



Regulations on Final Theses at Facultat d'Informàtica de Barcelona (FIB)

Standing Committee Decision CP.FIB/2024/05/06, of 26 June 2024, by which the regulations on final theses at the FIB are approved.

Dean's team

**REGULATIONS ON FINAL THESES AT
FACULTAT D'INFORMÀTICA DE
BARCELONA (FIB)**

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Preamble

To be awarded any of the bachelor's or master's degrees offered by the Barcelona School of Informatics (FIB) of the Universitat Politècnica de Catalunya (UPC), students must complete a final thesis. This document sets out the regulations that govern final theses.

The bachelor's degrees managed by the FIB are:

- Bachelor's degree in Informatics Engineering (GEI)
- Bachelor's degree in Data Science and Engineering (GCED)
- Bachelor's degree in Artificial Intelligence (GIA)
- Bachelor's degree in Bioinformatics (BBI)

The master's degrees managed by the FIB are:

- Master's degree in Informatics Engineering (MEI)
- Master's degree in Innovation and Research in Informatics (MIRI)
- Master's degree in Artificial Intelligence (MIA)
- Master's degree in Secondary and Upper Secondary Education, Vocational Training and Foreign Language Teaching (MFPS)
- Master's degree in Data Science (MDS)

In this document, final theses, depending on the field, are distinguished as bachelor's or master's theses where necessary.

Chapter 1. General regulations

Section 1. General aspects

Article 1. Definition and characteristics

The final thesis is an original, individual piece of work that must be presented and defended before an examination committee. The thesis must consist of a comprehensive project that draws together many of the competencies attained over the course of the degree. Accordingly, theses should demonstrate that students are able to apply the knowledge, competencies and skills they have acquired.

Theses must comply with applicable regulations and respect the UPC Statutes and Code of Ethics.

Article 2. Types

Final theses may be of one of the following four types:

- A: Theses done at the UPC.
- B: Theses done at companies or institutions.
- C: Theses done on mobility, whether national or international.
- D: Theses done at foreign companies or institutions.

Type A theses

Final theses of this type are linked to an academic unit (department, research institute, etc.) of the UPC and are proposed by professors or students.

Professors may make their final thesis proposals public at any time using the established system. Students interested in a specific proposal must address the professor who made it, who becomes the thesis supervisor if an agreement is reached. Students who wish to make a proposal must address an FIB professor who may be interested in supervising the final thesis, who becomes the thesis supervisor if an agreement is reached. Both at the time of registration and at the time of the defence, the thesis supervisor must be affiliated with the FIB.

Type B theses

Students who have an employment contract with a company or institution or have signed an educational cooperation agreement can produce theses of this type. They must be supervised by a person who has a degree that is of an equal or higher level than the degree the student is taking and is under contract to the company or institution. This person supervises the final thesis. In this case, students must also find a professor at the School who is willing to act as a tutor for the final thesis.

Theses of this type must be defended, at the latest, in the defence period following the date on which the employment contract or educational cooperation agreement with the company or institution ends.

Type C theses

Final theses of this type are completed within the framework of student exchange agreements.

In this case, the theses are governed by the regulations of the host university and are supervised and assessed by its professors.

Type D theses

Type D theses are similar to type B but are completed at a company or institution abroad once the corresponding agreement has been signed.

Article 3. Final thesis registration

Students must register the final thesis before enrolling for it. As a general rule, registration must take place in the semester before the semester in which enrolment takes place.

Article 4. Final thesis enrolment

The period during which enrolment remains valid is determined by the UPC regulations in force. If the thesis is not defended during this period, students must enrol for it again.

Each enrolment allows students to defend the final thesis in two calls: an ordinary call and an extraordinary call. Students must complete the corresponding administrative process to be eligible for the extraordinary call.

Article 5. Thesis supervisors and tutors

Thesis supervisors are responsible for:

- Advising students on all matters related to the development of technical and cross-disciplinary competencies linked to final theses, on the degrees that have them.
- Tracking and monitoring progress on final theses.
- Assessing and validating the corresponding milestones in accordance with the provisions of these regulations.

Final theses may be co-supervised by two or more people.

