



**Handbook for PhD students in
Earth and Environmental Science and Technology
XL Cycle**

November 1, 2024
PhD program organisation

The PhD Course in Earth and Environmental Science and Technology – STAT - is a doctoral program of the University of Genova. The main information on the educational and training activities offered by the STAT program is reported here.

The PhD program is run by the PhD committee whose members are listed on the PhD web page of the Department (<https://distav.unige.it/phdstat/it>) and is coordinated by Prof. Marco Scambelluri (marco.scambelluri@unige.it). It is structured in two curricula with common activities, services, goals and training programs; each curriculum has a coordinator:

- Biology Applied to Agriculture and Environment: Prof. Sonia Scarfi soniascarfi@unige.it
- Earth Sciences: Prof. Marco Scambelluri marco.scambelluri@unige.it

The PhD program provides advanced courses and research training: all courses provided by the STAT PhD Course are reported at the doctorate webpage <https://distav.unige.it/phdstat/it/xl> The STAT official languages are English and Italian. At the start of every PhD cycle, all the enrolled PhD students must:

- acquire their institutional UniGe email address
- upload their official photo and CV in the general UniGe website.

To every PhD student a working place and a personal computer must be assigned.

Choice of the supervisor and of the research topic

At the beginning of each cycle the PhD Committee assigns one or more supervisors to each student based on the student's scientific project. The supervisor must be a University Professor, or a permanent University Researcher and is responsible for the scientific, technical and intellectual training of the PhD student. Supervisors encourage and support the publication of their students' results on international scientific journals, as well as their active participation to scientific conferences and schools in the relevant disciplines.

In agreement with the supervisor(s), the students choose their research topics that must be approved by the PhD Committee

By the end of November or early December 2024 each newly enrolled PhD student must submit a preliminary program. The program should include the general state of the art in the PhD research field, a description of the research topic and the potential or expected outcomes, and a list of the learning and training activities they plan to undertake during the first year of the doctoral program; the full list of STAT and UniGe courses is provided at <https://distav.unige.it/phdstat/xl>. The preliminary program shall be presented to and approved by the PhD Committee at the kick-off meeting. A Table



showing the number of credits assigned to each specific activity (educational and scientific training) is attached at the end of this handbook and is also available at <https://distav.unige.it/phdstat/it/cfu>.

At the end of each academic year, PhD students are required to submit an annual report of their training and scientific activities to the STAT PHD Committee, along with their PhD student booklet (see page 3 for more information).

PhD Courses

During the first two years, students must attend courses according to their area of interest. The list of courses is chosen by each student in agreement with the supervisor(s) and is submitted for approval to the PhD Committee each year.

STAT PhD students are required to obtain 180 credits (CFU). It is mandatory to allocate 30 CFU to structured learning activities, which include PhD courses offered by STAT or other Doctorate Courses, as well as national and international schools on advanced topics. Ideally, these learning activities should be completed within the first two years. The remaining credits must be earned through research, with a limited portion allocated to teaching and outreach (third mission) activities. The third year should be entirely dedicated to research, preparation of papers and of the PhD dissertation (see page 2 for more details).

The full breakdown of credits and the suggested number of credits per each activity is shown in the Table at the end of this tutorial (see also <https://distav.unige.it/phdstat/it/cfu>).

If, for serious and documented reasons, a student is unable to obtain the required credits and intends to continue the PhD program, she/he must inform the coordinator and the PhD committee. A written report must be submitted to the coordinator and the PhD committee, detailing the problems encountered by the student and a timely proposal for obtaining the missing credits.

Structured Learning activities

The 30 CFU dedicated to Structured Learning Activities can be obtained prevalently during the first two years¹ by attending any of the following activity typologies:

1. **PhD courses**, specifically offered by the PhD STAT² (1 CF corresponds to 4 hours lecture) or by other PhD courses from the University of Genova.
2. **PhD Schools**. International PhD Schools are approved by the PhD Board upon a formal request by the Tutor including the detailed program of the school and its duration. To report on this type of activity, students must provide the certificate of attendance of the school and 1 CF can be assigned to every 6 hours of lectures.

To complete their preparation, PhD students may also attend a limited number of courses that are part of *Graduate programs* (Corsi di Laurea) offered by the University of Genova in agreement with the supervisor and the approval of the PhD Committee. The credits (CFU) are those reported for the course on the official University website. Such courses must not exceed one third of the credits devoted to the structured learning activity program of the student.

¹ It is recommended that these Cfu are prevalently allocated over the first two years in decreasing amount, so to have the third year fully devoted to science and dissemination of results.

² the courses can be selected among the full list of courses available in STAT PhD web page <http://www.distav.unige.it/drupalint/dottorato>, or in other PhD programs of the University of Genova



At the end of each academic year, PhD students must submit to the PhD Committee

1. a detailed report of the research activities of the year.
2. give a presentation in English to the PhD Committee on the research activities carried out during the year in a live meeting with the STAT PhD Committee.
3. a workplan for the following year.
4. a list of publications under submission and/or accepted.

