

Computer Science GSSI PhD Rules

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General GSSI PhD courses regulation available at CS@GSSI web site (<https://cs.gssi.it>)



All dates below refer to the current academic year.

Introduction

These regulations discipline the PhD course regulations of Computer Science area of GSSI pursuant the general PhD regulations of the GSSI (cf. https://www.gssi.it/images/pdf/Regolamento_corsi_di_dottorato_rev_protoc.pdf). Details concerning absences, didactic activities, and academic roles are published on the CS@GSSI web site.

Advisor and co-advisor (Art. 3.1 and Art. 12.4)

Each student is assigned an *internal tutor* as soon as they join GSSI. Students design a personal study plan by *mid-December*, with the assistance of the Coordinator and their internal tutors, and according to the course offering (as specified below). (See <https://www.gssi.it/images/pdf/tutors.pdf> for further details on the role of the tutor.)
Advisors are nominated by the Academic Board *at the end of June*; *at least one of the advisors must be a faculty of GSSI*.

Academic Progress (Art. 8.3, Art. 12, Art. 16, and Art. 17)

Progress of 1st-year students is based on *Credito Formativo Universitario* (CFU, corresponding to the European Credit Transfer and Accumulation System); a 1st-year student has to be awarded *60 CFUs* to progress to the 2nd year (cf. **First year** and **Thesis proposal** sections below). Progress of 2nd-, 3rd, and 4th-year students is regulated in sections **Second and third year** and **Final defence** below.

First year

The taught part of the course takes place in year 1 as follows

- *Immigration courses* (November and December) are introductory 30-hour courses consisting of lectures targeted at the acquisition of techniques, methods, and skills needed to conduct research in computer science. For each immigration course, passing the corresponding exam awards *5 CFUs*.
- *Core courses* (January, February, and March) are 14-hour courses providing in-depth knowledge on topics of central interest to the PhD program, in order to expose doctoral students to relevant subjects in computer science. For each core course, passing the corresponding exam awards *4 CFUs*.
- *Advanced courses* (April, May, and June) focus on specific research topics that are of interest for the students, and are of shorter duration (from 6 to 10 hours each). For each advanced course, attending the course awards *1 CFU*.

1st-year students must pass *all immigration courses* (15 CFUs total), *at least five core courses* of the student's choice (20 CFUs total), and must attend *at least 12 advanced courses or complementary teaching activities*. Lecturers decide and communicate the format of the exam in due course.

Thesis proposal

By *mid-September* 1st-year students produce a *proposal for a doctoral thesis* and present it to the Academic Board, who nominate a thesis committee that valuates the scientific relevance, novelty, and feasibility of the proposal as well as its alignment with the GSSI research themes. Once approved by the Academic Board, the thesis proposal awards *13 CFUs*.

Second and third year

By *mid October*, 2nd- and 3rd-year students submit a report of about 10 pages

- describing their overall activities in the current year,
- highlighting the progress of their research,
- providing links to relevant and original results (e.g., papers, tools, webpages, etc.), and carefully describing their own contribution in each of them, and
- providing a research plan for the following year.

The report must be approved by the Academic Board for the student to progress to the following year.

Final defence

The final defence of 4th-year students proceeds as follows:

- By *end August* advisors provide the Coordinator with title and abstract of the theses and the list of two external reviewers who accepted to evaluate the dissertation.
- By *mid September* students present their work in an internal seminar and submit to their advisors their thesis to be forwarded to reviewers.
- By *end October* advisors receive the reports by reviewers and forward them to the Coordinator who form the final examination committee and sets the examination date for the dissertations with positive reports. The examination consists of a *40-minutes* presentation given by the student, followed by questions by the examination committee.

The overall evaluation will consider the quality of the student's work as well as the engagement in the scientific activities at GSSI demonstrated throughout the entire program.

Seminars and other scientific activities

Attendance and engagement with the scientific activities of the institution are crucial to strengthen research skills and network building. *Seminars* are of key relevance. 1st-year students must attend *all* the announced seminars organised by the computer science area at GSSI, unless they have mitigating circumstances (e.g., health issues) which must be timely communicated to the tutor and the Coordinator. Besides seminar attendance, 2nd-, 3rd-, and 4th-year students are expected to engage with the scientific activities organised by the group. They are also strongly encouraged to propose new activities to their advisors or to the Coordinator.

Publications

Students must agree upon a publication strategy (e.g., conferences and journals to target) *and seek for advisors permission before submitting papers for publication*. This is fundamental to avoid venues that do not meet appropriate levels of scientific standards and quality. Students must indicate their *affiliation to the Institute* in all their research papers, posters, talks and, in general, all the scientific work that they produce during their studies at GSSI.