

A student with long brown hair, wearing a light-colored hoodie, is sitting at a wooden desk. In front of them is a laptop displaying a website with a blue logo. To the left of the laptop is a dark grey mug. In the foreground, there is a white notebook with handwritten notes and a black pen. A yellow sticky note is attached to the notebook. The background is slightly blurred, showing a desk lamp and other items.

STUDENT GUIDE

PhD Program in Nanotechnology
University of Trieste
Version: January 2024

This brief guide is not intended to be exhaustive, but rather to call PhD students attention to specific procedures and rules of the PhD Program in Nanotechnology.

Please refer to [UniTS PhD regulation webpage](#) and [here](#) for complete regulation.

Do not forget to visit the official [UniTS PhD webpage](#).

Enjoy your PhD!

Alberto Morgante
Coordinator

Paola Posocco
Deputy Coordinator

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First Steps

The PhD Program in Nanotechnology is a three-year course of study and research beginning annually on the 1st of November. After the enrollment, if you are not recipient of an earmarked scholarship, your first task is to choose a supervisor, who will support you in your research activity and with whom you are expected to prepare a research plan. The full list of research groups can be found on the website [here](#).

Within approximately one month after your enrollment, you will receive an official email account [name.surname@phd.units.it](mailto:yourname.surname@phd.units.it): please use it in all your correspondence with the School. If you normally use a different email address, remember to set your mailbox (and check that it works) for automatic forwarding of messages from your official email account, since the official address is the only one which will be used by the Coordinator and the Secretary to communicate with you.

By beginning of December, the Coordinator and Deputy Coordinator meet the new PhD students in a welcoming meeting, where all information needed to start your research activity at best will be provided ([link](#)). UniTS organizes also a PhD Welcome Day for all just-enrolled PhD students usually by the end of November. Do not miss both of them.

Training Activity

For students enrolled AFTER November 2023

PhD students have to attend training activities, which are complementary to their research, for **at least 20 ECTS** during the three-year period and choosing among the following activities:

Activity	Hours/Credits	Requirements	
Disciplinary courses	1 ECTS = 8 hours	at least 8 ECTS (maximum 10 ECTS) of which at least 5 ECTS from the courses offered by the PhD program in Nanotechnology	
Soft skills and general competencies courses	1 ECTS = 8 hours	at least 4 ECTS (of which 1 ECTS aiming at acquiring skills related to public engagement) (maximum 8 ECTS)	
Master's degree courses (of the University of Trieste or other universities)	Respecting ECTS	maximum 4 ECTS	
National and international schools	1 ECTS = 2 days	maximum 5 ECTS	
Conferences and workshops	1 ECTS = 2 days	at least 1 ECTS maximum 6 ECTS	

Teaching activities carried out by the PhD student	ECTS of the course	maximum 12 ECTS	
Tutoring activities	1 ECTS = 25 hours		
Public engagement activities	1 ECTS = 2 days	maximum 2 ECTS	

 Mandatory activity  Not mandatory activity

"Maximum" means the maximum number of ECTS that can be recognized. After the approval by the Board of Teachers, students may attend further courses, which will not contribute to the recognition of other ECTS.

Courses require compulsory attendance for at least:

- 50% of the course if it includes a final exam
- 75% of the course if it does not include a final exam.

The recognition of ECTS is done by the Board of Teachers, which has the duty to supervise and evaluate, at the end of every academic year, all of the activities of training and research carried out by every PhD student in order to admit PhD students to the following academic year or to the thesis revision phase.

There is no obligation to acquire a minimum number of credits per year, but it is strongly recommended to attend most of the DISCIPLINARY COURSES within the second year.

DISCIPLINARY COURSES

PhD students are required to attend disciplinary courses linked to specific fields and disciplines pertinent to your doctoral research plan. Disciplinary courses include all courses provided annually by the PhD program in Nanotechnology (UniTS) ([link](#)). Sign the form to enroll. Details of the lessons (exact dates, room, ...) will be communicated by each lecturer at due time.