The templates are available on the STAT website at <https://distav.unige.it/phdstat/it/templates>.

Based on the results achieved, on the oral presentation and on the state of the art of each project students are admitted (or not) to the subsequent year of their PhD program

Approximately 1500 Euros per year are assigned to PhD students to cover their basic research expenses: the eligible expenses are detailed in the document attached at the end of this handbook.

PhD dissertation

The final thesis must be written in English. The PhD thesis can be structured as either a monograph, or as a compilation of all peer-reviewed papers published, accepted, under review or ready for submission during the 3 years of Doctorate. The templates are available on the STAT website at <https://distav.unige.it/phdstat/it/templates>. The papers must be related to the research topic and the student must either be the First or corresponding author in each draft or clearly have an active role in a research paper that is tightly related to the PhD thesis' topic. The decision to structure the Dissertation in either a monograph or the compilation of papers must be agreed upon by the student and the supervisor(s). For Dissertations that are structured as papers' compilation, it is mandatory to include an introductory chapter and a concluding chapter that highlights the most relevant results and the conclusions of the Doctorate. The published articles and those accepted for publication must be included in the PhD thesis in their pre- print editorial version (no line numbering, figures and eventual repository material embedded in the text), to avoid copyright conflicts and embargoes imposed by the publishers.

At the end of the 3rd year, each student will be assigned two referees who will write a report on the thesis and either support the student's admission to the final exam or, if necessary, recommend a delay of up to 6 months for the PhD defence. The student must submit the thesis to the referees in time to allow reviewers to send their reports to the Coordinators and the PhD committee, so that the final PhD exam and defence can be scheduled.

During the 3rd year, PhD students may apply for the titles of European PhD Doctor or of International PhD Doctor by submitting request to the PhD Coordinator and the Curriculum Coordinator (see documentation in the intranet area of the program web page). To qualify for the European or the International PhD degree, students must have spent at least 3 months of their scientific training in a European or in extra EU Universities or acknowledged Research Centres. The PhD theses of European and of International PhD Doctors must be reviewed by two European or two international foreign referees, respectively, and the committees for the final exam must include one or more European or International members.

Student's representatives

At the beginning of each Cycle, the new doctoral students must elect their representative to the

STAT Committee. There is a single representative for both curricula. The election process is managed by the University of Genoa, with oversight from a commission composed of STAT PhD faculty members. Role of the PhD students' representative is to present the students' requests to the STAT Committee and to coordinate the PhD students for the organization of events and seminars.

Credit repository and diploma supplement for PhD careers.

Starting from Cycle 40, all PhD students must acquire 180 educational credits (CFU) during their 3-years doctorate program to be eligible for the final exam and obtain the title of Research Doctor. Of the 180 educational credits (CFU) for training and research activities, 30 CFU (1 CFU = 4 hours) must be dedicated to courses for advanced scientific training. The available STAT courses include both disciplinary, with focus on specific topics related to the students' projects, and interdisciplinary, which aim to highlight the broader impact of research findings. Some interdisciplinary courses also focus on enhancing the students' soft skills. Courses can be chosen among those organized by STAT, or by other schools and/or PhD courses. A table detailing the allocation of credits for educational, research and teaching activities, as well as awards is provided reported in the Table at the end of this document and is also available on the STAT website at <https://distav.unige.it/phdstat/it/cfu>

PhD students must log all activities completed during the year and the related credits in the doctoral student's booklet managed by the University of Genoa. The booklet is regularly reviewed by tutors and supervisors, and at the end of each year, the PhD Coordinator verifies and approves the credits acquired. By the end of the third year, each doctoral student must have accumulated at least 180 CFU, as required by the regulations. Students who fail to achieve 180 credits within three years cannot be eligible for the final exam and will not be able to obtain the PhD Doctor title in due time.

PhD student's Questionnaires. All students are requested to complete the questionnaires issued by the University of Genova for PhD students at the end of the first and second year of their programs and for PhD students that will take the final exam

General information

Further information on university regulations and ministerial decree concerning Italian PhD programs, are available on the website of the university: <https://unige.it/dottorati-di-ricerca#normativa>

Further information on the PhD program, the training and programs of the courses is available at the STAT web page: <https://distav.unige.it/phdstat/it>.



