



Regolamento-English Version PhD Course in Innovation Sciences and Technologies University of Cagliari

Art. 1

The PhD course in Innovation Sciences and Technologies (hereafter STI) is established at the University of Cagliari and is administered at the same University under the proposal of the Department of Mechanical, Chemical and Materials Engineering and involves the following Departments:

- Department of Biomedical Sciences;
- Department of Chemical and Geological Sciences;
- Department of Surgical Sciences;
- Department of Medical Sciences and Public Health;
- Department of Life and Environmental Sciences.

The above mentioned Departments make suitable staff, spaces, services and funds available for the carrying out of the PhD course.

Art. 2 Aim and Training goals

The STI PhD course, which has started as the corresponding international doctoral course (a.y. 2013/14-2021/22), has a duration of three years and aims at introducing young laureates in the field of fundamental and applied research, in a highly interdisciplinary framework, with reference to the broad topics related to the following curricula:

- 1) Regenerative medicine, biomedical applications and management of complex healthcare systems
- 2) Methods and systems for the environmental protection
- 3) Methodologies and processes for the transformation and use of materials

The main scientific-disciplinary areas involved in the topics of research related to the STI PhD course are: 03-CHEMICAL SCIENCES; 04-GEOLOGICAL SCIENCES; 06-MEDICAL SCIENCES; 09-INDUSTRIAL AND INFORMATION ENGINEERING. The PhD students will be included in the research groups to which the components of the PhD Board belong and will have the chance to understand the main approaches for:

- organization of the research activity that will be developed;
- defining a research project suitable for being funded at regional, national and international level;
- valorization of research results (i.e. writing of scientific papers, poster preparation and conference presentation);
- preservation/valorization of intellectual property.

A specific attention is devoted to the contextualization of the activity within an international framework, also through research and training periods abroad and by promoting training in



the presentation and dissemination of the results and writing scientific papers in English language.

The PhD course in STI moreover refers to the principles of the European Chart of researchers and conduct code for their recruitment (Raccomandazione del Consiglio, del 18 dicembre 2023, su un quadro europeo per attrarre e trattenere i talenti della ricerca, dell'innovazione e dell'imprenditorialità in Europa, https://eur-lex.europa.eu/legal-content/IT/TXT/PDF/?uri=OJ:C_202301640).

Art. 3 Organization

The STI PhD course is organized based on the *Rules of the PhD courses* of the University of Cagliari issued under Rectoral Decree n. 296 of 21/03/2022 and its potential updates and additional notes. In its organization and activity it collaborates with the Phd, Master and Visiting Professors Area (Teaching and Guidance Direction), the Quality Direction of the University, the Evaluation Center of the University and the Board (Consulta) of PhD Coordinators.

The course aims in particular at using a system for the quality assurance and good practices, which are actuated through institutional organs and structures (such as PhD course Coordinator, PhD Board) and specific of the course (such as Curriculum Coordinators, Vice-Coordinator).

The PhD Board, within th Board itself, nominates Curriculum Coordinators head of the organization for the corresponding curriculum. The Vice Coordinator, together with other incistitutional duties, acts as Coordinator for one of the curriculum.

The PhD Board nominates moreover within the PhD Board a Responsible for Quality of the PhD course.

- **Supervisor and Co-Supervisor**

To each PhD student a Supervisor and at least a Co-Supervisor is assigned. To this end the decision of the STI PhD Board of 12/XII/2022 is taken into account. In particular, to each PhD student of the STI course a Supervisor within the members of the PhD Board and one or more co-supervisors selected by the PhD Board even outside the PhD Board itself, provided that at least one is academic. In case the Supervisor is an academic member of the STI PhD Board, the Co-supervisor(s) may be external to the PhD Board, as well as affiliated to Institutions abroad.

Each Supervisor makes sure that the PhD student is aware of the Rules for PhD Courses of the University of Cagliari and of the present Rules.

It is expected that supervisors and co-supervisors play an active and responsible role towards their PhD students in the support, supervision and promotion of advances in their research activities, making them in particular aware of their role of “researchers in the first step of development of their career” and making them aware of the available budget assigned as a support for their research activity in Italy and abroad and the expenses associated to their training.

Art. 4 Training and Research Activities



- Training activities aim at promoting the development of advanced and independent research abilities -both in terms of scientific understanding and technological impact – in the scientific topics of interest of the PhD course. Training is mainly carried out through improvement by the students of their knowledge in the topic of the thesis under the guidance of their supervisors. In particular, it is required that PhD students define the knowledge goals associated to the research activity and plan and organize the training activities under the supervision of their Supervisor and Co-Supervisor(s) and submit them for approval to the PhD board. To support the carrying out of the training and research activities, a budget of 6.000 € for the whole length of the PhD course is made available to each PhD student by the Supervisor/Cosupervisor and/or the corresponding affiliation Institutions. Specific conditions may apply depending on the PhD grant, or based course and with amount not less than 10% of the PhD grant, as required by art 11 c. 10 of the current Rules of the PhD courses.
- Training in the field of presentation, discussion and dissemination of the scientific results in English is promoted, with the aim to form researchers who may be included in an international environment, also outside the field of research. The reached language skills are to this end checked and verified. To this end, PhD students may take advantage of the suitable support offered by the Linguistic Center of the University CLA, which includes organization of required English classes for all PhD students at the University of Cagliari.
- It is also foreseen that PhD students participate to courses/seminars/schools for PhD students. To this end, the STI PhD course proposes training activities (reported in the Phd course website, <http://sites.unica.it/internationalphdist/>) and takes advantage of the post lauream activities at the University of Cagliari, such as seminars and courses held by visiting scientists, as well as transversal courses (related to topics such as bibliometric issues, possibilities to access to funding of the research, technology transfer, equal opportunities in academia, etc.) organized within the University of Cagliari for Phd students. It is in general assumed that the activities attended by the PhD students are post lauream and include a final assessment. In case of attendance of courses which are within master (magistrale) degrees or do not include a final assessment, the activity will be admitted based on the justification, and it cannot exceed 20 % of training activities.
- The ability to elaborate, present, discuss and disseminate research results is promoted through oral presentation, reports, conference presentations, scientific publications.
- The PhD students have to present their authorization requests for their activities related to their doctoral project. To this end, the forms reported in annex A are available.

