Natural Sciences
Health Sciences
Humanities
Social Sciences
Engineering
Applied Sciences
A message from the International Office of the University of Pisa
Profile of the University of Pisa
Admission to the University of Pisa
Student Services, About Pisa
How to reach Pisa
Mathematical, Physical and Natural Sciences
Health Sciences
Humanities
Social Sciences
Engineering
Applied Sciences
Summer Schools
Editorial board: Alessandra Guidi, Marco Guidi, Laura Nelli, Lynda Lattke, Lora Del Gatto
Photos: Bruno Sereni, Roberto Martini
Graphic design: Roberto Martini for 2R Studio Web Solutions, Francesca Gelichi
Documentation: International Office; Communication Office (University of Pisa)
Engineering
Department of Civil and Industrial Engineering
http://www.dici.unipi.it
Department of Energy, Systems, Territory and
Construction Engineering
http://www.destec.unipi.it
Department of Information Engineering
http://www.dii.unipi.it

Mathematical, Physical and Natural Sciences
Department of Mathematics
http://www.dm.unipi.it
Department of Physics
http://www.df.unipi.it
Department of Computer Science
http://www.di.unipi.it
Department of Chemistry and Industrial Chemistry
http://www.dcci.unipi.it
Department of Biology
http://www.biologia.unipi.it
Department of Earth Sciences
http://www.dst.unipi.it

Health Sciences
Department of Clinical and Experimental Medicine
http://www.med.unipi.it
Department of Surgical, Medical and Molecular
Pathology and Critical Care Medicine
http://www.med.unipi.it
Department of Translational Research on New
Technologies in Medicine and Surgery
http://www.med.unipi.it
Department of Pharmacy
http://www.farm.unipi.it

Humanities
Department of Civilisations and Forms of Knowledge
http://www.cfs.unipi.it
Department of Philology, Literature and Linguistics
http://www.fileli.unipi.it

Social Sciences
Department of Economics and Management
http://www.ec.unipi.it
Department of Law
http://web.jus.unipi.it
Department of Political Science
http://www.sp.unipi.it

Agricultural and Veterinary Sciences
Department of Agricultural, Environmental and Food
Sciences
http://www.agr.unipi.it
Department of Veterinary Sciences
http://www.vet.unipi.it
Dear International Students and Researchers,

The University of Pisa, one of the oldest in the world, has been extraordinarily successful in updating and maintaining its infrastructure and human resources to meet the new challenges of international research and education.

We boast an excellent international reputation in all areas: Natural Sciences, Mathematics, Humanities, Social Sciences, Medicine, Engineering, Agricultural Sciences, Applied Sciences, and many more. We lead important international research and direct vital education networks whose results we constantly incorporate into our programmes. The University of Pisa is committed to promoting quality in all areas of research and teaching, and to making all our programmes available to an increasing number of international students and researchers.

The city of Pisa, of which our University has always been a fundamental institution, offers students and researchers an ideal environment for living, studying and working. Pisa has a pleasant climate, excellent food and world-famous cultural and leisure attractions. Both the sea and the mountains are nearby, as well as ever-celebrated cities, such as Florence, Siena, and Bologna, museums, monuments and the beautiful countryside for which Tuscany is rightly renowned. With its large and intellectually stimulating scholarly community, Pisa is an attractive environment for researchers in any field.

We hope to see you soon!

Warmest regards,

The International Office
University of Pisa
PROFILE OF THE UNIVERSITY OF PISA

The University of Pisa was officially established in 1343, when it was proclaimed a ‘Studium Generale’ with the authority to prepare university professors, although its origins date back to earlier centuries.

Amongst its glories is Galileo Galilei, who was born and studied in Pisa, and became professor of Mathematics in 1589. The University also counts several Nobel Prize winners among its alumni, including Giosuè Carducci (Literature), Enrico Fermi (Physics), Carlo Rubbia (Physics), and a Fields medalist, Enrico Bombieri (Mathematics).

Today the University of Pisa is a prestigious modern centre of teaching and advanced research. It offers 58 Bachelor’s (first cycle), 64 Master’s (second cycle) and 8 long single cycle degree programmes in all the main areas of knowledge and advanced professional education. The University has 21 doctoral degree programmes; it also offers 49 specialisation schools and 65 one-year specialisation programmes of further education, including an MBA. Research and teaching are combined in all fields and levels.

Overall, the University of Pisa (a.y. 2015/2016) has about 56,000 first and second cycle students, about 588 doctoral students and over 1,500 students enrolled in its more than 50 residency programmes in the medical and health areas, or in specialisation courses in other disciplines. The research and teaching staff is comprised of 1,421 permanent employees and 890 temporary employees; the technical and administrative staff has 1,490 members.

According to the most recent Shanghai Ranking ARWU 2015, the University of Pisa ranks first amongst Italian universities and is one of the top 200 universities in the world. Its department of Mathematics is amongst the top 100 worldwide; more generally, the University of Pisa ranks between 101 and 150 for the Sciences.

The 2015 QS ranking of world universities ranks the University of Pisa in the world’s elite institutions in 13 of the 36 featured subjects. According to QS, Pisa is a “four star” university, with five stars in research, innovation and access. In the area of Natural Sciences, Physics ranks at the 30th place in the world, Mathematics ranks amongst the top 101-150 and Chemistry ranks amongst the top 151-200.
ADMISSION TO THE UNIVERSITY OF PISA

International students are warmly welcomed at the University of Pisa. Admission to all first and second cycle (Bachelor’s and Master’s) degree programmes is generally guaranteed to all those who hold the necessary qualifications (a High School diploma for the former, an appropriate undergraduate qualification for the latter).

Only certain long single cycle programmes, in such fields as Medicine, Dentistry and Veterinary Medicine, and some of the first and second cycle degree programmes, have a limited number of places. To access these programmes one must sit an admission exam in early September (see http://matricolandosi.unipi.it).

All other degree programmes require an evaluation test to ascertain whether the applicant possesses the necessary minimum competences for access.

Admission of non-EU students to degree programmes taught in Italian is conditional on their passing a language test or presenting a certificate of Italian language proficiency (level B2).

Admission to degree programmes taught in English is conditional on presenting a certificate of English language proficiency (level B1/B2).

Admission to PhD programmes funded by the University of Pisa is limited and involves a competitive application process. Our university also welcomes PhD students who are externally funded.

