

The Double Degree Programme

Mainz-Pisa

in Physics



UNIVERSITÀ
DI PISA



JG|U

JOHANNES GUTENBERG
UNIVERSITÄT MAINZ

OVERVIEW

The Double Degree Programme Mainz-Pisa aims at producing highly qualified professionals in the fields of Physics by combining the special expertise of the Johannes Gutenberg-Universität Mainz and of the University of Pisa. The Degree Programs, building on the scientific networks of both partner Universities, will create excellent career prospects.

Structure of the double degree programme.

Students start the Degree Programme either at JGU or UNIPI (Home university). They will spend the first year (first and second semesters) at the home institution. During the course of the second semester, they may apply for the participation in the Double Degree Programme. Selected students will spend their second year at the Partner university.

The standard Degree Programme study period is 4 semesters (2 years) full time with 30 ECTS credits per semester and 120 ECTS credits in total.

The Double Degree Programme can begin at JGU every semester (spring or fall), while at UNIPI only at the start of the academic year ("primo periodo" starting in September).

The teaching language of the Degree Programme is English. Examinations including the master's thesis will be held in English.

During the study period, students participating in the Degree Programme will take part in the teaching activities of the Host University as they are regularly carried out. The participating students will be evaluated according to the same criteria and with the same methodology regularly used at the Host University.

The master's thesis is co-supervised, involving one supervisor from each Partner.

Both Partners use the ECTS evaluation system. Credits obtained at one of the partner institutions in the framework of the double degree programme are automatically recognized by the other institution.

Grades are converted according to a conversion table defined in the agreement.

Upon the successful completion of the Degree Programme (exams and thesis), students will be awarded a degree by both universities. The degree certificate of JGU will be issued in German and English, the degree certificate of UNIPI will be issued in Italian and English. The Partner Institutions will supply a Diploma Supplement each to all graduating students. The Diploma Supplement will mention that the degree was awarded within a Double Degree Programme.

The Double Degree Programme Partners

MAINZ

The Johannes Gutenberg University (JGU) in Mainz is backed by over 500 years of history and combines all the advantages of a fully-fledged university with the infrastructure of a university campus in the very centre of a charming, centrally-located city. The JGU is one of the few major universities in Germany with a contiguous campus. For the students, that means shorter walks from one lecture to the next – and they are only a short distance from their professors too.

For bachelor and master theses and doctorates in [Physics](#), the Johannes Gutenberg University offers a highly diverse and top quality range of research programmes which are centred on the fields of Astro-particle and Particle Physics, Nuclear Physics, Materials Science, Quantum Optics and Magnetism. This strength in research makes it possible to attract a great deal of sponsorship, among others in connection with the Cluster of Excellence “Precision Physics, Fundamental Interactions and Structure of Matter (PRISMA)” the [Max Planck Graduate Center](#) and the [Graduate School on particle detectors](#). For students, this results in first class equipment and infrastructure.

The researchers in Mainz have access to an outstanding infrastructure on the campus and in its immediate vicinity.

On the campus itself, our own particle accelerator [MAMI](#), soon to be joined by MESA, and the reactor [TRIGA](#) offer unique possibilities. The scientists are moreover members of world-wide associations and undertake research in major projects, such as the ATLAS detector at the CERN research centre in Geneva or the IceCube Experiment in Antarctica, and many others.

In Mainz itself, there are many networking and research possibilities too, as well as numerous career opportunities because of the number of institutes in the city.

- Helmholtz-Institute Mainz ([HIM](#)). Structure, symmetry and stability of matter and anti-matter
- [Max-Planck-Institute for Polymer Research](#). Manufacture and characterisation of polymers and investigation of their physical and chemical properties
- [Max Planck Institute for Chemistry](#). Understanding the chemical processes in the earth’s system from a molecular to a global scale
- Fraunhofer [ICT-IMM](#). Energy and chemical technology and analysis systems and sensors



PISA

The Department of Physics of the University of Pisa is an international center for scientific research and advanced education. Covered fields include the [Physics of Fundamental Interactions](#), [Physics of Matter](#), [Theoretical Physics](#), [Astrophysics](#) and [Applied Physics](#), with highly interdisciplinary research carried out in Nanotechnologies, Medical Physics, and in the Physics of the Universe.