Thesis tutors are responsible for:

- Advising thesis supervisors and students to ensure that final theses meet the requirements stemming from these regulations.
- Tracking progress on final theses in collaboration with thesis supervisors.
- Assessing and validating the corresponding milestones with thesis supervisors in accordance with the provisions of these regulations.

Article 6. Final thesis road map

6.1 Type A, B or D theses

Students who wish to undertake a final thesis must:

- Register the final thesis.
- Enrol for the final thesis.
- If applicable to the degree, reach the first milestone of the final thesis.
- Reach the progress review milestone of the final thesis.
- Defend the thesis in accordance with the assessment regulations set out in these regulations.

The specific regulations of each degree establish the examiners and the specific milestones that

they must assess. Possible milestones are the first milestone, the progress review milestone and the final milestone. The specific regulations of each degree state which milestones are applicable and how they must be assessed (if they are subject to assessment). Over the course of this process, examiners may include any comments they deem necessary (for the first and progress review milestones), which must be available to the members of the examination committee that assesses the final milestone, and use the rubrics established for this purpose.

6.2 Type C theses

Students who wish to undertake a final thesis must enrol for it at the FIB.

When students return from an exchange, they deposit the final thesis, and the mark on the transcript from the university at which the thesis was written is adapted and added to their academic record.

6.3 Withdrawal and changes to the details of the final thesis

The final thesis road map includes two additional actions that students can take in exceptional circumstances.

- *Withdrawal from the final thesis*: both the thesis supervisor (or the tutor, if there is one) and the student may apply to withdraw from the final thesis unilaterally by submitting an application to the degree's vice-dean for Studies. If the thesis supervisor or tutor withdraws, the vice-dean for Studies must ensure that a new supervisor or tutor is assigned, if possible, or that the student is able to register a new person to fill this role.
- *Changes to thesis details*: any changes to the details of a final thesis (title, change of supervisor, specialisation, etc.) must be made by submitting an application by the thesis supervisor (or the tutor, if applicable) and the student to the degree's vice-dean for Studies. However, the following restrictions apply:
 - Once a final thesis has been registered, its type may not be changed.
 - The process of modifying thesis details may only be initiated up to the progress review milestone by means of the procedure in effect.
 - Once the progress review milestone has been attained, students may not request any modification of their thesis details.

The degree's vice-dean for Studies may make exceptions in duly justified cases.

Section 2. Aspects of assessment

Article 7. Preliminary considerations

In the case of type A, B and D theses, assessment takes place as provided in these regulations. Type C theses are assessed in accordance with the regulations of the host university for the mobility period.

In the case of type C theses, the assessment of the university where the student enrolled for and worked on their final thesis will be accepted. The certificate of marks issued by that university must include the number of ECTS credits the thesis carries and the mark achieved. If the assessment of the final thesis includes information on cross-disciplinary competencies, this must also be recorded in the student's academic record. Type C theses must carry a number of ECTS

credits that is equivalent to the number established in the specific regulations of the degree. The mark for final thesis credits is adapted to a scale of 0 to 10 based on the mark certified by the university where the final thesis was completed. In exceptional cases, when the original mark is not numerical and additional information from the university that awarded it is not available, the degree's academic committee may require that the student concerned defend the thesis at the FIB. The examination committee appointed will then assess the thesis and award a final mark.

Article 8. Assessment

The specific regulations of the degree establish the milestones that must be reached for the thesis to be assessed, as well as the examiners and the specific assessment method for each of them.

Final theses are assessed by means of two or three milestones, depending on the degree.

- *First milestone*: this is only applicable to the bachelor's degrees that include it. It must be attained in the first month of work on the thesis. Students must draft a report that includes a brief description of the work and its objectives, schedule (including an estimate for the progress review milestone) and scope.
- *Progress review milestone*: this is compulsory on all degrees. The aim of the progress review milestone is to check that students are making satisfactory progress on their thesis and for students to declare their intention to defend their final thesis in the next defence period. Students must generate a progress review report (see Article 9) and submit it to the supervisor or tutor before the deadlines set for academic processes in the corresponding academic year.
- *Final milestone*: this must occur in one of the final thesis defence periods set in the School's academic calendar. Students must submit the final thesis (see Article 10). Students must then defend the thesis in a public session before an examination committee. The School announces the deadlines for the submission and public defence of theses before the start of each semester.