**Tuition fees:** the full rate is approximately € 2,345.00 per year. In order to grant equal opportunities to all students, tuition fees may be reduced or waived according to income and country of origin (see www.unipi.it/tuition-fees). In some cases, scholarships granted by the DSU (the Regional “Right to Study” Programme) cover the entire amount. Other scholarships are granted by the governments of other countries in agreement with the Italian government.

**For further information see:**
www.unipi.it/index.php/english
www.unipi.it/welcome-and-support

**Or contact:**
international@unipi.it

**For students with special needs:**
www.unipi.it/special-needs
STUDENT SERVICES

Intensive Italian language courses for international students are offered in September and October each year by the CLI (Centro Linguistico Interdipartimentale/Interdepartmental Language Centre). The CLI also offers regular Italian courses during the year for different proficiency levels. For further information and to register: www.cli.unipi.it.

Most student services are provided by the Tuscan Region’s DSU. The DSU offers a large number of scholarships and accommodation in university dormitories. Priority is given to low-income students. The DSU also offers all students an excellent food service at very favourable prices in the five university dining halls located downtown, as well as other information and guidance services. For further information see www.dsu.toscana.it or write to info@dsu.toscana.it.

A wide range of sports facilities and services are provided by the Centro Universitario Sportivo (CUS), a member of CONI (the Italian Olympic Committee). The CUS takes part in national and international university championships in every sport. For further information see: www.unipi.it/sports-and-leisure
CUS Pisa
via Napoli, 49
56123 Pisa (PI)
Homepage: www.cuspisa.it
Info: segreteria@cuspisa.it

ABOUT PISA

Pisa is world famous for its Leaning Tower and Cathedral (listed as a UNESCO World Heritage site) and its many other medieval and Renaissance monuments. It is located in Tuscany, in the central part of the Italian peninsula, on a plain near the coast of the Mediterranean Sea close to the mouth of the river Arno. Its multicultural population totals about 100,000 people, in addition to the many thousands of students who enliven the city. The university buildings are located in the city itself, some in monumental historical buildings and others in modern structures. Together, the University and the city form a single
complex, a “campus in a city”, just as they have for many centuries.

In addition to the University, the city hosts two prestigious higher education institutes: the Scuola Normale Superiore and the Scuola Superiore Sant’Anna di Studi Universitari e di Perfezionamento. Both are centres for advanced studies and research in various disciplines. On the basis of a yearly national competition, they admit the best high school graduates to study at the University, and participate in special seminars and activities at the Institutes.
Pisa is also an ideal place for students to live and meet in the city centre’s streets and piazzas, with their bars and pubs.

Both the beaches and the mountains are close and easily accessible, as are other famous Tuscan cities, such as Lucca, Florence, Volterra and Siena.

The climate in Pisa is generally mild. The city enjoys cool summers and mild winters. There is some rain in autumn and winter although it rarely snows; the summers are dry and make for pleasant excursions to the sea.

Rates of criminality are very low. Overall Pisa is a very friendly and safe city, well attuned to students’ and researchers’ needs.

Rental rates: most students find lodgings in shared private flats in the city centre. Rates vary from about 250.00€ per month for a place in a double room to 350.00€ or more per month for a single room.
HOW TO REACH PISA

By Plane: Pisa’s international airport “Galileo Galilei” offers a large and ever-growing number of flight connections with Europe, America and Asia. It is the preferred hub in Tuscany for Low-Cost companies as well as for major airlines. The airport is very close to the city centre, and can be reached very quickly by bus, train, car or bicycle. For further information see http://www.pisa-airport.com.

By Train: Pisa’s main train station offers frequent connections with Florence, Lucca, Viareggio and other Tuscan destinations as well as with major Italian and European cities. The trip by rail to Rome takes 3 hours. For further information see www.trenitalia.com.

By Bus: There are regional bus services with connections to Florence, Lucca, Prato, Pistoia, Massa Carrara, Volterra, Livorno, Viareggio and other destinations. For further information see: www.pisa.cttnord.it.

By Car: Pisa is served by two large motorways (“Autostrade”): A12 (Genoa - Rosignano), and A11 Pisa-Florence. There are state highways such as SS67 to Florence and SS1 (the Roman “via Aurelia”) which connects Pisa to Rome in the south and La Spezia to the north, and a “super road” from Livorno-Pisa-Florence.

Transportation in the city: The urban bus service is operated by the CPT (Pisa Transport Consortium, www.pisa.cttnord.it). By far the most popular means of transportation amongst students, given the convenient size of the city, is by foot or by bicycle (see: www.ciclopi.eu).
DEGREE PROGRAMMES OFFERED

FIRST CYCLE (BACHELOR’S) DEGREE PROGRAMMES
(3 years, 180 ECTS credits)

- Mathematics
- Physics (some courses in English)
- Computer Science
- Digital Humanities (together with Humanities)
- Chemistry
- Industrial and Environmental Chemistry
- Biological Sciences
- Biotechnology
- Natural and Environmental Sciences
- Geological Sciences

SECOND CYCLE (MASTER’S) DEGREE PROGRAMMES
(2 years, 120 ECTS credits)

- Mathematics (some courses in English)
- Physics (some courses in English - together with the Université Pierre et Marie Curie - UPMC)
- Exploration and Applied Geophysics
- Computer Science (in English - possibility of a Double degree with the Universidad de Málaga or the Université de Paris Ouest Nanterre La Défense)
- Business Informatics (mostly in English – together with the Department of Economics, possibility of a Double degree with the Université Paris Dauphine)
- Computer Science and Networking (in English - together with Engineering and the Scuola Superiore Sant'Anna, possibility of a Double degree)
- Chemistry
- Industrial Chemistry
• Marine Biology (Double degree with Zejiang Ocean University)
• Biology Applied to Biomedical Sciences
• Cellular and Molecular Biology
• Molecular Biotechnology (Joint degree with the Scuola Superiore Sant’Anna)
• Conservation and Evolution (some courses in English)
• Geosciences and Geotechnologies
• Environmental Sciences

Special Programmes
The departments of Mathematics of the University of Pisa and the University of Limoges share a 18-ECTS programme.