The Department takes part in many international research projects at the frontier of Science, and collaborates tightly with the [Pisa Division of the National Institute for Nuclear Physics \(INFN\)](#), and with several Institutes of [National Research Council \(CNR\)](#). A relevant partnership exists with the [European Gravitational Observatory](#), whose gravitational wave detector [VIRGO](#) strongly involves our Department. Joint research projects in medical physics are being conducted with “[Santa Chiara](#)” [University Hospital](#) and the [IRCSS Foundation Stella Maris](#).

The Department of Physics is the focus of a unique eco-system for higher education, in which we develop programmes jointly with researchers and professors of INFN, CNR, the [Scuola Normale Superiore](#) and the [Scuola Superiore Sant’Anna](#) in Pisa.

We also collaborate with the [Italian Institute of Technology](#), and with industry at national and international level, through technology transfer projects carried out with companies in various fields (e.g. new materials, quantum technologies, aerospace).

Broad and intense teaching activities are performed for about 1000 undergraduate students, and 60 PhD students and postgraduate students specializing in Medical Physics, all interacting with current frontier research.

The Master’s Degree Course in Physics provides graduates with a comprehensive and in-depth training in different areas of Physics, opening up the possibility to partake in current research and professional fields requiring specific scientific-technical skills and the ability to analyze complex phenomena.



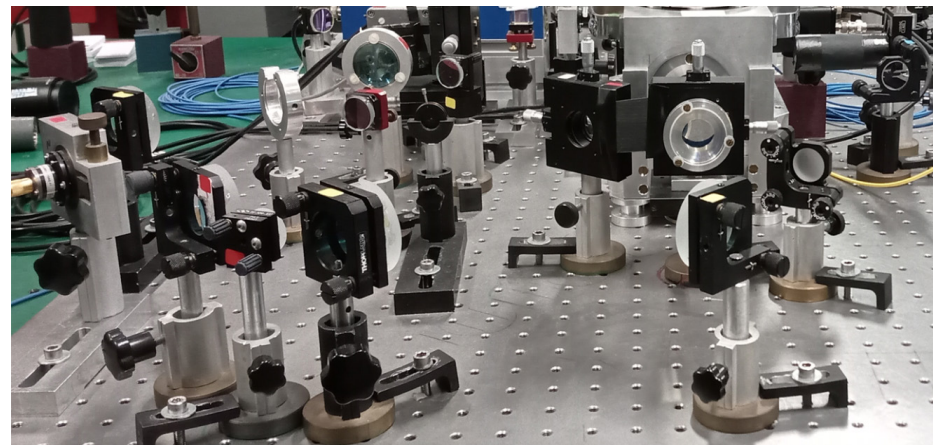
Study plans

Students from UNIPI:

- First year at UNIPI: course as foreseen in the curricula or study plans <http://tinyurl.com/unipi-phy-study-plan>
The 60 ECTS requirement should include the compulsory and alternative course of the chosen plan.
- Second year at JGU: the research phase is foreseen with the module “Methods” for 15 ECTS, consisting of seminars or alternative courses, the module “Specialization” for 15 ECTS (development of specific abilities required for the master thesis in the context of the thesis work) and the Master thesis itself with the final oral exam (colloquium) (30 ECTS). Detailed description under: <http://tinyurl.com/jgu-phy-study-plan>.

Student from JGU:

- First and second semester at JGU (60 ECTS). Courses as presented <http://tinyurl.com/jgu-phy-study-plan>
Advanced courses in experimental and theoretical physics (lectures and exercises), special lectures and seminars and advanced laboratory courses.
- Third and fourth semester at UNIPI (60 ECTS). Courses for 15 ECTS chosen among the advanced courses in the UNIPI curricula <http://tinyurl.com/unipi-phy-study-plan> and the Master thesis and final exam (45 ECTS)



Selection criteria

A minimum of 18 ECTS is required at the time of application. Moreover, in their application students must include a detailed plan on how they will acquire the remaining ECTS. Students will be enrolled at their Home University for the entire duration of the Degree Programme. They enroll at the Host University starting from the semester they take up their studies after the selection and continue to be enrolled until the end of the Degree Programme. While being enrolled, students will maintain regular student status at both Partner Institutions.

We aim at accepting 5 students per year at each University.

To be accepted into the Degree Programme candidates must fulfill the following requirements:

Students from UNIPI:

- a) must be regularly enrolled in the Master Programme “Laurea Magistrale in Fisica” at UNIPI which requires English language skills at level B2
- b) must have completed 60 ECTS in the first academic year

Students from JGU:

- a) must be regularly enrolled in the Master Programme “MSc. Physics” at JGU which requires English language skills at level B2.
- b) must have completed 60 ECTS in the first and second semesters.