The examination committee jointly assesses the competencies for final theses in numerical terms and awards a single mark on a scale of 0 to 10. If the degree has an assessment rubric, the examination committee must assess the competencies in accordance with the current assessment rubric to facilitate discussion and promote the transparency of assessment criteria to students. During the assessment, the examination committee may consider the assessment and comments made by the supervisor or the tutor.

If the degree considers the assessment of cross-disciplinary competencies, the examination committee must assess them in accordance with the specific regulations of the degree in question.

Article 9. Progress review milestone

The progress review milestone occurs when students have completed approximately half of the work, at the very latest once the student has chosen the (ordinary or extraordinary) defence period.

The examiner is the thesis supervisor (when there is no tutor for the final thesis) or the tutor of the final thesis. The student meets the examiner and provides them with a report on the status of the thesis. The academic committees of the degrees may define the structure of the document that must be submitted and a rubric to facilitate its assessment and promote the transparency of the process to students. If a rubric is established it must be public and accessible. The specific assessment of the progress review milestone depends on the degree and is outlined in the degree's specific regulations.

The examiner may propose changes to correct deviations or reject the report. In this case, a new date must be set for a new meeting on the progress review milestone. Once the progress review report has been accepted, the examiner assesses the final, agreed-upon version. In addition, the examiner may enter any comments they deem appropriate.

The progress review report must be assessed favourably at least a month before the final thesis defence. Without a positive assessment of the report the final milestone cannot be assessed. The progress review report and assessment must be available to the examination committee that assesses the final milestone.

Note that once the progress review milestone has been successfully completed, students may not request any changes to their thesis details (see Article 6).

Article 10. Final milestone

The student submits their final thesis. At this point, the thesis supervisor or the tutor may modify the assessment made at the progress review milestone based on the same criteria indicated in Article 9. The student must defend the thesis in a public session before an examination committee. The examination committee has access to the assessment of previous milestones. It is essential for the supervisor or the tutor to accept the final report for it and the assessment of the previous milestones to be accessible to the examination committee. They must do so at least seven days before the agreed-upon date of the defence.

The examination committee for the final milestone must bear in mind the following during the assessment:

- The report submitted.
- The explanation and the answers to the questions posed.
- The objectives fulfilled with respect to the objectives proposed.
- The application and synthesis of the knowledge acquired by the student during the degree.
- The assessment of cross-disciplinary competences, if this is applicable to the degree.

Before the deliberations prior to the assessment, the examination committee may hear the supervisor or the tutor. If they plan to be absent, they can send a statement of their considerations to the committee chair beforehand.

The academic committees of the degrees may draw up a rubric to facilitate assessment and promote the transparency of the process to students. If a rubric is established it must be public and accessible. The specific assessment of the final milestone depends on the degree and is

outlined in the degree's specific regulations.

Section 3. Additional considerations regarding the final milestone

Article 11. Examination committee for the final milestone

Type A, B and D theses are assessed by an examination committee appointed by the dean at the proposal of the heads of studies or the degree's coordinator. The examination committees are appointed and made public at least 15 days before the date set for the thesis defence. Examination committees are made up of three FIB professors, who serve as chair, secretary and committee member. (If a degree does not include a secretary there will be two members.) Examination committees have mechanisms for appointing substitute members to act in situations of force majeure.

At least one of the professors must have teaching duties assigned on the degree in the academic year in which the defence takes place. Members of the examination committee may not simultaneously act as supervisors or tutors for any of the final theses they must assess.

Article 12. Format and content of the final thesis

A final thesis must be an original and unique piece of work. Once it has been validated by the thesis supervisor or tutor, it must be accessible to the examination committee. Students are not required to submit a printed copy of their thesis, but they must follow the protocol for submission within the time limits established in these regulations.