Third Cycle (Doctoral) Degree Programmes
(3 years)
• Mathematics (some courses in English)
• Physics (some courses in English)
• Computer Science (in English)
• Smart Computing (together with the University of Florence and the University of Siena)
• Chemistry and Materials Science
• Earth Sciences (together with the University of Florence and the University of Siena)
• Biology
• Biochemistry and Molecular Biology (together with the University of Florence and the University of Siena)
• Molecular Medicine (together with the University of Florence and the University of Siena)

Erasmus Mundus Joint Doctorate – EMJD in Theoretical Chemistry and Computational Modelling

One-Year Specialisation Programmes
5 One-Year Specialisation Programmes (60 ECTS credits)

Working with the Business World
Cooperation with major firms like Yahoo and Google results in funding fellowships for our PhD students. A large number of firms, Small Medium Enterprises (SME), local and regional authorities, hospitals and health institutions, non-academic research centres have cooperation contracts to offer training opportunities to our undergraduate students.

Resources and Services for Students and Researchers
• Physics, Mathematics and Computer Science library (47,000 books, 87 current journals, 3,568 e-journals)
• Chemistry library (8,814 books, 9 current journals and 1,739 e-journals)
• Natural and Environmental Sciences library (36,873 books, 186 current journals and 2,334 e-journals)
• Maths computer room (26 workstations equipped with maple, matlab, scilab, octave)
• Computer Science labs fully equipped for teaching
• Chemistry computer room
• Natural Sciences computer room
• Full wi-fi coverage
• Self-service facility for printing and photocopying
• International relations offices in each department
AREAS OF EXCELLENCE IN RESEARCH

For Mathematics, the University of Pisa is amongst the top 100 institutions in the world according to the 2015 ARWU, and has the highest score amongst Italian universities. In 2015 there were 100 math seminars at the University of Pisa, plus a large number of math seminars at the Scuola Normale Superiore and at the “De Giorgi” Center. Mathematics research in Pisa focusses on the following areas:

- Commutative Algebra, Computational Algebra, Number Theory, Representation Theory
- Calculus of Variations, Control Theory, Partial Differential Equations, Geometric Measure Theory, Nonlinear Analysis
- Numerical Analysis
- Mathematics Education, History of Mathematics
- Algebraic and Analytic Geometry, Configuration Spaces, Geometric Group Theory, Low-dimensional Geometry and Topology, Complex Analysis and Geometry
- Mathematical Logic
- Celestial Mechanics, Continuum Mechanics
- Probability and Statistics
- Operations Research
- Dynamical Systems

The University of Pisa is, together with the Scuola Normale Superiore and the Scuola Superiore Sant’Anna, a founding partner of the Centro di Ricerca Matematica Ennio De Giorgi (Mathematical Research Centre Ennio De Giorgi), which is part of ERCOM (European Research Centres on Mathematics) and has established agreements for academic collaboration with several prestigious institutions.

For Physics, the University of Pisa is ranked 30th in the world, according to the 2015 QS World University Ranking. Enrico Fermi and Carlo Rubbia, Nobel Prize winners, were Physics students in Pisa. Research in Physics is done in very close collaboration with the local branches of the National Institute for Nuclear Physics (INFN) and the National Research Council (CNR). The only three Italians to win the high energy Panofsky award work in Pisa.

Research is carried out in all of the major fields of Physics:

- Theories of the Fundamental Interactions
- Quantum Field Theory
- Theoretical Nuclear Physics
- Astronomy and Astrophysics
- Condensed Matter
- Atoms, Molecules and Photons
- Plasma Physics
- Particle Physics at Accelerators and Colliders
- Experimental Astroparticle Physics and Gravitational Waves
- Medical and Applied Physics

Pisa hosts VIRGO, the large gravitational wave interferometer involving scientists from all over Europe; it is also a GRID node. Researchers from Pisa work in all of the most important high energy laboratories around the world: CERN, SLAC, FermiLab to name a few.

For Computer Science, research is carried out in cooperation with leading European and international networks in many currently relevant fields:

- Algorithm Engineering
- Analysis and Synthesis of Numerical Algorithms
- Architectures and Tools for High Performance Computing
- Computational Biology
- Data and Knowledge Engineering
- Human Language Technology
- Machine Learning, Computational Intelligence
- Models and Algorithms for Network Problems and Logistics
- Software Engineering
- Specification, Verification and Security of Parallel, Distributed and Mobile Systems
- Web Computing, Semi structured Data Management Systems
Chemical studies at the University of Pisa promote extensive academic and applied research with numerous partnerships within national and EU projects. Research activities cover most of the traditional as well as advanced areas of Chemistry and Materials Science. This area has an exceptional tradition of research. Amongst the many sectors in which it excels, there are the following:

- Theoretical and Computational Chemistry
- Thermodynamics and Thermal Analysis
- NMR and Optical Spectroscopies
- Organic and Inorganic Synthesis
- Biologically Active Compounds
- Catalysis
- Nano- and bio-materials
- Polymer sciences
- Sensors
- Cultural Heritage
- Environment and Health

For Biology, academic and applied research is carried out with numerous partnerships within national, European and other international projects. Research focuses on the following topics:

- Anthropology
- Cell Biology
- Biochemistry
- Botany
- Ecology
- Ethology
- General Physiology
- Plant Physiology
- Genetics
- Protistology-Zoology

The Department of Earth Sciences at the University of Pisa is one of the few departments in Italy that promotes research and coordinates academic programmes (Bachelor’s degree in Geological Sciences, Master’s degrees in: Geosciences and Geotechnologies; Exploration and Applied Geophysics and Environmental Sciences), covering a broad spectrum of disciplines: geochemistry, geomorphology, geophysics, mineralogy, palaeontology, petrography, sedimentology, stratigraphy, structural geology and volcanology. Basic research on Earth Sciences and investigations applied to environmental problems are undertaken in collaboration with prestigious foreign institutions and laboratories, as well as with national public authorities and private companies. Major topics of research include:

- Change through time: paleoenvironmental reconstruction, fossil record and biological evolution
- Crystallography and crystal chemistry of minerals
- Crustal deformation and geophysical monitoring of natural hazards
- Environmental geochemistry, pollution status and ecological risk assessment
- Heat flow and geothermal energy
- Igneous petrology and Earth’s dynamic processes
- Planetary geology: meteorites, impacts and planet surface morphology
- Properties of earth materials
- Quaternary climate changes and paleoenvironmental indicators
- Regional studies in geology and geologic mapping
- Seismic processing and imaging solutions
- Volcanic landforms, processes and hazard
- Water resources management and planning