Art. 5 Intermediate Monitoring and final Verification of the Goals

In order to ensure that the training and research goals are reached and to monitor the regular development of the activities the STI PhD board has identified the following requisites:



- The Supervisor and co-Supervisor are in charge of verifying the regular activity of the PhD student. In particular, the PhD students holding a PhD grant file a Diary, which has to be signed monthly by the Supervisor/s and at the of the A.Y. is signed by the Coordinator. (https://web.unica.it/unica/page/it/badge_e_registri_xxxvi_xxxvii_e_xxxviii_ciclo). Different reports and timesheets may be required for monitoring the activities of PhD students depending on the specific features of the grant. For those PhDs who do not benefit a PhD grant, the Supervisor/co-Supervisors are required to make sure that the regular activities are carried out and to report to the PhD Board in case of any issues.
- The research activity of PhD students must result in at least two scientific publications on peer-reviewed international journals, in which the significant contribution of the PhD student can be inferred. To this end, the publications must be related to the developed research activity, and the PhD affiliation of the PhD student to the UniCa structure where the activity is carried out must be clearly reported. It is recommended that UniCa and the specific support to the PhD grant is acknowledged, by taking into account the specific features of the given supporting grant. The above mentioned two publications must be, by the time of admission to the final exam, published or at least in the accepted status (accepted for publication).
- English is the language used by PhD students for the presentation and discussion of the results, as well as for writing and discussing the final thesis.
- Starting from XXXVIII cycle it is required that all PhD students (including those who do not benefit of a PhD grant) carry out within their PhD a minimum period of 6 months abroad. The same is required for previous cycles with reference to PhD students who benefit of a PhD grant. Specific requirements concerning mobility may apply for given PhD projects, under the respect of the rules for PhD courses of UniCa, with particular reference to the minimum period to be spent at UniCa.
- It is possible to carry out a period in a company/research center if consistent/required by the project, under the respect of the rules for PhD courses of UniCa, with particular reference to the minimum period to be spent at UniCa.
- The STI PhD board verifies the achievement of the required language skills through C1 english language certificate (starting from XXXVIII cycle; for previous cycles a minimum B2 level is required). Starting from XXXVII cycle, for language requirements the IST PhD board will consider the certificates released by the Centro Linguistico di Ateneo (CLA), or the certificates released by other institutions/centers/schools then approved by CLA.
- It is required that all PhD students present their activity (through an oral or poster communication) at least at one conference/workshop.
- It is required that all PhD student demonstrate the attendance of overall 60 hours of formation and training activities.
- Where required, the PhD board will apply the correspondence for post lauream classes/seminars inclusive of final assessment: 7.5 h = 1 cfr.
- Admission on following years is based on positive evaluation of the performed research and training activities, based on the presentation and discussion at the IST



- PhD board of his/her activity. It is required that the corresponding presentation is disseminated among the PhD board prior to the presentation by the PhD student (tentatively 5 days before the discussion) and includes a slide containing a schematic table where the following are summarized: a) formation, seminars and training activities; b) periods abroad and related length; c) scientific publications; d) attendance to conferences and presentations to conferences; e) possession of English language skill certification; f) other. Presentation and discussion take place in English.
- The above mentioned requirements are taken into account when the admission to the final exam is decided, together with the synthetic report on the performed activity by the PhD student, the favorable evaluation report by the Supervisor, and the favorable evaluation by the reviewers, based on the rules established by UniCA.
 - The PhD thesis has to be written in English.
 - The final exam in view of the Doctor of research title takes place in English.

ANNEX A *Fac-simile richieste di autorizzazione*

Alla c.a. Prof/Prof.ssa NOME COGNOME COORDINATORE
Alla c.a. Collegio di Dottorato in Scienze e Tecnologie per l'Innovazione

Il/la sottoscritto/a _____, iscritto al ____ anno del corso di
Dottorato in Scienze e Tecnologie per l'Innovazione (_____ ciclo), chiede con la
presente che sia autorizzata la seguente attività: _____

Della durata dal _____ al _____. Dichiara a tal fine di aver già acquisito il parere positivo
dei propri Supervisor e che tale attività non compromette il regolare svolgimento delle
attività formative e di ricerca legate al progetto di dottorato.

Luogo, data, firma

Alla c.a. Prof/Prof.ssa NOME COGNOME COORDINATORE
Alla c.a. Collegio di Dottorato in Scienze e Tecnologie per l'Innovazione



Il/la sottoscritto/a _____, iscritto al ____ anno del corso di
Dottorato in Scienze e Tecnologie per l'Innovazione (_____ ciclo), chiede con la
presente che sia autorizzato lo svolgimento di un periodo di ricerca e studio all'estero della
durata di _____ nel periodo compreso tra il ____ ed il _____ presso _____ la
seguente attività: _____

Della durata dal _____ al _____. Dichiaro a tal fine di aver già acquisito il parere positivo
dei propri Supervisorì e che tale attività non compromette il regolare svolgimento delle
attività formative e di ricerca legate al progetto di dottorato.

Luogo, data, firma