The following information must appear on the cover (front page):

- A. Title
- B. Author
- C. Date of the defence
- D. Thesis supervisor and the department, institution or company to which they are affiliated
- E. Degree
- F. BARCELONA SCHOOL OF INFORMATICS (FIB)
- G. UNIVERSITAT POLITÈCNICA DE CATALUNYA (UPC) – BarcelonaTech

In Section D, if the final thesis has more than one supervisor, the details of all the supervisors must be added on separate lines in the same format. Similarly, if there is a tutor for the final thesis their details must be added on the line below in the same format.

In the case of type B and D theses, students must add an H section that clearly indicates the school, institution or company where the final thesis was completed.

There is no set format for theses. It is compulsory to include the standard final thesis cover (that students can generate themselves following the process established by the FIB), an abstract of the work and an analysis of sustainability and ethical implications, in accordance with [Governing Council Decision 07/2023](#). The degree's specific regulations may establish the minimum necessary sections.

It is recommended that theses include the following sections:

- Cover
- Abstract
- Table of contents
- Introduction, motivation and objectives
- State of the art
- Specification and design of the solution
- Development of the proposal/technique/work
- Experimentation and evaluation of the proposal/technique/work
- Analysis of sustainability and ethical implications
- Conclusions
- List of references used
- Appendices with complementary information

Article 13. Distinctions

The examination committee may propose that a Distinction be awarded, explaining the reasons for its proposal. The academic committees of the degrees or the committees to which they delegate are responsible for awarding Distinctions and must establish the criteria for awarding them, in accordance with current UPC regulations.

Article 14. Intellectual property

Industrial and intellectual property rights in type A theses are governed by the regulations in force at the UPC. It should be noted that these regulations do not affect type B, C and D theses, as they are completed outside the scope of the UPC.

The intellectual property rights of theses of type B or D are established in the agreement between the student and the company. In the case of type C theses, intellectual property rights are governed by the academic regulations of the university where the thesis is completed.

The only exception that must be considered is when the supervisor of a type B thesis is an FIB professor. In such cases, the agreement between the professor and the company must stipulate who will own the intellectual property of the thesis.

Article 15. Confidentiality

All final theses are made public through the UPC's Libraries, Publications and Archives Service. The student or the thesis supervisor may submit a reasoned written request for confidential treatment of a final thesis to the degree's vice-dean for Studies for an embargo period that does not exceed five years. In cases in which confidential treatment has been requested, all the information on the thesis is not made public and is only available to members of the examination committee for them to assess the thesis and for the information to be filed in the student's academic record.

For theses of type B or D, the examination committee may not, under any circumstances, sign a non-disclosure agreement at the request of the company or institution.

Confidential treatment may be requested up to the progress review milestone, at the latest.

Chapter 2. Specific regulations

Section 1. Specific regulations of the bachelor's degree in Informatics (GEI)

In the framework of the bachelor's degree in Informatics Engineering (GEI), there is cross-disciplinary content that belongs to any of the projects that may be carried out as part of the bachelor's thesis. This notwithstanding, the bachelor's thesis is part of the major and must demonstrate the technical competencies of the major. Therefore, the bachelor's thesis is part of one of the GEI's majors, regardless of its type: Computing, Computer Engineering, Software Engineering, Information Systems or Information Technologies. Theses by students who wish to opt for an additional major must demonstrate the technical competencies of the two majors involved, that is, the principal major and the additional major.

Article 16. Language of the final thesis and thesis defence

The documentation generated by the final thesis must be written in one of the following languages: Catalan, Spanish or English.

Article 17. Number of credits and workload

The number of ECTS credits of the final thesis is 18; this includes 3 ECTS credits for the Project Management (GEP) module and 15 ECTS credits for the thesis. The workload for students is 30 hours per credit.

Article 18. Final thesis road map

The GEP module is part of the final thesis road map. The module aims to professionalise students in the planning, design and execution of projects. With this aim, it presents the methodologies and tools that allow students to work successfully on their theses. This training is delivered in blended learning mode and takes place at the beginning of each semester.

The first milestone of the final thesis and the report that is submitted are part of the GEP module. For type C theses, the GEP module may be taken remotely, recognised for an equivalent module at the host university or validated if the project done abroad is worth 18 ECTS credits or more. The professor in charge of the specialisation must approve the final thesis proposal before work on the thesis can begin.