PhD Course in Science and Technology for Earth and Environment - STAT

Activity	CFU per activity	CFU total	CFU max	Evaluation	Type of activity
PhD Courses offered by STAT	1 CFUs = 4h	30 CFU mandatory	60 CFU	CA	Training activities
Courses offered by other PhD Courses	CFUs of the course			CA	
Courses offered by MSc Degree Courses	CFUs of the course			CA	
Attended Seminars	1 CFU= 6h			CA	
PhD Summer or Winter Schools	1 CFU = 6h or day	20 CFU recommended	60 CFU	CA	Training activities
Advanced training Courses	1 CFU = 6h or day			CA	
Participation in Scientific meetings, Workshops and Conferences	1 CFU = 6h or day			CA	
				CA	
Mobility for research periods in Italy	0.7 CFU = 1 working day	60 CFU recommended	120 CFU	CH	Research activities
Mobility for research periods abroad	1 CFU = 1 working day			CH	
Publications	20 CFU = Q1/Q2 (PhD first or corresponding author, manuscript passed the 1st round of reviews)	40 CFU recommended	120 CFU	AP	Research activities
	15 CFU = Q1/Q2 (PhD has a relevant role, manuscript passed the 1st round of reviews)			AP	
	15 CFU = Q3/Q4 (PhD first or corresponding author, manuscript passed the 1st round of reviews)			AP	
	10 CFU = Q3/Q4 (PhD has a relevant role, manuscript passed the 1st round of reviews)			AP	
	5 CFU = submitted papers to Q1-Q4 Journals			AP	
	2 CFU = isi journals without IF (Acceptance letter required)			AP	
Contribution to scientific meetings, conferences;	5 CFU = Oral presentation (first author and speaker)	40 CFU recommended	120 CFU	BA	Research activities
	2 CFU = Poster contribution (first author and attendee)			BA	
PhD thesis	Evaluation of the draft of the final dissertation	30 CFU recommended	30 CFU		
Teaching support (D.R. n. 569 del 17.5.2012)	1 CFU=8h		7 CFU	CT	Teaching activities
Third mission activities	1 CFU=10h				
Thesis tutoring	0.5 CFU for each Bachelor's thesis 1 CFU for each master thesis				
Awards at conferences (best poster or presentation)	2 CFU each prize		10 CFU		Awards
Awards from national scientific society (best degree/doctoral thesis)	5 CFU each prize				
Awards from scientific journal	5 CFU each prize				
Awards from national scientific academies and international societies	10 CFU each prize				

certificate of attendance (CA); certification by the host institution (CH); extract from the book of abstract (BA); Acceptance (major or minor revision) letter or email, or published version (AP), contract (CT)



DOTTORATO DI RICERCA

LINEE GUIDA PER L'UTILIZZO DEL 10% PER L'ATTIVITA' DI RICERCA IN ITALIA E ALL'ESTERO DOTTORANDI ATTIVI

- Acquisto pc portatili limitatamente ai primi 18 mesi di corso. Al termine del percorso di studio il pc resta in dotazione al Dipartimento
- Acquisto pc desktop limitatamente ai primi 18 mesi di corso. Al termine del percorso di studio il pc resta in dotazione al Dipartimento
- Acquisto materiale inventariabile limitatamente alle necessità dell'allievo e della sua ricerca, adeguatamente motivato dall'allievo di concerto con il tutor
- Acquisto reagenti, solventi, ecc. limitatamente alle necessità dell'allievo e della sua ricerca, adeguatamente motivato dall'allievo di concerto con il tutor
- Acquisto materiale di consumo limitatamente alle necessità dell'allievo e della sua ricerca, adeguatamente motivato dall'allievo di concerto con il tutor
- Acquisto libri e riviste
- Iscrizione a convegni, conferenze
- Quota di iscrizione ad associazione che valorizza l'attività dell'allievo e lo aiuta a inserirsi in un importante contesto scientifico nazionale e internazionale, nel rispetto delle disposizioni vigenti nel nostro Ateneo
- Iscrizione a corsi di lingua, corsi di formazione (non finalizzati al conseguimento di un titolo di studio)
- Spese per pubblicazioni
- Spese bibliografiche (es. copie anastatiche)
- Traduzione di articoli o della tesi in inglese
- Pagamento di tasse per l'iscrizione agli altri atenei in caso di cotutela
- Pagamento di assicurazioni obbligatorie nell'ambito di soggiorni all'estero
- Spese di viaggio

FONDI DERIVANTI DA CICLI CHIUSI

- Finanziamento o cofinanziamento borse di dottorato
- Organizzazione convegni, conferenze, summer/winter schools a beneficio dei dottorandi
- Integrazione fondo dottorandi attivi (se il dottorando attivo ha usufruito di tutta la propria dotazione e nel rispetto delle tipologie di spesa ammissibili)

NOTE

L'acquisto di pc successivamente ai primi 18 mesi è consentito solo in caso di furto, guasto irreparabile con autorizzazione esplicita dell'Ufficio Dottorato di Ateneo

A decorrere dal ciclo XXXVII è richiesta rendicontazione all'Ufficio Dottorato di Ateneo delle spese pagate al 31 dicembre di ogni anno.

Il fondo deve essere diviso per allievo e assegnato al coordinatore del dottorato. I fondi derivanti da cicli chiusi possono essere cumulati in un unico fondo.