed their program apart from the thesis and research training also have the opportunity to defend their thesis in January *instead of* in June. (If you fail in January, you are automatically referred to second session in August, i.e., you cannot defend your thesis again in June.) If you want to take this opportunity, you must submit a request via the student self-service by 1 December 2018 (cf. the detailed instructions on My.VUB).

The deadlines for each of the three exam periods are as follows:

- First exam session (June)
 - Title page: Friday of Week 38, 4 PM. 7 June 2019
 - o Thesis: Monday of Week 40, 4 PM. 17 June 2019
 - Defence: Friday of Week 41 or Monday of Week 42 28 June or 1 July 2019
- Second exam session (August)
 - o Title page: Friday of Week 48, 4 PM. 16 August 2019
 - O Thesis: Monday of Week 50, 4 PM. 26 August 2019
 - Defence: Friday of Week 51 or Monday of Week 52 6 or 9 September
 2019
- Thesis defence in January instead of in June (only for some students, cf. above)
 - o Title page: Friday of Week 17, 4 PM. 11 January 2019
 - Thesis: Monday of Week 19, 4 PM. 21 January 2019
 - O Defence: Friday of Week 20 1 February 2019

Before submitting your thesis, you should upload your thesis to **Turnitin**, an online plagiarism detection application. The printed receipt should be submitted at the department's administrative office together with the hardcopies of your thesis. Detailed instructions regarding Turnitin will be announced via Canvas as the submission deadline draws nearer.

5. Defending your thesis

The schedule for the thesis defences will be announced via Canvas. You will be asked to defend your thesis to a jury consisting of the following members:

- Your supervisor
- An academic staff member from the same research lab as your supervisor

- An academic staff member from another research lab
- An academic staff member who chairs most of the thesis defences

You will have 25 minutes to give an oral presentation on your work (a data projector will be available, e.g., for a PowerPoint presentation). If you are registered for the 'Research Training' course, 5 of these 25 minutes should be dedicated to your research training. After your presentation, there is about 10 minutes for questions by the jury. Both the presentation and the question time afterwards are public. After this, the jury will deliberate in private, based on the evaluation criteria outlined in the official descriptions of the respective course units. Your final grade will be communicated via the student self-service.

More information regarding the thesis will be communicated as time progresses. Any further questions regarding the practical organisation of the master's thesis may be directed to **masterproef@dinf.vub.ac.be**.

Best regards,