You can also choose doctoral courses of the PhD program in Physics and Chemistry at UniTS, or other doctoral courses offered by different universities or research institutes. Successful completion of an exam is mandatory.

SOFT SKILLS AND GENERAL COMPETENCIES COURSES

UniTS organizes annually soft skills and general competences courses for PhD candidates. These activities encompass thematic macro-areas such as linguistic enhancement, IT proficiency, research management and knowledge of national and international research systems, valorization of research results and intellectual property, ethics, communication skills, professional development, and safety. Within these activities, it is mandatory to acquire skills related to public engagement equivalent to 1 ECTS. Details of scheduled courses, along with the associated ECTS, can be accessed at the following link: <https://www2.units.it/dottorati/it/?file=Formazione.inc>.

PhD can attend soft skills and general competences courses organized by external entities such as universities, research institutes, or companies. In the latter case, the Board of Teachers will assess appropriateness and the allocated ECTS.

OTHER ACTIVITIES

PhD candidates can carry out, as part of their training program, after the approval of the Board of Teachers and without an increase in the scholarship amount:

- 1) **Teaching activities carried out by the PhD student** (assistance in laboratory activities, exercises, seminars), up to a limit of 40 hours for each academic year
- 2) **Tutoring activities**, including paid ones, for students in bachelor's and master's degree programs.

PhD candidates may also engage in tutoring and complementary activities outside the formal training program, with the approval of the Board of Teachers and after consultation with the supervisor, up to an additional 50 hours per year, including paid activities.

For students enrolled BEFORE November 2023

By the end of the 2nd year, you have to attend **80 hours of lectures**, of which **at least 40 selected from those offered by the PhD program in Nanotechnology**. A full list of our courses can be found [here](#). Sign the form to enroll. Details of the lessons (exact dates, room, ...) will be communicated by each lecturer at due time.

Each evaluation is tracked by the lecturer in your [online](#) personal study-evaluation booklet. In case you need a record of the evaluations, write to the Coordinator (amorgante@units.it) or the Deputy-Coordinator (paola.posocco@dia.units.it) and we will provide it to you.

You may also attend master courses offered by UniTS and lectures offered by the PhD Program in Physics (UniTS) or the PhD Program in Chemistry (UniTS). In all these cases, you have to provide a certification of the successful exam completion, using the template provided [here](#) and you have to send it together with your annual activity report.

During the three years, you have to attend **at least two Schools** (national or international) for PhD students, either organized by the PhD program in Nanotechnology or by other institutions.

You are encouraged to spend **at least 40 hours of training outside the research group**, getting familiar with new techniques and/or methodologies of interest for your research project. Lastly, **at least 30 hours of scientific seminars** must be attended.

For ALL students

The training activity has to be approved by prof. [T. Da Ros](#) and prof. [A. Bonifacio](#). Please send them a pdf named "Surname_Research&TrainingPlan@CycleNumber.pdf" including the list of courses you would like to attend usually by the end of January of the 1st year of your PhD (please see also the Research Plan section below).

Ask your Supervisor for advice and share your study plan with her/him.

Research Plan

By the end of January of the 1st year of your PhD you have to prepare a Research Plan describing your research project. This has to be agreed with your Supervisor and sent to the Coordinator (amorgante@units.it or morgante@iom.cnr.it), Deputy-Coordinator (paola.posocco@dia.units.it), and prof. [T. Da Ros](#) and [A. Bonifacio](#) via email as a pdf "Surname_Research&TrainingPlan@CycleNumber.pdf". Please use the template you find [here](#) to prepare your Research Plan.

End-of-year Progress Evaluation

Primary aim of the School is to guarantee high standards in the quality of the research. For this reason, besides being continuously assessed by your personal supervisor, at the end of each academic year you have to prepare a report – signed by the supervisor - containing a summary of the work done and the training activity carried out over the year. Please send the report named as "Surname_FirstYearReport@CycleNumber.pdf" (or Surname_SecondYearReport@CycleNumber.pdf etc ... as appropriate) to the Coordinator (amorgante@units.it) and the Deputy Coordinator (paola.posocco@dia.units.it) by the end of August. Use the template you find [here](#) to prepare your annual report.

