RULES FOR DISSERTATION APPROVED ON MARCH 18, 2014

(amendments from November 2020)

1. Master's dissertations adapted to the Integrated Master in Micro and Nanotechnology Engineering must be written in English and respecting the following procedures:

a) The world text should be written using the times new roman size 11, 1.25-line space with headers, titles and subtitles obeying to the rules implemented at ID, convenient number ed and connected sections and sub-sections (see the example in annex).

b) Proper number and introduction of equations, tables and figures

c) The equation should follow the scientific notation, the same for the figures representing plots.

d) The figures should follow the rules given and related to the exploiting the Origin tool or equivalent, where axis should be using Arial 28 size for the numbers and 30-32 for the label of the axis, with the corresponding units they refer to.

e) References should introduce the styles discussed during the ID (can be the American or IOP styles)

f) No empty spaces between sections and the presentation and the margins to be adapted are for all 2 cm (top, bottom, left and right). Without annexes and index of figures and tables and list of abbreviations, the contain of the written document cannot **exceed the 33 pages**.

2. The thesis must contain: a title; a general Index; Summary; acknowledgements; list of abbreviations and notations; index of figures; index of tables; Introduction; Materials and Methods; Results and discussion; Conclusions and Future Perspectives; Annexes.

3. For each od above mentioned sections we expect that:

- **Motivation** for the work performed (no more than 1 page)

- **Summary** (300 words - value fixed by FCT-UNL regulation)

- **Introduction** (maximum 5 pages)

- **Materials and Methods** (maximum 2 pages, extendable to a maximum of 6 pages in cases of thesis to be made in industrial environment where the place requires also to be identified or when a technique is developed/modified during the work activity of the student). In this way, the description the physical principles of the techniques are no longer included in the dissertations (except in cases where it has been developed or modified during the work). It should include only the experimental conditions used.

- **Results and Discussion** (maximum 20 pages)

- **Conclusions** and **Future Perspectives** (maximum 2 pages)

- **References** (maximum 2 pages)

To these sections are added the indexes of figures and tables.

In the case of a "Professional Activity Reports" of the "To Be a Master" programme, rules previously established for their preparation must be obey (maximum of 33 pages).

2. All students must fill out an attendance sheet (available at the lab/supervisor), which should be delivered to the DCM secretariat at the end of each month, signed by the student and advisor (who make the comments it deems relevant to the student's work, monthly). It is expected that during its masters' work the student should

make a minimum of 35 h/week of Work. This rule must be applied whatever the environment in which the thesis work takes place.

This rule does not apply to those who are enrolled in the "Program to Be Master", given its specificity.

RULES CONCERNING THE PROCESS EVALUATION OF THE THESIS

For the evaluation of the thesis, **3 key points** will be considered:

I- **Evaluation of the work carried out** and the technical skill demonstrated by the master student. This evaluation is made mainly by the supervisor and must be considered the partial sheets above mentioned. Here the following aspects must be considered: originality of the work; scientific and or technical relevancy of the work; The methodology used and its adequacy to the work; ability to overcome obstacles and apply knowledge to new challenges; Contribution of the work for the advances of the stat of art, concerning science and/or technology. This implies to know if the work at the originated a scientific o technical published paper by an international journal peer-reviewed journal, or alternatively if the outcome of the work gave rise to a patent.

II- **Structure and contain of the dissertation**. This means that all points above mentioned should be taken into consideration and the final marks will reflects so (a student that do not follow such type of structure will be penalised up to 2 values out of 20 marks. Moreover, the following points will be evaluated:
- Clarity and concise of the objectives
- The *introduction* must reflect the present state of art with the correct updated references.
- *Global technical quality* of the document concerning structure and quality of figures, sketches and tables used
- *scientific language* and notation (e.g., tables, graphs, equations, formulas, tables, etc.) must be appropriated with the rules learned.
- Adequacy of the *discussion and analysis* of the results with the work performed, including any required critical analysis required to turn all technical and scientifically understandable.
- Clear and concise conclusions reflecting the main outcomes of the work performed, including key indicators of the results obtained.
- Future perspectives towards future challenges and quality of the supplementary information (annexes)

III- **Communication capacity during the discussion**. Here, what it is evaluated is:
- Clarity and communication skills demonstrated in the public presentation.
- Proper use of technical and scientific terminology.
- Technical and scientific precision.
- Ability to summarize and synthesize the work done.
- Ability to conduct public discussion and how it answers the questions raised.