Article 19. Final thesis registration

Registering the final thesis requires all of the compulsory subjects and at least three compulsory specialisation subjects to have been passed.

It is at this moment that students who wish to pursue an additional major must specify the second major. In these cases, to register the final thesis all of the common compulsory subjects and at least three compulsory subjects on the principal major and three subjects on the additional major (at least two of which must be compulsory) must have been passed.

When students register the final thesis, they propose a set of technical competencies from their major that they wish to work on in the final thesis. When thesis supervisors validate the registration, they ratify the technical competencies or make changes and establish the depth at which the competencies must be worked on (a little, quite a lot or in depth). Students who have opted for an additional major must work on the technical competencies of the two majors in the final thesis.

The professor in charge of the specialisation receives the final thesis proposal and approves it if it conforms with the specialisation. If it does not, it will not be approved. Students who opt for an additional major must obtain the approval of the two professors in charge of the specialisations.

Changes to thesis details

Changes to the technical competencies must be approved by the professor in charge of the corresponding specialisation.

Article 20. Final thesis enrolment

Final thesis enrolment requires students to have passed all compulsory subjects, whether common or specialisation subjects, and final thesis registration must have been approved by the professor in charge of the specialisation.

Students who opt for an additional major may enrol for the final thesis when they have passed all of the compulsory subjects, that is, common, principal major and additional major subjects. In addition, the registration of the thesis must have been accepted by the two professors in charge of the specialisations.

Article 21. Assessment

The final mark for the thesis is made up of 60% of the mark for the technical competencies and 40% of the mark for cross-disciplinary competencies. The first milestone of the thesis is assessed as part of the GEP. The GEP does not have a mark in the academic record, rather it contributes to the mark for the bachelor's thesis with the weight assigned to the first milestone.

Technical competencies

The thesis must include a justification of how the student has developed the corresponding technical competencies. The examination committee for the final milestone assesses the technical competencies and awards a single numerical mark on a scale from 0 to 10. This assessment does not take into account any aspect related to cross-disciplinary competencies.

Cross-disciplinary competencies

Cross-disciplinary competencies are assessed using the objective indicators that make up the rubrics for the three milestones (first, progress review and final). The first milestone makes up 25% of the mark for cross-disciplinary competencies, the progress review milestone another

25% and the final milestone the remaining 50%. The final milestone is assessed as part of the GEP and the examiners are GEP professors and the supervisor or the tutor.

Assessment of the foreign language competency

To graduate with a bachelor's degree in Informatics Engineering, students must certify the foreign language competency. The UPC establishes the routes for certifying the foreign language competency. One of these routes is to write and defend the bachelor's thesis in a foreign language. Students who have not certified the foreign language competency during the bachelor's degree can do so by writing and defending their bachelor's thesis in a foreign language. The mark awarded for this competency does not affect the mark for the final thesis. The assessment rubric for the final milestone of these students has specific indicators with which to assess this competency.

Additional point

Examination committees can increase the mark for a final thesis by up to one additional point if they consider it appropriate. The report must include the reasons that merit the additional point. The increase does not apply to aspects that have already been assessed in the rubric.

Article 22. Content and format of the final thesis

A final thesis must always begin with an abstract one or two pages in length, in Catalan, Spanish and English.

The cover must follow the structure established in the general regulations, with the following changes:

Section E must be followed by a section stating the specialisation (or specialisations, if there is an additional major).

Good practices must be observed when submitting software, which must be limited to source files and avoid object and binary files as much as possible.

Section 2. Specific regulations of the bachelor's degree in Data Science and Engineering (GCED)

Article 23. Language of the final thesis and thesis defence

The documentation generated by the bachelor's thesis must be written in one of the following languages: Catalan, Spanish or English.

Article 24. Number of credits and workload

The bachelor's thesis counts for 18 ECTS credits. The workload for students is 30 hours per credit.

Article 25. Final thesis registration

Final thesis registration requires students to have passed 168 ECTS credits and the initial stage.

Article 26. Final thesis enrolment

Final thesis enrolment requires final thesis registration to have been approved by the professor in charge of the specialisation.

