

# **Master Thesis Regulations**

# **Erasmus Mundus Joint Master in Medical Imaging and Applications (MAIA)**

Contents:

1.	Scope

- 2. Working on your thesis
- 3. Procedure
- 4. Evaluation
- 5. Writing your thesis outside the MAIA consortium
- 6. Calendar
- Annex A. Calendar for year 2016-2018
- Annex B. Thesis proposal
- Annex C. Thesis agreement
- Annex D. Thesis information

## 1. Scope

The Master's thesis is regarded as an activity of the student in an area related to the topics of the master, with an equivalent of 30 ECTS. The MAIA Master's students will perform their Master's thesis during their 4th semester. The duration of the thesis is normally 20 weeks (from mid-January to June). The aim of the Master's thesis is to develop the academic skills of the student such as the ability to search for information, critical evaluation and analysis of existing solutions, and independent production and application of knowledge in order to develop a specific topic.

Before you can start working on your Master's thesis, the general rule is that all other courses needed to complete your degree must be completed in advance. In certain cases, students can be allowed to begin their thesis work with remaining courses. In such cases, the students must send a written application to the faculty, asking to begin their thesis work even with remaining courses. The application must be signed by the student's thesis supervisor, confirming that the remaining course(s) will not affect the student's ability to complete the thesis. Please note that:

- No more than 2 remaining courses are allowed.
- The remaining course(s) cannot be of significant importance to the student's thesis work.
- Any compulsory field work in the student's programme must be completed.

## 2. Working on your thesis

The Master's thesis assignment is the final proof of the ability of the student to independently handle more complex problems within the area of medical imaging, and to work as a scientific engineer on an advanced level. The Master's Thesis is an individual, but guided project, which trains students for industrial and/or research work.

Especially during the master project, you have to show that you can:

- interpret a project proposal and translate it to more concrete research questions,
- organise your work by making a project plan, executing it, adjusting it when necessary, and handling unexpected developments,
- work in a systematic way and document your findings as you progress,
- work in correspondence with the level of the elective courses you have followed,
- perform original work that has sufficient depth to be relevant to the research in the chair,
- find and study the relevant literature, software and hardware tools, and critically assess their merits,
- work independently and goal oriented under the guidance of a supervisor,
- seek assistance within the research group or elsewhere, if required and beneficial for the project,

- benefit from the guidance of your supervisor by scheduling regular meetings, provide the supervisor with progress reports and initiate topics that will be discussed,
- write a master's thesis report that motivates your work for a general audience, and communicates the work and its results in a clear, well-structured way to your peers,
- give a presentation to fellow-students and members of the chair, and
- create an A0 poster presentation to explain your work at a more local audience.

## 3. Procedure

The student will follow the procedure stated below, according to the dates shown in Annex A.

- I. Thesis choice. The student will present the thesis proposal agreement form (Annex C) to the master coordinator (coord.maia@udg.edu). To facilitate this aim:
  - a. at the beginning of the third semester the consortium will deliver a set of master thesis proposals to the students (Annex B), or
  - b. the student can propose his own master thesis in an institution outside the consortium (see point 5) that will be added as an associated partner of the master (compulsory step). In that case, a proposal with a similar structure of the proposals of point (3.1.a) should be accorded with the outside institution.
- II. Thesis work. The student will work on the master thesis, under the guidance of his/her supervisor during the 4<sup>th</sup> semester. During the first weeks of the semester, the student has to send a small report (Annex D) with the following information: Title of the thesis, Aim, Brief description, Main tasks, planning/chronogram, thesis director, and the research group or institution.
- **III. Thesis submission.** In a due date, the student will present a master dissertation with the structure of a research paper. The paper must contain the following points:
  - a. Introduction and problem definition
  - b. State of the art
  - c. Methodology
  - d. Results
  - e. Conclusions
  - f. Bibliography

The thesis should contain a maximum of 35.000 words. Formatting guidelines and templates for the master thesis dissertation will be distributed during the semester.

**IV.** Thesis presentation (VIVA). In a due date (see calendar), the student will present the master in front of a jury. A poster session will also be scheduled to present the work in a friendlier environment.