INTERNATIONAL NETWORKS

- More than 50 international research networks funded by the European Union and other institutions
- Erasmus+ Study and Traineeship Programme
- H2020 European Joint Doctorate Programme in “Theoretical Chemistry and Computational Modelling”
- Erasmus Mundus joint doctorate PCUBE (Physics)
- 2 international cooperation agreements for the exchange of students and researchers

WEBSITES
Mathematics: www.dm.unipi.it
Applied Mathematics: www dma.unipi.it
De Giorgi Centre: www.crm.sns.it
Physics: www.df.unipi.it
Computer Science: www.di.unipi.it
Chemistry: www.dcci.unipi.it
Biology: http://didattica.biotgia.unipi.it
Earth Sciences: www.dst.unipi.it

CONTACT INFO
Mathematics: international@dm.unipi.it
Physics: international@df.unipi.it
Computer Science: international@di.unipi.it
Chemistry: international@dcci.unipi.it
Biology: international@biologia.unipi.it
Earth Sciences: international@dst.unipi.it
DEGREE PROGRAMMES OFFERED

LONG SINGLE CYCLE DEGREE PROGRAMMES
- Medicine (6 years, 360 ECTS credits)
- Dentistry (6 years, 360 ECTS credits)
- Pharmacy (5 years, 300 ECTS credits)
- Pharmaceutical Chemistry and Technology (5 years, 300 ECTS)

FIRST CYCLE (BACHELOR'S) DEGREE PROGRAMMES
(3 years, 180 ECTS credits)

Medicine:
- Dental Hygiene
- Dietetics
- Speech Therapy
- Physical Activity and Sports Sciences
- Nursing
- Midwifery
- Physiotherapy
- Podology
- Clinical and Health Psychology
- Audio-prosthetic Techniques
- Biomedical Laboratory Techniques
- Environment and Workplace Prevention Techniques
- Psychiatric Rehabilitation Techniques
- Techniques in Radiological Imaging and Radiotherapy
- Developmental Neuro and Psychomotor Therapy
Pharmacy:
- Science of herbal and health products (together with Agricultural Sciences)

SECOND CYCLE (MASTER’S) DEGREE PROGRAMMES
(2 years, 180 ECTS credits)

Medicine:
- Clinical and Health Psychology
- Nursing and Midwifery
- Health Professions of Rehabilitation Sciences
- Preventive and Adapted Physical Activity Sciences

Pharmacy:
- Human Nutritional Sciences

THIRD CYCLE (DOCTORAL) DEGREE PROGRAMMES
(3 years)

- Clinical and Translational Sciences
- Clinical Physiopathology
- Science of Drug and of Bioactive Substances
- Neurosciences (together with the University of Florence and the University of Siena)
- Molecular Medicine (together with the University of Florence and the University of Siena)
- Genetics, Oncology and Clinical Medicine (together with the University of Florence and the University of Siena)

SPECIALISATION SCHOOLS AND ONE-YEAR SPECIALISATION PROGRAMMES

46 Residency Programmes in Medicine and Pharmacy, some of which are in cooperation with other universities

56 One-Year Specialisation programmes (60 ECTS credits)

RESOURCES AND SERVICES FOR STUDENTS AND RESEARCHERS

Medicine and Surgery library (29,742 books, 72 current journals and 6,879 e-journals)
Pharmacy library (9,175 books, 35 current journals and 465 e-journals)
12 department libraries

Medical School Computer Centre
C.I.S.I.F. (Interdepartmental Centre of Computer Sciences for Drugs Design and Learning)
Pharmacy Computer Centre (18 workstations)
Museum of Human Anatomy “Filippo Civinini”
AREAS OF EXCELLENCE IN RESEARCH

**Medicine:**
- Study of innovative approaches in computer-aided surgery.
- Study of innovative methodologies in organ transplantation.
- Study of a novel integrated system to measure autonomic functions.
- Analysis of novel markers and therapies in oncology and hematology.
- Up to date imaging techniques translated into medical and surgical practice.
- Innovative techniques and achievements in paleopathology.
- Basic and translational neuroscience related to novel drug treatment and surgical procedures in neuropsychiatric disorders.
- Functional neuroimaging in developmental and adult psychobiology.
- Translational studies on microorganisms related to novel antimicrobial agents.
- Basic and translational studies of the endocrine system related to novel markers and therapeutic outcomes in endocrine and metabolic disorders.
- Translational Research in Human Genetics.
- Set up of an integrated environment for rehearsal and planning of surgical interventions.

**Pharmacy:**
- Innovative synthetic methodologies to obtain bioactive compounds.
- Innovative methodologies for the release and bioavailability of bioactive compounds.
- Isolation and study of natural compounds endowed with potential biological activities.
- Computational methodologies for the design and development of bioactive compounds.
- Evaluation and study of the mechanism of interaction between biological systems and new compounds.
- Design and synthesis of compounds possessing therapeutic activity.
- Evaluation of the activity and toxicity of novel compounds in cellular and animal models.
- Green chemistry: ionic liquids as solvents, catalysts and smart materials.
- New methodologies and synthetic applications towards bioactive carbohydrates.
- Asymmetric catalysis.
INTERNATIONAL NETWORKS

- Erasmus+ Study and Traineeship Programme
DEGREE PROGRAMMES OFFERED

FIRST CYCLE (BACHELOR’S) DEGREE PROGRAMMES
(3 years, 180 ECTS credits)

- Foreign Languages and Literatures
- Digital Humanities (together with Computer Science)
- Classical Studies and Italian Literature
- History
- Classical and Modern philologies
- Philosophy
- Sciences of Communications and Performing Arts
- Peace Studies, International Cooperation and Conflict Transformation (together with other areas)
- Cultural Heritage Studies
- Tourism Sciences (Lucca Campus)
- Telematic Bachelor’s degree in Italian Language and Culture (for residents abroad only), promoted by the ICoN Consortium of twenty Italian Universities, managed by the University of Pisa

SECOND CYCLE (MASTER’S) DEGREE PROGRAMMES
(2 years, 120 ECTS credits)

