

D**Erasmus Policy Statement (Overall Strategy)*****D. Erasmus Policy Statement (Overall Strategy)***

The Institution agrees to publish this overall strategy (all three parts) on its website within one month after the signature of the Erasmus Charter for Higher Education by the European Commission.

Please describe your institution's international (EU and non-EU) strategy. In your description please explain a) how you choose your partners, b) in which geographical area(s) and c) the most important objectives and target groups of your mobility activities (with regard to staff and students in first, second and third cycles, including study and training, and short cycles). If applicable, also explain how your institution participates in the development of double/multiple/joint degrees. (max. 5000 characters)

Original language [EN]

The International School for Advanced Studies (SISSA), founded in Trieste (Italy) in 1978, was the first institution in Italy to promote postgraduate courses to get a Doctor Philosophiae (PhD) degree.

Established as a high-level training school and as a centre for theoretical research in mathematics and physics, since the 1990s SISSA broadened its interests to include new cutting-edge disciplines, such as cognitive neuroscience and neurobiology.

Today its PhD courses provide original and innovative post-graduate curricula that are considered a reference model in the international scientific scenario under every respect, comparable to few other research and teaching institutes worldwide.

SISSA partners are chosen among the best European (and International) Universities and Research Centres on the basis of a common interest in research. The proposals are carefully evaluated by Research Committee and by the Academic Senate. At the moment SISSA has established collaborations with about 200 institutes all over the world (mainly in EU but also in Asia and South&North Americas). A few examples: University of Oxford, University of Cambridge, Max-Planck Institut, Nordita Institute for Theoretical Physics, CERN, Peking University, Riken Institute, American Institute of Mathematics,...

The main SISSA mission is to hire outstanding PhD students.

At the moment, more than 30% of students come from a foreign country. About 60% of them are from Asia (mainly China, India, Iran and Vietnam) 15% from EU (central Europe in particular) and 15% from South America.

SISSA is aiming to increase this figure to 35-40% with particular interest in students coming from South and North America (Argentina, Brazil and Mexico in particular).

Staff mobility is also considered very important to improve the scientific level of the research and to achieve new goals in science.

Since 2004 SISSA began to develop joint degrees agreements.

First on second cycle activities with the University of Trieste (Master in Mathematics) and Trento (Master in Physics and Cognitive Science). Since 2011 thanks to an agreement with the Politecnico di Torino, ICTP and some universities of Paris area, SISSA is part of the "International Master Course in Physics of Complex Systems".

Students from affiliated Universities spend at least 6 months in SISSA following courses, seminars and also developing projects for their Master thesis.

The experience of joint PhD courses began in 2009 with an agreement with the University of Lille (France) for a joint PhD course in Mathematics. The agreement has been recently renewed.

In 2011 SISSA signed an agreement with the Abdus Salam International Centre for Theoretical Physics (ICTP) to establish an International Joint PhD programme in Physics and Mathematics. Students from developing countries are selected every year by a joint committee and admitted to the SISSA PhD programmes.

If applicable, please describe your institution's strategy for the organisation and implementation of international (EU and non-EU) cooperation projects in teaching and training in relation to projects implemented under the Programme. (max. 2000 characters)

Original language [EN]

1.- Increasing attainment levels to provide the graduates and researchers Europe needs.

At the moment 32% of the SISSA PhD students and more than 50% of post-docs are from abroad.

SISSA strongly believes that a high rate of internationalisation is one of the keys towards "modernisation" not only of the School but of society. The School aims to increase these figures in the next five years.

2.- Improving the quality and relevance of higher education.

Over 40% of all the papers published by SISSA each year involved the participation of students (an average of roughly 400 papers). This percentage has constantly increased in the last five years. By participating in the Programme SISSA strongly believe that these figures may increase.

3.- Strengthening quality through mobility and cross-border co-operation.

A large number of papers are published by SISSA fellows in collaboration with scientists of other European and International Institutes on scientific journals with a very high Impact Factor (i.e. Nature, Science, Physics Reports, PNAS, etc.) We are convinced that mobility and cross-border cooperation is the right way to improve more and more the quality of research and are therefore strongly motivated to pursue it.

4.- Making the knowledge triangle work: Linking higher education, research and business for excellence and regional development.

Transfer of the results of scientific research to society and to the business sector is one of the institutional tasks carried out by SISSA.

SISSA promotes and organises research (even applied research) by favouring protection of intellectual property and economic valorisation of research results. Constant communication between researchers and the industry is a necessary condition for a successful process of technology transfer. SISSA aims at favouring collaboration with the business sector through research tasks, consulting, know-how transfer and conveyance or partnerships for joint innovation activities.

5.- Improving governance and funding

Each year SISSA researchers are awarded prestigious national and international grants. This funding is a vital resource enabling teachers, PhD students and postdoctoral fellows to carry out their research work. In 2010-2011 alone, Italian funding amounted to some € 5.5 million, while international grants provided over € 10 million.

It is understood that public financing remains the foundation for higher education but SISSA is well aware that the diversification of funding resources is vital to maintain and improve its scientific level. Participation in the Programme has had and will have a positive impact on the teaching and scientific activities allowing fruitful collaboration with European and International Institutions.

* COM (2011) 567 (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0567:FIN:EN:PDF>)

The School has only recently widened its strategy for the organisation and implementation of international cooperation projects under the Programme.

Bilateral agreements have been signed with Universities in

Opava, Czech Republic (since 2002)

Oxford, UK (2003)

Szczecin, Poland (2003)

Orleans, France (2009)

Plymouth, UK (2012)

Paris VI, France (2012)

and fruitful collaborations have been established in Mathematics and Physics.

SISSA also participates in the Job Placement initiative; in the last three years more than 15 students passed a 3 to 6 months period in a EU University where they improved their technical and organisational skills and acquired ability to work as part of a team. Part of their final thesis has been developed while there. At the end of their PhD studies, many of them have been called as a postdoctoral fellow in the same University that hosted them as a trainee.

Please explain the expected impact of your participation in the Programme on the modernisation of your institution (for each of the 5 priorities of the Modernisation Agenda*) in terms of the policy objectives you intend to achieve. (max. 3000 characters)

Original language [EN]

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Endorsement of the application

I, the undersigned, legal representative of the applicant institution,

certify that the information contained in this application is complete and correct to the best of my knowledge. All Programme activities will be implemented on the basis of written agreements with the relevant authorities of the partner institutions;

agree to the content of the Erasmus Charter for Higher Education (ECHE) application outlined above and commit my institution to respect and observe these obligations;

agree to the publication of the Erasmus Policy Statement by the European Commission

Place: Trieste

Name: Guido Martinelli

Date (dd/mm/yyyy): 14/05/2013

I have read and accept the Privacy statement



Original signature of the legal representative of the Institution (as identified in section A.2 above)

Original stamp or seal of the Institution