Application procedure

Only students who are enrolled in the respective Master of Science in Pisa and Mainz are allowed to apply for this double degree program.

Application deadline: beginning of May. For 2024: May 6, 2024

Required documents (all in English):

- Short CV
- Letter of motivation by the candidate
- Academic record with exam grades for the Bachelor and Master courses
- Full study plan including the missing exams at the Home University (with schedule) and the planned exams at the Host University.

The application must be submitted to:

For Pisa students:

Segreteria Didattica Fisica segrdida@df.unipi.it

For Mainz students: Coordination of the double degree Program

DDPJGUPisa@uni-mainz.de

The local coordinator of the DDP will serve as a contact for the student, will assist the student in the application process and help in the compilation of the study program.

Contacts

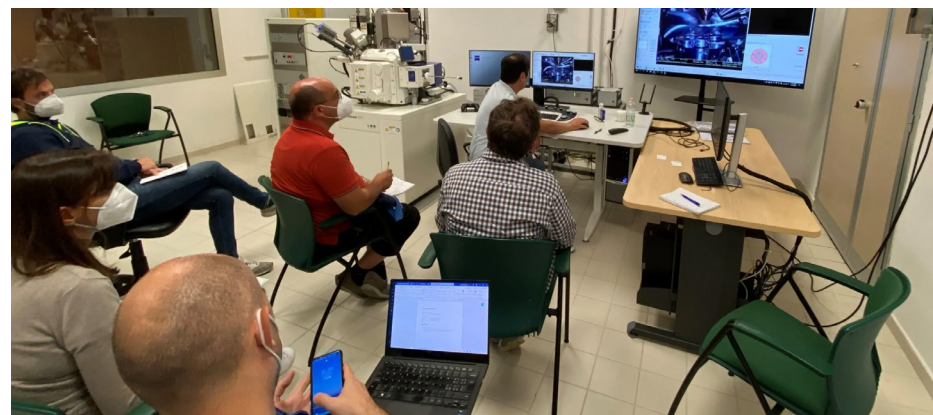
Local coordinators for Pisa:

Prof. Francesco Forti <francesco.forti@unipi.it>

Prof. Maria Giuseppina Bisogni <maria.giuseppina.bisogni@unipi.it>

Local coordinators for Mainz

Prof. Concettina SFIENTI <sfienti@uni-mainz.de>



Things to know

A selected collection of links from the two Universities are included below for convenience.

Mainz:

Studying in Mainz:

<https://www.studies.fb08.uni-mainz.de/study-abroad/incoming/>

Student apartments:

<https://www.studierendenwerk-mainz.de/en/wohnen>

Welcome Center for International scholars:

<https://www.international-office.uni-mainz.de/welcome-center-for-international-scholars/>

https://www.international.uni-mainz.de/files/2021/11/ComingToJGU_En.pptx

Campus Map:

<https://homepage.uni-mainz.de/campus-map/>

Pisa:

Pisa welcome for international students:

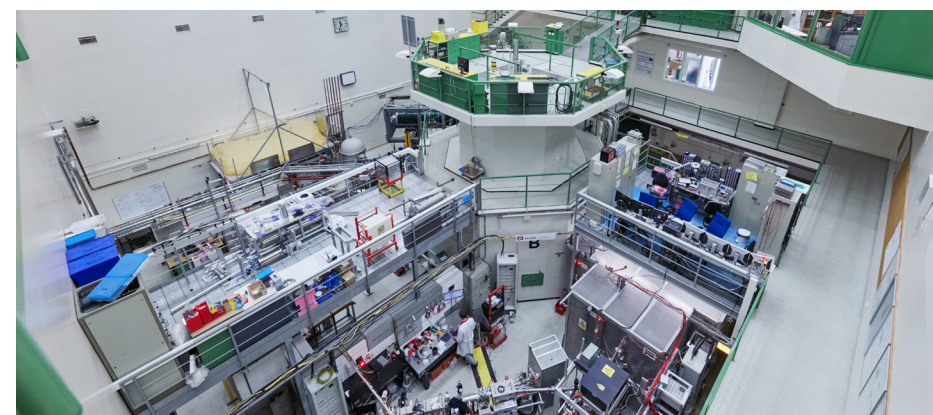
<https://www.unipi.it/index.php/welcome-and-support>

UNIFI Brochure:

https://www.unipi.it/images/lang_pdf/intstudguide.pdf

Unipi short guide:

https://www.unipi.it/images/lang_pdf/unipi_en_guide.pdf





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