

PhD FOR INNOVATION

CALL FOR COMPANIES

PhD FOR INNOVATION brings together talent and innovation, academia and companies.

Companies from all over Italy and of all sizes (from start-ups to SMEs and large corporations) can participate in this exclusive programme to test the potential and talent of PhD students from the six Italian Schools of Excellence: SISSA (Trieste), Scuola Superiore Sant'Anna (Pisa), Scuola Normale Superiore (Pisa), IUSS (Pavia), Scuola IMT Alti Studi (Lucca) and GSSI (L'Aquila).

PhD FOR INNOVATION, promoted by SISSA, is the programme that aims matching best skills with companies: the two languages, academia and business, will meet in the field for impact creation, with the aim of creating concrete opportunities for the future of the PhD students.

FOR COMPANIES: THE PhD FOR INNOVATION INITIATIVES

- ✓ Companies are invited **to apply by proposing an internal innovation need** no later than **Tuesday 18th April 2023**.

This innovation need must fall within the following thematic macro areas, as indicated by each School. The Company-School match will be made according to the common thematic macro areas (as per the criteria below).

SCHOOL	THEMATIC MACRO AREAS
SISSA (Trieste)	Artificial Intelligence (AI); Astrophysics; Big Data; Quantum Computing; Quantum technologies; High Performance Computing (HPC); Life Science in particular Neuroscience; Mathematical modelling and digital twin
Scuola Superiore Sant'Anna (Pisa)	Additive Manufacturing; Agricultural Science; Artificial Intelligence (AI); Big Data and Quantum Computing; Circular Economy; Computational chemistry; Cultural Heritage; Green Economy; Green Science; High-Performance Computing (HPC); Information and Communication Technology (ICT); Life Science (MedTech, BioTech, Pharma, Neuroscience); Mechanics and New Materials; Microelectronics; Nanotechnologies; Photonics;

	Robotics and Biorobotics; Social and Humanistic Sciences; Soft Matter; Space economy; Space Tech.
Scuola Normale Superiore (Pisa)	Additive Manufacturing; Cultural Heritage; Nanomedicine; Nanotechnologies; Quantum technologies; Social sciences
IUSS (Pavia)	Additive Manufacturing; Agricultural Science; Artificial Intelligence (AI); Big Data and Quantum Computing; Computational chemistry; Cultural Heritage; Green Economy; Green Science; High-Performance Computing (HPC); Information and communication technology (ICT); Life Science (MedTech, BioTech, Pharma, Neuroscience); Mechanics and New Materials; Microelectronics; Nanotechnologies; Photonics; Robotics and Biorobotics; Social and Humanistic Sciences; Soft Matter; Space economy; Space Tech; Natural Hazard and Risk; Linguistics; Astrophysics; Sustainability, Seismic Engineering
Scuola IMT Alti Studi (Lucca)	Artificial Intelligence (AI); Big Data; Cultural Heritage; Green Economy; Information and communication technology (ICT); Life Science (MedTech, BioTech, Pharma, Neuroscience); Mechanics and New Materials; Social and Humanistic Sciences
GSSI (L'Aquila).	Green economy; High performance computing; Information and communication technology (ICT); Space economy; Space technologies;

The innovation need proposed by the company will be presented to PhD students and postdocs according to the criteria detailed below. The students will be able to choose the company challenge for which they can make an innovative proposal.

Once the call for participants is closed, teams will be formed and, once the presence of one or more teams interested in the specific business challenge has been verified, the team/business pairing will take place.

The PhD students/postdocs in the team (belonging to one of the six schools*) will then start working on the innovation need.

The aim is to produce a useful output for the companies, which will then have the opportunity to have a talented team working on their unmet needs.

***How the Team-Company match will be conducted**

Criteria:

- **Themes:** Competence of the teams in the specific thematic area in which the challenge takes place.
 - **Proximity:** the desire is to facilitate face-to-face meetings and to strengthen local relationships between schools and companies. The location of the company will therefore be considered when matching the company and team (School).
 - Without an objective criteria such as themes (e.g., themes covered by several Schools) and proximity (e.g., company located on national territory but not in the regions covered by the Schools), it will be up to the Schools to decide together which team will be paired with the company.
- ✓ **The company must provide A COMPANY TUTOR** for the entire duration of the project, who will guide the team until the end of the programme, scheduled for Friday 30th June 2023, with at least two face-to-face meetings (excluding the kick-off scheduled for 21st April 2023 within the Mini-Spring Innovation School). Meetings should preferably take place on the company's premises, but if this is not possible, it can be held remotely).
- The teams will work autonomously, but will be guided by the company tutor, who will help them to identify priorities and define objectives.
- The company and the team will be accompanied by an **INSTITUTIONAL TUTOR from the School** to which the team belongs or from SISSA.
- ✓ **On the 20th and 21st of April 2023 SISSA (Trieste) will host the Mini-Spring Innovation School**, an event dedicated to innovation training. During the event the PhD FOR INNOVATION kick-off meeting will take place. Companies are warmly invited to take part in the event.
- ✓ At the end of the programme on Friday 30th June 2023, each company will receive a final report containing the solutions proposed by the team and an assessment of the potential impact on its business. Please note that to students involved will be asked to sign confidentiality agreements and the results, however preliminary, will be the exclusive property of the company.

HOW TO PARTICIPATE

Companies interested in participating in the initiative are invited to send an email to the SISSA Valorisation and Innovation Office at valorisation@sisa.it.

To participate, it's necessary to send the need for innovation, describing it in a maximum of 10 lines. The abstract will be made public and presented to the students who have applied and who will choose the challenge they wish to apply for.

For further information, please contact SISSA Valorisation & Innovation Office at valorisation@sisa.it or +39 040 3787 276 - 551