- Classical Philology and Ancient History
- Archaeology
- European Literatures and Philologies
- History and Civilisations (together with four European universities)
- History and Forms of the Visual and Performing Arts and of New Media
- Digital Humanities (together with Computer Science)
- Italian Language and Literature
- Linguistics
• Literary and specialized translation (together with the Université Aix-Marseille, possibility of a Double degree)
• Planning and Management of Mediterranean Tourism Facilities (Lucca Campus, together with other institutions)
• Modern Euro-American Languages and Literatures
• Oriental Studies: Egypt, the Near and Middle East (together with the University of Aden)
• Philosophy and Forms of Knowledge
• Peace Studies: International Cooperation and Conflict Transformation (together with other departments and the Université Paris Dauphine)

THIRD CYCLE (DOCTORAL) DEGREE PROGRAMMES
(3 years)
• History
• Classical Studies and Archaeology (together with the University of Florence and the University of Siena)
• Philosophy (together with the University of Florence)
• Philology, Literature and Linguistics
• Italian Studies (together with the University of Florence and the University of Siena)
• History of the Arts and Entertainment (together with the University of Florence and the University of Siena)

SPECIALISATION SCHOOLS AND ONE-YEAR SPECIALISATION PROGRAMMES

2 SPECIALISATION SCHOOLS
• Cultural Heritage
• Archaeological Heritage

4 ONE-YEAR SPECIALISATION PROGRAMMES (60 ECTS credits)

WORKING WITH THE NON-ACADEMIC WORLD
The Humanities area has particular links with local and regional authorities (for example, in the one-year specialisation programme on Political Communication), as well as publishing houses, museums and archives.

RESOURCES AND SERVICES FOR STUDENTS AND RESEARCHERS
• Interdepartmental Language Centre (CLI) (courses in Italian for international students, courses in foreign languages)
• Humanities Computer Centre
• The Area cooperates with the Interdepartmental Centres for Jewish Studies and for Peace Studies
• A very large number of specialised department libraries (591,249 books, 1,456 current journals and 5,307 e-journals)
AREAS OF EXCELLENCE IN RESEARCH

The Humanities division of the University of Pisa has an exceptional tradition of research, in some cases going back many centuries. Amongst the many sectors in which it excels, there are the following areas:

- **Egyptology**: archaeology and history of Thebes (Egypt), where excavations are conducted.
- **Archaeology**: the Mycenaean presence in Cyprus; the Archaic age sanctuaries in the Northern Aegean; figurative culture in Sicily and Magna Graecia; Etruscan studies (in particular, Volterra); the Arno river valley settlements. Excavations are conducted in most sites.
- **Languages**: Syriac, Armenian, Sanskrit, Hebrew and Arabic language and literature.
- **Cinema and Performing Arts**: studies on the relationship between drama and performance, text and stage settings, cinema and literary narrative, Video and Video Arts.
- **Art History**: Italian art from the Middle Ages to the 21st century, its relations with European and North American art; studies in iconology and iconography; the history of collecting and of the art market; museum studies and history of restoration work.
- **Philosophy**: the analysis of texts of ancient (Plato; Aristotle; Plotinus), modern (Bruno), and contemporary philosophers (Heidegger; Kierkegaard; German and French Thought); risk theory; proof theory; modern and contemporary reflection on autonomy and consensus.
- **History**: the medieval urban realities in the Middle Ages; Europe and the Mediterranean during the 15th and 16th centuries; the Italian Risorgimento; nation and nation-State in 19th century Europe; totalitarian regimes and anti-Semitism in the 20th century; history of the mafia.
- **Two ERC projects are hosted by the Department**:
  - Digital Archive for the Studies of pre-Islamic Arabian Inscriptions: digitalization of the epigraphic patrimony of pre-Islamic Arabia, and excavations in Yemen, Oman.
  - Greek into Arabic. Philosophical concepts and linguistic bridges: transmission of late ancient philosophy, especially Neo-platonic, to the Arabic-speaking world.

Classical Philology

- **Editing of complete and fragmentary classical Greek texts** (Plato, Epicurus, Aeschylus).
- **Editing of complete and fragmentary Latin texts** (Ennius, Plautus, Seneca the Elder, Pompeius, Donatus on Terence).
- **Linguistic and historical studies on Greek and Latin lexicon, syntax, pragmatics**.
- **Reception of Greek and Latin literary texts in modern and contemporary literatures**.

Romance Studies

- **Critical editions and reflection on eclectics**.
- **Text analysis** (poetry, prose, theater).
- **Literary History from the Middle Ages to the Contemporary Age** (in France, Italy, Latin America, Spain, Portugal and Romania).
- **Theory and practice of translation**.

Linguistics

- **Theoretical linguistics**.
- **Historical linguistics**.
- **Contrastive linguistics, with reference to Italian and other European languages** (German, Portuguese, Slavic systems).
- **Applied linguistics** (acquisitional, computational, acoustic phonetics, etc).

English studies

- **Medieval narrative and drama studies. Critical editions and commentaries**.
- **Early Modern Culture and Theatre Studies**.
- **Romantic and Victorian Poetry**.
- **Modemism and Postmodernism**.
- **Native American literature**.
- **Postcolonial studies (Critical Theory and Anglophone Literatures)**.
- **Translation studies and Intercultural communication**.
- **Semantics, Pragmatics and text/discourse analysis**.
- **Lexicology and Lexicography**.
- **Corpus Linguistics**.
- **ESP and Second Language Learning**.
Italian Studies
- Dante Studies
- Editing and commentary of the works of major Italian authors between the Middle Ages and the Renaissance
- Italian Classical Studies between the 18th and 19th centuries
- Italian Contemporary Poetry and Narrative Studies

Modern European Literatures
- Thematics
- Textual criticism
- Cultural Studies
- Comparative Literature

WEBSITES
Humanities: http://www.fileli.unipi.it/didattica/corsi-di-laurea-triennale/
http://www.cfs.unipi.it/formazione/corsi-di-laurea-triennale/
Modern Foreign Languages and Literatures: http://www.fileli.unipi.it/lin/ http://lingue.humnet.unipi.it

INTERNATIONAL NETWORKS
- 7 research and education programmes funded by the European Union
- Erasmus+ Study and Traineeship Programme

CONTACT INFO
Humanities, Literature and Philosophy: Letters and Philosophy: erasmus@cfs.unipi.it
Modern Foreign Languages and Literatures: erasmus@fileli.unipi.it
DEGREE PROGRAMMES OFFERED

LONG SINGLE CYCLE DEGREE PROGRAMME

- Law (5 years, 300 ECTS credits)

