

Regulations and Activities of the Doctoral Program in Physical Sciences and Technologies (CyTF): Requirements and Evaluation (December 2024)

General Regulations

1. The Academic Committee of the CyTF Program, as stated in Article 15 of the doctoral regulations, is responsible for defining, designing, updating, ensuring the quality and coordination of the training and research activities organized within the framework of the Program, as well as supervising research and training progress and authorizing the submission of theses by each doctoral student in the Program.
2. Tutors assigned to each student, as members of the CyTF Program, in collaboration with supervisors, are responsible for overseeing and ensuring the quality and relevance of the training activities carried out by students (Articles 31-3, 32-4, 27-2). Tutors are expected, as members of the Program, to substantiate the relevance of the merits claimed for the student's training. This can simplify the Committee's task when verifying and evaluating the supporting documentation for these activities.
3. Students enrolled annually in the CyTF Program have the right to participate in all academic activities organized by the Academic Committee and are obliged to participate in those activities indicated by the Academic Committee.
4. The Academic Committee establishes the training activities students must undertake, always within their doctoral training period, and evaluates these activities in the academic year in which the relevant supporting documentation is submitted.
5. Students must annually document their activities on the established dates and update their research plan in accordance with the general doctoral regulations of the University of Seville. The RAPI application will be used, specifically the "Activity Document" (DAD) menu and the "Research Plan" (PI) menu. These documents will be reviewed by the tutor and supervisors and will form the basis for the annual evaluation in RAPI conducted by the Academic Committee (Article 30, 3rd).
6. Students may request, with sufficient notice, the preparation of doctoral training reports required for scholarships or research contracts. These reports will be consistent with the RAPI evaluation and will be prepared by the Program Coordinator or a member of the Academic Committee designated by her/him. The Coordinator may also request reports from the student's tutor.
7. The Academic Committee will authorize the defense of the doctoral thesis based on the documentation submitted by the student in the RAPI application, provided that the latest RAPI evaluation confirms that the doctoral candidate has met the minimum requirements described below. Additionally, the Academic Committee may authorize the thesis defense if the student has pending requirements but submits documentation demonstrating that the minimum requirements have been completed since the last RAPI evaluation.
8. In the case of internationally co-supervised theses and in accordance with the specific agreement established for such co-supervision, the doctoral candidate may request the validation of academic activities equivalent to those of the CyTF Program.

Mandatory Activities of the CyTF Program: Description

All students enrolled in the Doctoral Program, regardless of whether they have met the minimum requirements, must:

- Attend at least one of the Doctoral Days organized annually by the CyTF Program, as stated in the Program's verification report.
- Additionally, in accordance with the general doctoral regulations of the University of Seville, each academic year they must:
 - Update their Research Plan.
 - Record in the Activity Document all relevant activities undertaken (courses, presentations, articles, etc., as detailed below).

Training Activities of the CyTF Program: Minimum Requirements

According to the verification report, the following are considered training activities:

1. Cross-Cutting Activities Courses (CAT): 150 hours

Of these, 60 hours must be in-person and justified, while 90 hours are considered the student's independent work. Within this category, the following are included:

a. Program-specific courses. These are courses organized within the Program and offered to students, with attendance monitored. No maximum number of hours applies.

Documentation: No specific documentation is required, although students must include these in the Activity Document.

b. Other training courses. A maximum of 55 hours is allocated for language courses of scientific interest, methodological activities, coding, bibliographic use, etc. Also included are specialty summer schools and courses with a pre-doctoral training profile. Workshops, seminars, and conferences are not included. Lecture hours of up to 8 hours per day are counted, with a maximum of 20 hours per course.

Documentation: Certificate of course completion indicating dates, hours, and syllabus. Tutor's report highlighting the course's relevance to doctoral training.

c. Presentations. A maximum of 15 hours is allocated for presentations by the doctoral candidate at conferences, workshops, seminars, and schools, as well as invited presentations during stays or visits to other institutions. Internal group or departmental meetings are excluded. Outreach activities are considered. General guidelines: 5 hours for oral presentations at international meetings, 3 hours for oral presentations at national meetings or posters at international meetings, and 2 hours for posters at national meetings or outreach presentations.

