1. Preamble

As stipulated in Article 20 of Decree-Law n.º 74/2006 of March 24, in the version recast by Decree-Law No. 65/2018 of August 16, the cycle of studies leading to the Master's degree awarded by IST must include a dissertation of a scientific nature or a project work, original and specially made for this purpose. Research and project work, including under the CAPSTONE framework, may take place in an academic, business or other environment.

2. The dissertation

The dissertation describes an original research and development work of a scientific/technical nature, on a subject in the area of knowledge of the course.

The master's thesis work must involve components of a theoretical, laboratory and/or experimental and/or simulation nature, promoting the approach of new problems, the collection of relevant information and bibliography, the reasoned selection of approach methodologies, the design of a solution to the proposed problem and its implementation, and the critical analysis of the results.

The dissertation is a report on the execution of the research work carried out, written in accordance with the Dissertation Preparation Guide and which should also include a discussion on the relevance of the problem considered, as well as its framework and relevance in relation to the state of the art in specialty in which it is integrated, and an exercise of synthesis and conclusions.

3. Presentation and choice of dissertation topics

The dissertation curricular unit must be ensured in both semesters.

It is up to the course coordinator to send an invitation to submit work proposals to all professors in the department(s) involved. This invitation may be extended to professors in related areas from other IST departments.

The faculty of the department(s) involved in the course will be responsible for ensuring the existence of proposals for dissertation topics in an adequate amount for the number of enrolled students. Proposals should cover the main areas of the course in a balanced manner.

Proposals are formalised, in a separate form, available in electronic format on the Fénix system, by the respective proposing professors and addressed to the course coordinator. The submission form for each proposal includes the set of requirements considered essential for the proposed work to be successful. The designation of the jury requires that the proposals be formalised in Fénix. When proposing a work, the professor is obliged to guide the work, in case there is an interested student who meets the pre-established requirements.
The course scientific committee is responsible for verifying that the goals of the proposed work are clearly stated and for disseminating them to the students, on dates to be defined by the course coordinator. The course coordinator will be responsible for publishing the list of approved proposals in the Fénix system.

4. Advisors of the dissertation

The preparation of the dissertation is advised by a doctorate, professor or researcher at IST, or by a specialist title holder, or by a doctorate external to IST.

If the advisor does not have a contractual relationship with IST, it is mandatory that the supervision of the dissertation preparation be carried out in co-supervision with a doctorate, professor or researcher at IST. The supervision of the preparation of the dissertation can be done in a co-supervision regime, up to a maximum of two advisors, which may include a doctoral student.

In the case of courses offered in association with other institutions of higher education or research, the supervisor will be a doctor, professor or researcher from one of the institutions involved. Supervisors are appointed by the course coordinator under the opinion of the respective scientific committee.

5. Dissertation carried out in a business environment and/or that requires a confidentiality agreement

When the studies and/or works leading to the preparation of the dissertation are carried out in a business environment, it is necessary to sign a confidentiality and intellectual property regulation agreement, which must be signed by students, advisors, the President of IST and those responsible for the company where work is performed.

- (Model) PT Masters Confidentiality Agreement
- (Model) EN Masters Confidentiality Agreement
- (Model) PT Master's Internship Contract
- (Model) EN Master's Internship Contract

Any change to the above-mentioned document must be given notice to IST's Intellectual Property Unit.

The confidentiality agreement must be registered in a specific form available below:

- Non-Disclosure Agreement Form

In any work leading to the preparation of the master's thesis in which a confidentiality agreement is required, the situation must be given notice to the course coordinator before the dissertation is delivered, clearly identifying the entity that requires confidentiality. Considering relevant, on the part of the course coordinator, the reasons invoked for this nature of confidentiality, the following procedures must be guaranteed:

- the title, abstract and keywords (both in Portuguese and in English) cannot be confidential;
• the coordinator on behalf of IST and the members of the jury must accept and sign a confidentiality agreement (model approved by the Legal Affairs Office of IST and agreed with any outside entity involved in the work, see example in the Dissertation Preparation Guide);

• the text of the dissertation, which will become public, must be reviewed and authorised by the entity that requires confidentiality;

• data and/or results considered confidential must be included in an annex, in a separate volume, which is distributed only to the members of the jury.

6. Constitution, appointment and functioning of the jury

The jury for the assessment of the dissertation is appointed by the course coordinator, upon proposal by the advisor, after hearing the respective scientific committee, under the terms of order n° 170621/2009, DR n°141, 2nd series of July 23, and article 22 of the of Law nº74/2006 of March 24, in the version of Decree of Law nº65/2018 of August 16.

The jury must be composed by:

1. President of the jury who, under the terms of the aforementioned order, may be the course coordinator, or a member of the respective scientific committee appointed by him. The advisor can never chair the jury;

2. Advisor (whenever there is more than one advisor, only one can be part of the jury);

3. National or foreign members who may be professors, doctoral researchers, specialists holding a doctor's degree or up to two specialists of merit recognised by the scientific committee of the course in the area of knowledge of the dissertation under consideration.

The jury is composed of 3 to 5 members.

