

# **Activities of the Doctoral Program "Physical Sciences and Technologies" (CyTF): requirements, regulations and evaluation**

(09/2026)

## **General Regulations:**

1. The Academic Committee of the CyTF Program, in accordance with Article 15 of the doctoral regulations, is "(...) responsible for the definition, design, updating, quality and coordination of the training and research activities organized within the framework of the program, as well as for the supervision of the progress of research and training and for the authorization of the presentation of the thesis of each doctoral candidate in the program."
2. The tutors of each student, as members of the CyTF Program, in collaboration with the supervisors, are responsible for overseeing and justifying the quality and suitability of the training activities carried out by the students (Articles 31-3, 32-4 and 27-2). The tutor, as a member of the program, is relied upon to justify the relevance of the merits claimed for the student's training. This justification is essential for the annual evaluation of doctoral candidates by the Academic Committee.
3. Students enrolled annually in the CyTF Program shall have the right to participate in all academic activities organized by the Academic Committee, and shall be obliged to participate in those indicated by the Academic Committee.
4. The Academic Committee establishes the training activities that the student must carry out, always within the period of their doctoral training, and will assess them in the academic year in which the relevant supporting documentation is submitted.
5. Students must document, each year, within the dates established by EIDUS, the activities carried out and update their research plan, in accordance with the general doctoral regulations of the University of Seville (US) (see <https://doctorado.us.es/estudios/supervision-y-seguimiento>). The RAPI application will be used; within it, the "Activities Document" (DAD) menu and the "Research Plan" (PI) menu, which also includes the "Personal Training Plan" (PFP). These documents will be reported on by the tutor and the supervisors, and will form the basis for the annual evaluation in RAPI carried out by the Academic Committee (Article 60).
6. Students may request, with sufficient notice, the drafting of doctoral training reports required by scholarships or research contracts. These reports will be consistent with the RAPI evaluation, and will be produced by the Program Coordinator or the member of the Academic Committee to whom this is delegated, who may also request reports from the student's tutor.
7. The Academic Committee will authorize the defense of the doctoral thesis based on the student's documentation in the RAPI application, provided that the information available in the most recent RAPI evaluation certifies that the doctoral candidate has met the minimum requirements described below. Furthermore, the Academic Committee may also authorize the defense of the doctoral thesis if the student has pending requirements, but provides documentation showing that they have completed the minimum requirements since the last RAPI evaluation.
8. In cases of theses under international co-supervision (cotutela) and in accordance with the specific agreement established for the 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, in each academic year:

- Update the Research Plan.
- Include in the Activities Document all relevant activities carried out during the academic year (activities, presentations, articles, etc., details below).

## Training Activities of the CyTF Program: Minimum Requirements

In accordance with the verification report, the following are considered training activities:

1. Cross-Disciplinary Activity Courses (CAT): 150 hours, of which 60 hours are in-person and must be justified, while 90 are considered the student's own work. This category includes training courses received, as well as presentations and articles produced by the doctoral candidate.

a. Courses specific to the program. These are courses organized within the framework of the program and offered to students, with attendance monitoring. There is no maximum number of hours for these.

*Documentation: The student must include them in the Activities Document, although supporting documentation is not required.*

b. Other training courses. Courses in scientific languages of interest, methodological activities, programming, use of bibliography, etc. are valued at a maximum of 55 hours. This includes specialized courses and summer schools that show a predoctoral-level training profile. Specialized workshops, seminars and conferences are not considered. The taught hours of the course will be counted, with a maximum of 8 hours per day. Each course will be valued at a maximum of 20 hours.

*Documentation: Certificate of having completed the course, indicating the dates, hours and syllabus. Tutor's report indicating the relevance of the course for doctoral training.*

c. Presentations. Presentations made by the doctoral candidate at congresses, workshops, seminars and schools, as well as invited presentations made at other institutions where stays or visits have taken place, will be valued at a maximum of 15 in-person hours. Presentations made at internal group or department meetings where the thesis is being carried out are not considered. Outreach activities are considered.

As a general rule, 5 hours are awarded for an oral presentation at an international meeting, 3 hours for oral presentations at national meetings and posters at international meetings, and 2 hours for posters at national meetings or outreach-type presentations.

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

d. Articles and reports. Scientific articles and documents that have been mainly written by the doctoral candidate and that are available on the journal's website (articles) or on the website of the relevant scientific institution (documents such as experimental proposals, progress reports, conference abstracts) will be considered, with a maximum of 20 hours. Priority will be given to articles and reports in which the doctoral candidate appears as first author. Additionally, articles and reports in which the doctoral candidate has been responsible for writing and drafting a substantial part of the document may also be taken into account.

As a general rule, up to 10 hours are awarded for an international article in indexed journals with the doctoral candidate as first author, up to 5 hours for other documents with the doctoral candidate as first author, and half of these hours if the doctoral candidate was responsible for a substantial part of the document.