FIRST CYCLE (BACHELOR’S) DEGREE PROGRAMMES
(3 years, 180 ECTS credits)

Business and Economics:
- Banking, Finance and Financial Markets
- Business Administration
- Management and Accounting

Political Science:
- Politics, International Relations and Administrative Sciences
- Social Sciences and Social Services

Law:
- Business, Labour and Administrative Law

Joint Programmes:
- Management and Law of Logistics Systems (together with other departments, Livorno campus)
- Tourism Sciences (together with other departments, Lucca campus)
- Governance and Administration of the Seas (together with the Naval Academy, Livorno)
- Peace Studies, International Cooperation and Conflict Transformation (together with other departments and the Université Paris Dauphine)

RESOURCES AND SERVICES FOR STUDENTS AND RESEARCHERS

- Business and Economics library (112,093 books, 143 current journals, 4,835 e-journals and 3 specialized data banks)
- Law library (121,048 books, 465 current journals and 1,087 e-journals)
- Political Science department libraries (44,200 books, 65 current journals, 2,064 e-journals and several specialised data banks)
SECOND CYCLE (MASTER’S) DEGREE PROGRAMMES
(2 years, 120 ECTS credits)

Business and Economics:
- Banking, Corporate Finance and Financial Markets
- Professional Advice to Businesses
- Economics (in English - together with Scuola Superiore Sant’Anna)
- Marketing and Market Research
- Strategy, Management and Control

Political Science:
- International Studies
- Sociology and Social Policies
- Business Communication and Human Resource Management

Joint Programmes:
- Sciences of Public Administration
- Governance and Administration of the Seas (together with the Naval Academy, Livorno)
- Peace Studies, International Cooperation and Conflict Transformation (together with other areas)

THIRD CYCLE (DOCTORAL) DEGREE PROGRAMMES (3 years)

- Business Administration and Management (together with the University of Florence and the University of Siena)
- Legal Sciences
- Political Science
- Economics (together with the University of Florence and the University of Siena)
- Political Science, European Politics and International Relations (together with the Scuola Superiore Sant’Anna, the University of Florence and the University of Siena)

ONE-YEAR SPECIALISATION PROGRAMMES

- 19 One-Year Specialisation Programmes (60 ECTS credits), amongst which an MBA (Master di I livello) in Business Administration (in English), a Risk Management Programme (Master di I livello) and a Programme in Internet Ecosystems: Governance and Rights (Master di II livello)
- 1 Specialisation School in Legal professions (1 year) Working with the non-academic world
- 1 Advanced Course in Constitutional Justice and Judicial Protection of Human Rights
- 1 Summer School in Fundamental Rights, Fundamental Freedoms and Private Law after the Lisbon Treaty

WORKING WITH THE BUSINESS WORLD
A large number of internship opportunities are available with Italian and international companies, amongst which Autogrill, Fiat, Eni, Gucci Group, Illy Caffè, Indesit Company, Pirelli, Prada, Salvatore Ferragamo, Vodafone, Piaggio, Ibm, Unicoop Firenze, Ansaldo Breda, Ansaldo Energia, Era S.p.A, Hp Italia, Ikea, and a number of multinational audit firms such as Pricewaterhouse Coopers, KPMG, Ernst&Young, Deloitte.

ONE-YEAR SPECIALISATION PROGRAMMES

- Business and Economics Computer Centre (100 triboot-operated computers, 3 computer labs)
- Law Computer Centre
- Business and Economics Language media lab
- Full wi-fi coverage
- E-learning platform
- Bookshop
- Printing centre
- Self-service train ticket machine
- Student-managed web radio
- Students’ union rooms
- International relations offices in each area of study
- ATM
- Bar / Cafeteria
- Vending machines
AREAS OF EXCELLENCE IN RESEARCH

- Theory of production
- Development economics at firm, micro- and macroeconomic level
- General equilibrium theory and game theory
- Economic growth and population economics
- Pension economics
- History of economic thought
- Public Finance
- Internal auditing
- Management accounting with special focus on costing
- Marketing, consumer behaviour and consumer culture theory
- History of economics with an institutional approach
- Operational research and mathematical optimization
- Mathematical Finance with special focus on portfolio selection
- Survey methodology and small area estimation
- Population dynamics of infectious diseases
- Business and tax law
- Private Law
- Roman Law
- History of Law
- Constitutional Law and Justice
- Procedural Law
- Philosophy of Law
- Criminal Law
- Political Parties and Party Systems
- Political Corruption and Organized Crime
- Democracy in the History of Political Thought
- Political Economy Issues
- Social Policy, Participation, Citizenship and Social Exclusion
- European Union and Regional Integration in Latin America
- International Migration Law, Development and Migration
- Constitutional and Administrative Justice
- Political Philosophy of the Enlightenment Age
- Copyright Theory and Open Access Publishing
- Institutional History in Italy and Spain
- Gender Studies
- Social network analysis and Media research
- History of globalization
- History and International Relations of Afro-Asiatic Countries
INTERNATIONAL NETWORKS

- More than 15 international research programmes, mostly funded by the European Union
- Erasmus+ Study and Traineeship Programme
- 11 international cooperation agreements for the exchange of students and researchers

WEBSITES

Economics: http://www.ec.unipi.it/
Economics - International Relations Office: http://international.ec.unipi.it/
Political Science: http://www.sp.unipi.it
Law: http://www.jus.unipi.it/
Law - International Relations Office: http://www.rapp-int.jus.unipi.it/

CONTACT INFO

Economics: international@ec.unipi.it
Political Science: international@sp.unipi.it
Law: rapp.int@jus.unipi.it
DEGREE PROGRAMMES OFFERED

LONG SINGLE CYCLE DEGREE PROGRAMMES
(5 years, 300 ECTS credits)
- Architectural-Construction Engineering

FIRST CYCLE (BACHELOR’S) DEGREE PROGRAMMES
(3 years, 180 ECTS credits)
- Aerospace Engineering
- Biomedical Engineering
- Chemical Engineering
- Civil Environmental and Building Engineering
- Computer Engineering
- Electronic Engineering
- Energy Engineering
- Management Engineering
- Mechanical Engineering
- Telecommunications Engineering