Documentation: Certificate of presentation with date and format (poster or oral), signed by the event organizer. Tutor's report on the relevance of the presentation for doctoral training.

d. Articles and reports. A maximum of 20 hours is allocated for scientific articles and documents primarily authored by the doctoral candidate, available on the journal's website or the relevant institution's site. Priority is given to articles/reports where the doctoral candidate is the first

author. Guidelines: Up to 10 hours for international journal articles with the doctoral candidate as the first author, up to 5 hours for other documents with the doctoral candidate as the first author, and half these hours for substantial contributions.

Documentation: Copy of the published article/document with web reference. Tutor's report on the publication's relevance for doctoral training and, if not the first author, specifying the candidate's contribution.

2. Professional Orientation Days (JOP): 8 hours

Organized by the Program with attendance monitored. In exceptional cases, equivalent activities may be validated if approved by the tutor and the Academic Committee.

Documentation: None required but recommended for annual PI updates.

3. Doctoral Days (JD): 10 hours

Organized by the Program with attendance monitored. 5 hours for oral presentations, 2 hours for "flash talks" or posters, and 1 hour for attendance without presentation.

Documentation: None required for attendance. Presentations must be included in the DAD.

4. Research Seminars (SI): 20 hours

These include seminars by renowned researchers aligned with the Program's research lines. Hours can be covered via:

a. Program seminars. Organized by the Program or relevant institutions. No hour limit applies. One hour per seminar is counted.

Documentation: Attendance lists managed by organizers.

b. Other seminars. A maximum of 6 hours may be validated with approval from the tutor and Academic Committee. Group meetings and thesis defenses are excluded.

Documentation: Seminar announcement with title, speaker, and attendance certificate. Tutor's report on the speaker's prestige and seminar relevance.

c. Scientific meetings. Up to 10 hours for conference attendance counted as 2 hours per day.

Documentation: Conference Program and attendance certificate. Tutor's report on conference level and relevance.

5. Research Stays (EI): 160 hours

These are stays conducted at entities other than the student's home institution. They are not compatible with stays associated with seminars or conferences. The required hours can be fulfilled through one or multiple stays, calculated as 8 hours per day of work.

In special circumstances, such as during the COVID-19 pandemic, which prevented stays outside the city, the academic committee may authorize "virtual" stays. Such authorization requires a request from the doctoral student supported by the tutor, along with a well-defined Program that ensures collaboration between the doctoral student and the external group.

For students pursuing industrial doctorates or doctorates with significant involvement of companies, the academic committee may authorize activities carried out at the company's

premises to count as research stays. This authorization requires a request from the doctoral student, supported by the tutor and the company representative.

Documentation: To justify these stays, a letter from the head of the host institution certifying that the stay has taken place is required, along with a report from the student's tutor indicating the relevance of the stay for doctoral training. It is recommended to include the activities of the stay in the Research Plan (RP).

Evaluation of Training Activities

The Program has established evaluation mechanisms, primarily qualitative, to assess the performance of doctoral students.

1. The doctoral Program annually evaluates the students' formative activities on the RAPI platform of the University of Seville, based on the documentation provided by the students and the reports from their tutors and advisors. This process in RAPI not only validates (or not, depending on their relevance as indicated in the tutors' and advisors' reports) the formative activities carried out—outlined in points 1) to 5) above—but also provides a qualitative evaluation of the doctoral student's performance during the academic year.
2. Additionally, following the student's participation as a speaker in the doctoral workshops, the academic committee of the Program provides qualitative feedback on the US virtual platform (ev.us.es), focusing on the strengths and weaknesses identified in their presentation.
3. The evaluation on RAPI mentioned in point 1 is crucial to the doctoral Program, as two negative evaluations result in the student being unable to continue in the Program. On the other hand, if the annual evaluation is positive, the student is informed of the remaining hours of the Program's formative requirements needed to submit their doctoral thesis. This allows the student, together with their tutor and advisors, to plan future formative activities.

Although the evaluation provided by the academic committee is primarily qualitative, if funding agencies for student scholarships require a quantitative assessment, this will be carried out by the academic committee following a report from the student's tutor. In any case, the academic committee will ensure that the criteria for quantitative evaluation are consistent for all affected students.