Article 27. Assessment and composition of the examination committee for the final milestone

The examination committee jointly assesses the competencies in a final thesis in numerical terms and awards a single mark on a scale of 0 to 10. If the thesis is awarded a Fail mark, the examination committee informs the student of the changes that must be made, if appropriate.

Members of the examination committee must be teaching and research staff with a contractual relationship with the UPC (that is not exclusively for an interuniversity degree) who are affiliated with one of the following schools: Barcelona School of Informatics (FIB), Barcelona School of Telecommunications Engineering (ETSETB) or School of Mathematics and Statistics (FME).

Article 28. Content and format of the final thesis

A bachelor's thesis must always begin with an abstract one or two pages in length, in Catalan, Spanish and English. As a general rule, bachelor's theses must be around 40 pages in length (appendices may be included separately).

The cover must follow the structure established in the general regulations, with the following changes:

Section F, schools: Barcelona School of Informatics (FIB), Barcelona School of Telecommunications Engineering (ETSETB) and School of Mathematics and Statistics (FME).

The thesis must contain at least the following information:

- Abstract and table of contents
- Introduction, context of the problem and prior work
- Definition, objectives and specifications of the problem
- Solution proposed
- Results
- Conclusions
- Bibliography
- Appendices (optional)

Appendices must include all cross-disciplinary aspects that go beyond the scientific and technical content and are relevant to the project, such as:

- Work plan followed.
- Cost and economic feasibility analysis.
- Ethical implications (social responsibility, sustainability, gender equality, privacy, etc.). It is recommended that the project's relationship with the 17 Sustainable Development Goals (SDGs) of the United Nations (<https://www.un.org/sustainabledevelopment/>) be analysed.
- Other aspects that may be considered relevant.

In the description of prior work, explicit mention must be made of the basis of the thesis in a prior project or work by the supervisor or the tutor or the institution to which they belong.

Section 3. Specific regulations of the bachelor's degree in Artificial Intelligence (GIA)

Article 29. Language of the final thesis and thesis defence

The documentation generated by the bachelor's thesis must be written in one of the following languages: Catalan, Spanish or English.

Article 30. Number of credits and workload

The bachelor's thesis counts for 18 ECTS credits. The workload for students is 30 hours per credit.

Article 31. Final thesis registration

Final thesis registration requires students to have passed all compulsory subjects.

Article 32. Final thesis enrolment

Final thesis enrolment requires final thesis registration to have been approved by the professor in charge of the specialisation.

Article 33. Assessment and composition of the examination committee for the final milestone

The examination committee jointly assesses the competencies in a final thesis in numerical terms and awards a single mark on a scale of 0 to 10.

Article 34. Content and format of the final thesis

A bachelor's thesis must always begin with an abstract one or two pages in length, in Catalan, Spanish and English.

The guide to the thesis content must follow the recommendations provided in the general regulations. Appendices must include all cross-disciplinary aspects that go beyond the scientific and technical content and are relevant to the project, such as:

- Work plan followed.
- Cost and economic feasibility analysis.
- Ethical implications (social responsibility, sustainability, gender equality, privacy, etc.). It is recommended that the project's relationship with the 17 Sustainable Development Goals (SDGs) of the United Nations (<https://www.un.org/sustainabledevelopment/>) be analysed.
- Other aspects that may be considered relevant.

Section 4. Specific regulations of the master's degree in Informatics Engineering (MEI)

Article 35. Language of the master's thesis and thesis defence

The documentation generated by the master's thesis must be written in one of the following languages: Catalan, Spanish or English.

Article 36. Number of credits and workload

The master's thesis counts for 30 ECTS credits. The workload for students is 30 hours per credit.

Article 37. Master's thesis registration

Students may register the master's thesis when they have passed a minimum of 30 ECTS credits for compulsory subjects.

Article 38. Master's thesis enrolment

Students may enrol for the master's thesis when they have passed all of the compulsory subjects.

Article 39. Content and format of the final thesis

The one- or two-page abstract must be included in three languages: Catalan, Spanish and English.