SECOND CYCLE (MASTER’S) DEGREE PROGRAMMES
(2 years, 120 ECTS credits)
- Aerospace Engineering (in English only for the Space option)
- Biomedical Engineering
- Bionics Engineering
- Building and Structural Engineering
- Chemical Engineering
• Computer Engineering *(in English)*
• Embedded Computing Systems *(in English)*
• Electrical Engineering
• Electronic Engineering
• Energy Engineering
• Hydraulic, Transportation and Territory Engineering
• Management Engineering *(together with Cranfield University)*
• Mechanical Engineering
• Nuclear Engineering *(in English)*
• Robotics and Automation Engineering
• Telecommunications Engineering
• Vehicle Engineering

**THIRD CYCLE (DOCTORAL) DEGREE PROGRAMMES**

(3 years)

• Energy, Systems, Territory and Construction Engineering
• Information Engineering
• Industrial Engineering
• Civil and Environmental Engineering *(together with the University of Florence)*

**SPECIAL AND ONE-YEAR SPECIALISATION PROGRAMMES**

• 11 One-Year Specialisation Programmes (1 year, 60 ECTS)
• Summer Schools in cooperation with the University of Illinois at Urbana, Champaign (Illinois), San Diego State University (California) and the University of Tokyo (Japan)

**WORKING WITH THE NON-ACADEMIC WORLD**

The Engineering Departments are involved in a continuous activity of technology transfer towards small and medium enterprises, with a turnover of 10M€ annually. Furthermore, a number of international companies outsource research activities to the laboratories hosted by the Engineering Area. The list of companies includes: Ansaldo, AustriaMicroSystems, Avio, Boeing, Dana, Enel, Ericsson, Fiat, Intel, Magna, Pagani Geotechnical Equipment, Piaggio, PowerONE, Selex Galileo, SensorDynamics, STMicroelectronics, Thales, Yanmar, La Spezia and Livorno Port Authorities, Robert Bosch Produktie, Continental Automotive Italy.

**RESOURCES AND SERVICES FOR STUDENTS AND RESEARCHERS**

• Engineering library (54,685 books, 236 current journals, 5,212 e-journals and several specialised data banks)
• Computer centre (200 workstations, 7 computer labs, printing centre)
• 2 Bars/Cafeterias
• Full wi-fi coverage
• 50 laboratories equipped with specialised machines and instruments
AREAS OF EXCELLENCE IN RESEARCH

The Engineering Area of the University of Pisa has a well-established international reputation in several research fields, with particular excellencies in the following sectors:

AEROSPACE ENGINEERING
- Advanced chemical propulsion
- Aerodynamics of road vehicles
- Development of fly-by-wire control systems
- Fatigue and damage tolerance of aerospace structures (advanced metals and composites)
- Flow stability and control
- Low thrust space propulsion
- Space mission analysis and space vehicle design

APPLIED ELECTROMAGNETICS
- Microwave circuits, antennas and metamaterials for advanced applications
- Computational electromagnetics
- Electromagnetic propagation in complex environments
- Wireless systems for remote identification and radiolocalization

AUTOMATION ENGINEERING
- Guidance, navigation and control systems
- Oceanic engineering
- Process and control theory
- Robotics

BIOMEDICAL ENGINEERING
- Biomedical signal and image processing
- Health information technology
- Mathematical and in-vitro models of physiological and biomimetic systems
- Smart materials and multiscale fabrication for bioengineering

CHEMICAL ENGINEERING
- Environmental engineering
- Fuel technology and carbon capture
- Industrial chemical process design, control, intensification, modeling
- Industrial safety
- Materials engineering (polymers, functional materials, nanocomposites, metals, biomedicals)
- Multiphase flow, fluid mechanics and interfacial engineering
- Product design (membranes, electrodes, fuel cells)

CIVIL ENGINEERING
- Architectural design and Architectural technologies
- Landscape and town planning
- Preservation and valorisation of the historical architectural heritage
- Geotechnical design of river embankments
- Seismic microzonation
- Design of hydraulic and environmental works (river engineering restoration, coastal engineering and shoreline protection, urban drainage system, water supply and sewer systems, environmental and sanitary engineering)
- Numerical modeling in open channel hydraulics
- Advanced methods for roundabout design and flow simulation
- Freight logistics and port planning
- Mathematical models for transport demand and network analysis
- Road and runway materials, pavement and subgrade design, monitoring and evaluation
- Road safety and mitigation of road traffic noise
- Geomatic engineering
- Actions on structures
- Classical linear and non-linear elasticity
- Damage mechanics, Fracture mechanics and Fatigue
- Earthquake engineering and Structural dynamics
- Fire and explosion resistance of structures
- Structural design of bridges, buildings, industrial plants, and innovative elements (glass & grid shells, low cost buildings)
- Traditional and innovative materials for structural engineering (masonry, wood, reinforced concrete, steel, glass, fibre-reinforced composites, etc.)
Computer Engineering
- Computer Architectures
- Distributed Systems and Computer Networking
- Embedded Systems and Pervasive Computing
- Dependable and Secure Systems
- Software Engineering
- Computational Intelligence
- Information Systems

Electrical and Energy Engineering
- Acoustics and lighting technique
- Building physics
- Computational and applied electromagnetics and fluid dynamics
- Distributed generation and cogeneration
- Domestic systems
- Electric machines, power electronics and electrical drives
- Electric propulsion and hybrid vehicles
- Energy market, energy storage and energy systems optimization
- Geothermal plants
- Health, safety, quality and environment systems
- Heat transfer enhancement
- Hydrogen propulsion and fuel cells
- Internal and external combustion engines
- Microgravity heat transfer
- Non-destructive tests
- Power line communications and power system reliability
- Pulsed power and MHD measurements
- Renewable energy
- Smart Grids and VPP

Electronic Engineering
- Analog integrated system design

Energy storage and vehicular electronics
- Micro and Nano-structured devices for health care
- Micro electro-mechanical system design
- Microelectronics and system on chip
- Nanoelectronics
- Radiofrequency and microwave ICs design
- Maintenance, virtual and augmented reality
- Manufacturing planning, systems and optimization

Management Engineering
- ICT management and organization
- Innovation management and economics
- Inspection, quality control and management
• Logistics and industrial plants
• Maintenance, virtual and augmented reality
• Manufacturing planning, systems and optimization