## 4. Evaluation.

The master thesis will be evaluated using the following incomings:

- a. **Supervisor (40%).** The supervisor will evaluate the work of the student in terms of quality, management, performance, and the dissertation document.
- b. **Second Reader (30%).** The dissertation document will be evaluated by a second reader belonging to one of the universities of the consortium. The assignment will be done by the Academic Board according to the topic and expertise of the reader.
- c. **VIVA assessment (30%).** The examination board will evaluate the oral presentation (presentation skills, structure, results, methodology, etc.) and the questions answered by the student.

A final mark will be given after the VIVA examination taking the above criteria into account.

### 5. Writing your thesis outside the MAIA consortium

First of all, you need to be aware of the fact that your education is expensive and the only thing we get in return is the work that you do for us in your Master thesis. Hence, we prefer and encourage you to do the master thesis within the members of the consortium.

If you want to do the entire thesis in another institution, you need to take care of several things which you have to organise on your own. You need to contact the supervisor (in the external institution) and have his written approval to accept being the supervisor. Additionally, you will have to sort out the accommodation and VISA issues.

In addition, we will also require the external institution to become a MAIA patron. The institution must sign an agreement concerning the collaboration conditions, work placement, benefits, and the use of results produced in the Master's thesis. This agreement will also state the economic costs that will be requested to the external institution (i.e. partnership).

### 6. Calendar

The calendar of the Master Thesis process is approved by the master consortium and is detailed in the Annex A.

# ANNEX A – MSc Thesis Calendar for the 2016-2018 MAIA promotion

	Date/deadline	Comments	
Starting of the 3 <sup>rd</sup> semester	1 <sup>st</sup> September 17		
MSc Thesis offers	15 <sup>st</sup> October 17		
Submission of the MSc Thesis Proposal Agreement	31 <sup>th</sup> October 17	<b>Submit</b> the document in the Annex B. If the proposal was not given by us, your training institution should also fill in Annex C. The proposal needs to be approved by the consortium.	
End of the 3 <sup>rd</sup> semester	19 <sup>th</sup> January 18	Move and starting the master thesis work	
Submission of the MSc Information	9 <sup>th</sup> February 18	Submit the document in the Annex D.	
Submission of the MSc Dissertation	1 <sup>st</sup> week June 18	Submit the thesis dissertation electronically.	
Submission of the poster	Mid-June 18	Submit the poster.	
VIVA assessment in Cassino	Last week of June 18*	All students will defend in the University of Cassino. Students outside Europe can defend by videoconference. Submit a pdf version of the presentation.	
MAIA Day	Last week of June 18*	Science forum, student poster presentations and oral presentations in front of a panel of private companies (see MAIA day program)	

#### Remarks:

\*The exact days will be fixed at the beginning of the 4th semester.

We will use the internal webpage of the UdG to distribute the information. You must use the same platform for all your submissions (the exact name of the module is: Tesi de master).

# **ANNEX B – Master Thesis Proposal**

Title

Institution: University of Consortium (UB, UNICLAM, UdG, Associated Partner)

Training place

Supervisor name

Contact Email

Brief Description of the project

Software/Hardware needs and skills

# **ANNEX C – Master Thesis Proposal Agreement**

<b>1. Student Information</b>
Family Name:

, .....

First Name:

Passport Number:

e-mail:

# 2. Supervisor Information

Name:

Department:

Institution:

e-mail:

**3. Master Thesis Information** 

Title:

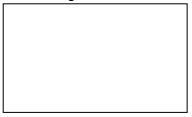
Training place:

Country:

#### Date and Signature



## Date and Signature



# **ANNEX D – Master Thesis Information**

1.	Stud	lent	Info	rmation
<u></u>	3144			mation

Family Name:

First Name:

Passport Number:

e-mail:

# Date and Signature

# 2. Master Thesis Information (use as many pages as needed)

Title:

**Description:** 

Aims:

Tasks:

Planning:

**3. Supervisor Information** 

Name:

e-mail:

Date and Signature