Annual research activity is also presented and discussed (15') in front of a Commission composed by members of the Board of the School usually within middle of September. Only students getting a positive Progress Evaluation from the Commission are admitted to the next academic year. Please use [this template](#) for preparing your presentation.

Seminars and Annual Workshop

PhD students are strongly encouraged to take part in all the seminar activities organized by the School and propose topics for future seminars.

In January/February, the School organizes an Annual Workshop, where all the students present their research activity to the Board Committee and colleagues. This is an important moment in the life of the School, so participation is mandatory. Presentation (20') should be comprehensible to all participants, whether they are expert or not in the subject of your research. At the end of the Annual Workshop [three awards](#) are assigned to deserving students.

Scientific Publications

Scientific publications, book chapters, conference proceedings, outreach activity or any other form of publication has to be uploaded as soon as possible into the UniTS ArTS catalogue (<https://arts.units.it>), which can be accessed using your UGOV credentials.

Thesis and Final Exam

The PhD degree is awarded upon passing a final exam, consisting in the discussion (approx. 1 h) of the doctoral thesis. PhD students admitted to the final exam have to submit their thesis to the evaluation of two external (not belonging to UniTS and not having worked previously with the candidate) reviewers suggested by the Supervisor and approved by the Board of the PhD program. The evaluators express an analytical written judgment on the thesis, and may require additions or corrections. When major revisions are required, the final exam may be delayed of a period of (maximum) 6 months. The Examination Committee consists of at least three members chosen among professors and researchers of Italian and foreign institutions, specialized in the topics of the thesis. The thesis may be approved or rejected.

Link to UniTS Final Exam webpage:

<http://www2.units.it/dott/it/?file=DottEsaFin.inc> (ITA)

<http://www2.units.it/dott/en/?file=DottEsaFin.inc> (ENG)

Doctor Europaeus

The additional label of "Doctor Europaeus" may be awarded to those PhD students who fulfil the prerequisites proposed by the European University Association as follows:

- the doctoral thesis defence will be accorded if at least two professors from two higher education institutions of two European countries, other than the one where the doctoral thesis will be defended, have given their positive judgement concerning the thesis;
- at least one member of the Examination Committee should come from a higher education institution in European countries, other than the one where the doctoral thesis will be defended;
- part of the defence must take place in one of the official languages of the European Union, other than the one of the country where the doctoral thesis will be defended;
- the doctoral thesis must partly have been prepared as a result of a period of research of at least one trimester spent in another European country.

Note: the procedure includes a previous request ([request module](#) here) by the PhD student to the Board Committee and the subsequent approval preferably within December 31st of the 2nd year of your PhD.

Label Doctor Europaeus:

<http://www2.units.it/dott/it/?file=DottEuropaeus.inc> (ITA)

<http://www2.units.it/dott/en/?file=DottEuropaeus.inc> (ENG)

<http://web.units.it/normativa/regolamenti/regolamento-156>

Budget for Research Activity

All students with PhD scholarship are entitled to a budget for any activity related to their research in Italy and abroad, for an amount of 10% of the PhD scholarship (the so-called "research budget" or "10% budget"). The budget is granted annually, and is managed by the Department of Physics or by the Department of UniTS to which the supervisor belongs.

Note that such amount is not available for PhD students enrolled with grant funded by foreign countries or beneficiaries of financial support under specific mobility programs (e.g., MSCA-ITN,).

Twenty things I wish I'd known when I started my PhD

by Lucy A. Taylor taken from Nature Career Column - 2018

Organization

Decide on your goals/organize your work early.

Aim to publish your research.

Write down everything-keep track of everything you do.

Backup everything!

It's never too early to start writing your thesis.

The best thesis is a finished thesis.

Communication

Discuss expectations with your supervisor.

Be honest with your supervisor.

Present your research.

Socialize with your lab group and other students.

Lifestyle and Mindset

Research will not always go according to your plans.

Don't compare yourself with others.

Never struggle on your own - ask for help.

Maintain a healthy work-life balance.

Have a life outside work.