**Mechanical and Nuclear Engineering**
• Acoustic and Bioacoustic: noise analysis and modelling
• Computational and Experimental Biomechanics and Biotribology
• Design and licensing of casks for storage and transport of radioactive materials
• Dynamics and design of Vehicles, transmissions, structural and rotor dynamics
• Dosimetry and image quality in radiodiagnostic
• Environmental and personnel neutron and gamma dosimetry
• Hydrogen Embrittlement
• Laser Applications for Manufacturing
• Mechanics of Materials and components: modelling, testing and computational analyses (fatigue, fracture, creep, wear, residual stress)
• Mechatronics and Robotics
• Surface mechanics and Tribology
• Nuclear Reactor Safety
• Qualification tests of noble radioactive gases delay beds with activated carbon

**Telecommunications Engineering**
• Cognitive Radio Systems
• Image and Signal Processing
• Remote Sensing
• Radar Systems
• Internet of Things
• Wireless Communications
• Teletraffic Control and Engineering

Currently about 300 patents have been co-authored and 10 spin-offs have been set up by staff members.
INTERNATIONAL NETWORKS

- More than 40 international research projects, mostly supported by the European Commission (5M€ annually)
- 5 European networks of excellence including the European Nuclear Education Network (ENEN)
- 12 agreements for student exchange and research cooperation
- Erasmus+ Study and Traineeship Programme
DEGREE PROGRAMMES OFFERED

LONG SINGLE CYCLE DEGREE PROGRAMMES
• Veterinary Medicine (5 years, 300 ECTS credits)

FIRST CYCLE (BACHELOR’S) DEGREE PROGRAMMES
(3 years, 180 ECTS credits)

AGRICULTURE:
• Agricultural Sciences
• Science of Herbal and Health Products (together with Pharmacy)
• Viticulture and Enology
• Biotechnology

VETERINARY MEDICINE:
• Animal Production Science and Technology
• Pedigree Dog Breeding and Animal Education Techniques
SECOND CYCLE (MASTER’S) DEGREE PROGRAMMES
(2 years, 120 ECTS credits)

AGRICULTURE:
• Agri-Production and Agroecosystem Management
• Urban Green and Landscape Design Management
• Plant and Microbial Biotechnology
• Food Biosafety and Quality (together with Veterinary Medicine)

VETERINARY MEDICINE:
• Animal Production Science and Technology

THIRD CYCLE (DOCTORAL) DEGREE PROGRAMMES
(3 years)

• Veterinary Sciences
• Agriculture, Food and Environment

SPECIALISATION SCHOOLS AND ONE-YEAR SPECIALISATION PROGRAMMES
• 3 Veterinary Specialisation Schools
• 7 One-year Specialisation programmes (1 year, 60 ECTS credits)

WORKING WITH THE BUSINESS WORLD
The Areas of Agriculture and Veterinary Sciences/Medicine have a total of 770 and 450 internship agreements each. These internship agreements have been established with companies which aim to give graduate students the opportunity to gain authentic work experience, enhancing their professional opportunities. Most of the active networks in Veterinary Medicine consist of collaboration with public bodies at national, regional and local levels in the fields of animal pathology, food inspection, social farming, rural development, animal production and toxicology.

RESOURCES AND SERVICES FOR STUDENTS AND RESEARCHERS
• Agricultural Sciences library (41,456 books, 379 current journals and 1,255 e-journals)
• Veterinary Medicine library (10,627 books, 90 current journals and 804 e-journals)
• 2 Biology Labs (70 workstations)
• 1 Chemical Lab (30 workstations)
• 1 Molecular Lab (10 workstations)
• 22 Veterinary Labs
• 1 Agriculture Computer Lab (30 workstations)
• 1 Veterinary Computer Lab (20 workstations)
• Full Wi-fi coverage
• Veterinary Hospital (24 hour service, 34 boxes for horses, 40 boxes for small animals)
• University Farm (1,300 ha)
• 3 Specialised rooms: Anatomy, Microscopy, Necropsy
• 2 ECDL Test Centres
Students interested in the Agricultural and Veterinary areas will find research activities focused in different fields like:

- Agronomy and organic production
- Agricultural chemistry
- Sustainable food production
- Biotechnology
- Food and soil microbiology
- Agricultural mechanization
- Irrigation
- Horticultural and fruit production
- Olive growing, viticulture and Mediterranean crops and products
- Multifunctional agriculture and rural development
- Social farming
- Food planning and policy industries
- Bio-technologies applied to food inspection
- Animal pathology
- Veterinary and comparative oncology
- Wildlife diseases
- Animal public health
- Microbiology of typical products
- Hygiene rules and procedures
- Animal behaviour
- Food quality in animal production
- Equine nutrition
- Equine breeding and reproduction
- Equine sports medicine
- Toxicology in food production
- Animal assisted therapy
- Parasitology
- Fisheries
INTERNATIONAL NETWORKS

• 5 ongoing EU funded projects
• Erasmus Mundus International Master of Science in Rural Development (2 years, 120 ECTS credits)
• Joint Chinese and Italian Centre on Food Safety (CSISA)
• 19 international agreements with universities and research centres
• Erasmus+ Study and Traineeship Programme

WEBSITES

• Agriculture: http://www.agr.unipi.it/
• Veterinary Medicine: http://www.vet.unipi.it/

CONTACT INFO

• Agriculture: presidenza@agr.unipi.it
• Veterinary Medicine: erasmus@vet.unipi.it
These are intensive academic courses for international students and also for graduates. They mostly last from 3 to 6 weeks and take place in an international context, with students and lecturers coming from various parts of the world and all lectures delivered in English. They are characterized by nonconventional teaching formats (workshops, tutorials, excursions, cultural events, business testimonials, etc.) and a multidisciplinary approach. Our professors are experts in their areas and have a keen interest in what they do. Our Summer Schools meet strict academic regulations: each grants at least 6 ECTS credits and the participants who successfully pass the final exams will receive a transcript.

AREAS
Agricultural and Veterinary Sciences
Humanities
Engineering
Health Sciences
Social, Economic and Legal Sciences
Mathematical, Physical and Natural Sciences
SUMMER SCHOOL
UNIVERSITÀ DI PISA

EXPLORE THIS SUMMER
EXPLORE YOUR FUTURE

SUMMER SCHOOL in TUSCANY

CONTACT INFO
International Cooperation
Lungarno Pacinotti, 44 - 56126 Pisa
Email: support.summerschool@adm.unipi.it
www.unipi.it/summerschool