Coordinators must print and sign the jury constitution form, which is available at Fénix, after having proceeded with its electronic approval. When the advisor is the coordinator of the course, approval must be made by the Scientific Council. Then they should send it to the Undergraduate Area.

The jury's deliberations are taken by the majority of its members, through justified nominal voting, abstentions not being allowed. In case of a tie, the president of the jury has the casting vote.

Minutes are drawn up at the jury meetings, which contain the individual votes of each of its members and the respective grounds. A model of minutes and individual voting is then available for download:

- Ata de Júri de Mestrado
- Critérios da Ata de Mestrado

The minutes of the jury meetings take effect after homologation by the Scientific Council of IST. Under the terms of the order mentioned in 1) of this paragraph, it is up to the course coordinators to send these minutes to the Undergraduate Area. A copy of the minutes must be provided to the student whenever requested.
7. Submission of the dissertation

The dissertation must be submitted according to the dates indicated in the Dissertation Procedure. Students who do not meet the defined deadlines must, for the purpose of completing the course, enrol in the Dissertation curricular unit in the following semester.

The dissertation to be submitted for final evaluation may be written in Portuguese or English, following the generic guide described in the Dissertation Preparation Guide.

The graphical presentation of the dissertation to be submitted for final evaluation must follow the model available in the Dissertation Preparation Guide. The dissertation to be submitted for final evaluation should not exceed 80 A4 pages. Complementary documentation that is considered relevant can be attached to the dissertation in the form of an independent annex up to a maximum of 100 A4 pages in total.

The dissertation must include the following statement immediately before the “Abstract”, Abstract, Acknowledgments sections:

**In Portuguese:**

Declaração
Declaro que o presente documento é um trabalho original da minha autoria e que cumpre todos os requisitos do Código de Conduta e Boas Práticas da Universidade de Lisboa.

**In English:**

Declaration
I declare that this document is an original work of my own authorship and that it fulfills all the requirements of the Code of Conduct and Good Practices of the Universidade de Lisboa.

The dissertation written in Portuguese (or English) must be accompanied by an extended abstract in the form of a scientific/technical article of up to 10 A4 pages written in English, according to the model available in the Dissertation Preparation Guide. The dissertation and the article must be uploaded to the Fénix academic management system (see Dissertation Preparation Guide).

The versions of the dissertation and extended abstract submitted for evaluation may be subject to verification using plagiarism detection software.

9. Public Defence

The public defence for assessment of the dissertation will be held in the calendar defined by the course coordinator. Under no circumstances can this date be later than the deadline for homologation of minutes stipulated by the Scientific Council of IST, which is available in the Dissertation Procedure.

It is up to the coordinator and the scientific committee of the course to publicise the realisation of the public tests. The notice must include the title of the work, the identification of the author, the identification of the members of the jury, the date, time and place of realisation.

Public defence cannot, under any circumstances, exceed the duration of 90 minutes, it being recommended that, as current practice, they last 60 minutes. It is up to the president of the jury to manage the duration of the public defence in accordance with the following rules:
• the first 20 minutes should be used to do a summary presentation of the candidate's work, which, without prejudice to scientific/technical rigour, should also be addressed to a target audience consisting of non-specialists;

• the remaining 40 to 70 minutes should be used for the discussion of the scientific/technical content of the work, being divided in equal parts by the interventions of the members of the jury and by the candidate.

During the public defence, Portuguese and/or English may be used.

9. Quantitative classification of the result of the public defense

It is the responsibility of the jury to evaluate the scientific/technical content of the work submitted, the public presentation made by the candidate and the performance of the candidate before the questioning of the members of the jury. The nature and specificities of the dissertations must be taken into account.

The following components should be evaluated:

A) Scientific/technical quality of the dissertation/project:

• Dissertation/report structure;
• Quality of the bibliographic review;
• Clarity of objectives and their achievement;
• Originality of the problem/project addressed, the methodologies used and the solutions proposals;
• Revealed ability to apply knowledge in solving non-standard familiar problems;
• Scientific/technical rigour;
• Critical analysis of proposed solutions and obtained results;
• Clarity and quality of writing and graphics;
• Relevant and comprehensive references.

B) Quality of the article/extended abstract

• Structure of the article/abstract;
• Scientific/technical rigour;
• Clarity and quality of writing.

C) Quality of public presentation:

• Quality of presentation;
• Clarity of exposition, including the ability to communicate to non-experts
• Scientific/technical rigour;
• Synthesis capability.

D) Public discussion

• Assurance (ease to present);
• Ability to argue.
Final classification calculation

The final classification assigned to the dissertation curricular unit is given by the weighted average, rounded to the nearest integer, of the classifications attributed on a scale from 0 to 20 to the evaluation components A to D according to the following weights:

A: 50%
B: 20%
C: 10%
D: 20%

The final classification publication is the responsibility of the course coordinator and must be carried out in accordance with what is defined in the Procedure of the Dissertation. The course coordinator may delegate the launch of the final classification to other member(s) of the course’s scientific committee, but sending the minutes to the Undergraduate Area is their sole responsibility.

The student who has not obtained approval must, for the purpose of completing the course, make a new enrollment in the dissertation curricular unit.