*Documentation: Copy of the published article or document, with the corresponding web reference. Tutor's report indicating the relevance of the publication for doctoral training, and, in cases where the doctoral candidate is not the first author, explaining which content of the document is attributable to them.*

2. Professional Orientation Sessions (JOP): 8 hours. These take place in activities organized by the program, with attendance monitoring. In exceptional cases where it is demonstrated that the student is unable to participate in the program's activities, upon prior request endorsed by the tutor, these hours may be substituted by other activities with the same objective.

*Documentation: The student must include them in the Activities Document, although supporting documentation is not required.*

3. Doctoral Days (JD): 10 hours. These are activities organized by the program, with attendance monitoring. 5 hours are awarded for a "long" oral presentation, 2 hours for a "flash talk" or poster, and 1 hour for attendance at the sessions without a presentation.

*Documentation: The student must include them in the Activities Document, although supporting documentation is not required.*

4. Research Seminars (SI): 20 hours. Students must attend 20 hours of this type of activity, consisting of lectures given by prestigious professors or researchers on topics related to the lines of research developed in the Doctoral Program. These hours may be covered through "Program seminars", "Other seminars" and "Attendance at scientific meetings".

a. Program seminars: These are seminars organized specifically by the program's Academic Committee, as well as those organized by the Faculty of Physics or by centers with which the program has a close relationship, such as the CNA or the IMSE, which the Academic Committee considers suitable for this purpose and communicates to students in advance. There is no limit on the hours that may be covered through program seminars; each seminar counts as one hour.

*Documentation: The student must include them in the Activities Document, although supporting documentation is not required, as attendance will be monitored by the seminar organizer, who will forward the attendance sheet to the Program's Academic Committee.*

Other seminars. Students may request validation of their attendance at other seminars, with a maximum of 6 hours, one hour per seminar. The Committee, having reviewed the documentation and the tutor's report, will decide whether these seminars are suitable for doctoral training. Group meetings and defenses of undergraduate theses, master's theses or doctoral theses are not considered for this activity.

*Documentation: Copy of the announcement, stating the title and the speaker, and a certificate of attendance issued by the seminar organizer. Tutor's report on the speaker's standing and the relevance of the seminar for the doctoral candidate's training.*

b. Attendance at scientific meetings. Students may request up to 10 hours for attendance at scientific meetings. 2 hours will be counted per day of the meeting. The Committee, having reviewed the documentation and the tutor's report, will decide whether these conferences are suitable for doctoral training.

*Documentation: Copy of the conference program and certification of the student's attendance. Tutor's report on the level of the conference and its relevance for the doctoral candidate's training.*

5. Research Stays (EI): 160 hours. Stays at institutions other than the home center are considered. The hours may be covered in one or several stays, calculated as 8 hours per working day. Attendance at seminars or conferences is not considered a stay.

When special circumstances arise (such as the COVID-19 pandemic) that prevent stays at other research centers, the Academic Committee may authorize "virtual" stays, upon prior request from the doctoral

candidate endorsed by the tutor. This request must include a well-defined stay program that ensures the doctoral candidate's collaboration with the external group.

For students undertaking industrial doctorates, or doctorates with strong company involvement, the Academic Committee may authorize the activity carried out at the company's premises to count as a research stay, upon prior request from the doctoral candidate endorsed by the tutor and the company's responsible officer.

*Documentation: A letter from the head of the center where the stay took place, certifying that it was carried out, is required for justification. Likewise, a report from the student's tutor indicating the relevance of the stay for doctoral training must be provided. It is recommended to include the activities of the stay in the Research Plan (PI).*

## **Evaluation of Training Activities**

The program has established evaluation mechanisms, primarily qualitative, to assess the performance of doctoral candidates.

1. On the one hand, the doctoral program annually evaluates the training activities of doctoral candidates on the US's RAPI platform, based on the documentation provided by the doctoral candidates and the reports of their tutors and supervisors. This RAPI procedure not only validates (or not, depending on its relevance according to the reports of the tutors/supervisors) the training activities carried out, in the sections described above, but also provides a qualitative evaluation of the doctoral candidate's performance in the academic year.

2. In addition, after the doctoral candidate's participation as a speaker at the Doctoral Days, the program's Academic Committee provides doctoral candidates with a qualitative evaluation, focused on the strengths and weaknesses found in their presentation, on the US virtual platform [ev.us.es](http://ev.us.es).

3. The RAPI evaluation referred to in point 1 is essential within the doctoral program, since a negative evaluation results in the student's definitive withdrawal from the program (Articles 60-2 and 47).

Furthermore, in this annual evaluation, if it is positive, the student is informed of the remaining training requirement hours under the program needed in order to submit their doctoral thesis. This allows the student, together with their tutor and supervisors, to plan future training activities.

Although the assessment made by the Academic Committee is primarily qualitative, if the funding agencies of the students' scholarships were to require a quantitative assessment, this will be carried out by the Academic Committee, following a report from the student's tutor. In all cases, the Academic Committee will ensure that the criteria for the quantitative assessment are consistent for all students affected.