The thesis content must follow the recommendations provided in the general regulations. Students must also include a section on the management of the project and the planning of the work. The following structure is recommended:

- Background analysis
- Work plan
- Sustainability report
- Feasibility, overall economic analysis, and comparison with other alternatives
- Risk assessment

Section 5. Specific regulations of the master's degree in Innovation and Research in Informatics (MIRI)

Article 40. Language of the master's thesis and thesis defence

All documentation generated in relation to the master's thesis must be in English.

Article 41. Number of credits and workload

The master's thesis counts for 30 ECTS credits. The workload for students is 30 hours per credit.

Article 42. Master's thesis registration

Students may register the master's thesis when they have passed a minimum of 60 ECTS credits.

Article 43. Master's thesis enrolment

Students may enrol for the master's thesis when they have passed a minimum of 78 ECTS credits.

Article 44. Format and content of the thesis

The compulsory cover, described in Section E of Article 12 of these regulations, must include the name of the specialisation, with no acronyms and in brackets, after the official name of the master's degree.

Section 6. Specific regulations of the master's degree in Artificial Intelligence (MAI)**Article 45. Language of the master's thesis and thesis defence**

All documentation generated in relation to the master's thesis must be in English.

Article 46. Number of credits and workload

The master's thesis counts for 18 ECTS credits. The workload for students is 30 hours per credit.

Article 47. Types

Given the interuniversity character of this master's degree, theses completed at partner schools (the Faculty of Mathematics of the University of Barcelona and the School of Engineering of the Universitat Rovira i Virgili) are treated as type A master's theses, and the academic staff of these schools are considered academic staff of the master's degree for all purposes. Therefore, they can supervise type A master's theses and act as tutors of type B and D master's theses.

Article 48. Master's thesis registration

Students may register the master's thesis when they have passed a minimum of 30 ECTS credits for compulsory subjects.

Article 49. Master's thesis enrolment

Students may enrol for the master's thesis when they have passed a minimum of 30 ECTS credits for compulsory subjects.

Article 50. Assessment and composition of the examination committee for the final milestone

Master's theses are assessed jointly by the partner schools participating in the master's degree, and the examiners for the final milestone are members of the academic staff of those schools.

Article 51. Format and content of the thesis

On the compulsory cover, described in Section F of Article 12 of these regulations, the partner schools must be added. Therefore, the following must feature:

BARCELONA SCHOOL OF INFORMATICS (FIB)
FACULTY OF MATHEMATICS (UB)
SCHOOL OF ENGINEERING (URV)

The partner universities must be added to Section G. Therefore, the following must feature:

UNIVERSITAT POLITÈCNICA DE CATALUNYA (UPC) – BarcelonaTech
UNIVERSITAT DE BARCELONA (UB)
UNIVERSITAT ROVIRA I VIRGILI (URV)

Article 52. Intellectual property

Industrial and intellectual property rights in type A master's theses are governed by the regulations in effect at the university where the thesis is completed.

Section 7. Specific regulations of the master's degree in Secondary and Upper Secondary Education, Vocational Training and Foreign Language Teaching (MFPS)

Article 53. Language of the master's thesis and thesis defence

The documentation generated by the master's thesis must be written in one of the following languages: Catalan, Spanish or English.

Article 54. Number of credits and workload

The master's thesis counts for 6 ECTS credits. The workload for students is 25 hours per credit.

Article 55. Types

The aim of the master's thesis is for students to work on a personal work or project in which they apply the competencies they have acquired during the master's degree and show in-depth knowledge of the subjects studied. In their master's thesis, students must respond to a specific need or situation, improve one of the School's teaching activities, compare a range of educational situations, design new classroom activities or resources, or write new teaching materials.

Given the characteristics of the degree, master's theses are of type A.

Article 56. Master's thesis road map

Given the characteristics of the master's degree, the following adapted milestones are established for the degree:

To defend a master's thesis before an examination committee students must have passed all of the subjects on the master's degree (including Practicum). They must also have been authorised to proceed to the defence by their supervisor or tutor.

Students who do not submit their partial thesis or their final thesis before the established deadlines may not defend their master's thesis in the ordinary call (June). In both cases, they can do so in the extraordinary call (October), as long as they meet all the requirements for defending a master's thesis.

Article 57. Master's thesis registration

Master's thesis registration takes place the semester before the presentation.

Master's thesis proposals must be validated by the master's thesis supervisor and approved by the academic committee of the degree or persons to whom they delegate.

Article 57. Master's thesis enrolment

Given that enrolment in the MFPS is annual, master's theses are enrolled at the start of the semester in which they are presented and may therefore take place before their registration.

Article 58. Assessment and composition of the examination committee for the final milestone

Examination committees are made up of three UPC professors. At least one of the members of the committee must have assigned teaching duties on the master's programme or have taught on the programme in one of the two preceding academic years.

The examination committee awards a mark to the master's thesis according to the assessment criteria set by the Academic Committee of the Master's Degree in Secondary and Upper Secondary Education, Vocational Training and Foreign Language Teaching (CAMSEC). This information is published in the document describing the master's thesis process, which must be public and accessible. The final mark for the master's thesis is a single numerical mark on a scale from 0 to 10.

Supervisors or tutors who detect any serious irregularity in the work, such as plagiarism, will not validate it and will inform the CAMSEC, in accordance with the UPC's academic regulations, and the students may not defend their master's thesis in that academic year.

Article 59. Format and content of the thesis

The content and the structure of the master's thesis, as well as the information on the cover, is specified in the document describing the master's thesis process drawn up by the CAMSEC.

Article 60. Confidentiality

The name of the school at which the thesis was carried out must not be mentioned directly, nor must personal details be included that may be subject to data protection law (including the names of institutions or persons, photographs of persons and documents that may identify the school). In exceptional cases and for a justified need, students who wish to use these references may include this information and/or documentation in an appendix named "Appendix: non-publishable data", but they must be excluded from the rest of the thesis.

Not meeting this requirement may result in the work not being awarded a mark.

Section 8. Specific regulations of the master's degree in Data Science (MDS)

Article 61. Language of the master's thesis and thesis defence

All documentation generated in relation to the master's thesis must be in English.

Article 62. Number of credits and workload

The master's thesis counts for 30 ECTS credits. The workload for students is 30 hours per credit.

Article 63. Master's thesis registration

Students may register the master's thesis when they have passed a minimum of 60 ECTS credits.

Article 64. Master's thesis enrolment

Students may enrol for the master's thesis when they have passed a minimum of 78 ECTS credits.

Article 65. Final milestone

The compulsory sustainability and ethical implications report is carried out through the gender competency associated with the master's thesis. The final assessment must include the assessment of the gender competency. There are two points on which the gender competency is assessed.

- The thesis and its presentation during the defence before the examination committee: inclusive language, references and examples are assessed.
- Technical aspects. The following ethical issues are assessed: issues related to data management and analysis; issues related to equity, where possible biases are identified and assessed both in the data and in the processes carried out in relation to data management and analysis; and actions carried out to eliminate or mitigate such biases. The work must have analysed the impact of these aspects critically.

Assessment of the gender competency is included in the single numerical assessment. It is recommended that the examination committee consider the impact of the gender competency on the final mark as follows:

- Up to 20% of the final mark based on the quality of the final thesis and the presentation.
- The technical aspects of this competency should be assessed together with the other technical competencies and can potentially have an impact of 100% on the final mark.

Transitional, repealing and final provisions

Transitional provision

These regulations do not affect master's theses that students enrol for before 1 February 2024. Any final theses defended in the extraordinary spring 2024 defence period will also be exempt.

Repealing provision

The regulations governing final theses are hereby repealed, in particular:

- The Bachelor's Thesis Regulations of the FIB, Standing Committee Decision of 19

September 2012, and subsequent modifications of these regulations agreed by the Standing Committee at meetings held on 19 March 2014, 21 October 2015, 18 October 2017 and 29 January 2020.

- The Master's Thesis Regulations for Informatics Degrees, Decision CP.FIB/2022/08/07, of 19 October 2022, of the Standing Committee of the FIB.
- The Master's Thesis Regulations for the Master's Degree in Secondary and Upper Secondary Education, Vocational Training and Foreign Language Teaching, Standing Committee Decision CP.FIB/1019/01/07, of 27 March 2019.

Final provision. Entry into force

These regulations enter into force the day after they are approved.