



invest in tuscany

P
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Why invest in Pisa

Invest in intelligence



Pisa,
where history meets the future.



Le ali alle tue idee

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An exemplary story

I am happy to tell my story if it can help to understand the possibilities that this city offers. I was born in '64, on the 15th of February in Pisa, the first of seven children. My father was a wandering musician, my mother was a housewife, severe and religious. I was never religious – I even contrasted the Church – until I became older and was obliged to change my mind.

I was quite a good student, but when I tried to support myself with a scholarship I failed. Thanks to the long-sightedness of a businessman who believed in young people and innovation, I managed to continue studying. Even though I was good at Physics and Maths, my father wanted me to study Medicine. After many years I can now say that I didn't like it and never obtained my degree.

In spite of this, and even because of certain things I had invented in the meantime, I obtained a three-year contract when I was 25 and began teaching at Pisa University.

I wasn't exactly a normal teacher and I said many things that the academicians found hard to swallow. They could not even accept the fact that I refused to wear the toga as I taught. Among my publications of that time, you will find a small book that tries to explain my reasons.

The episode that changed my life happened in Pisa. I was visiting the Dome, and I saw the great light in the nave (now replaced but it was there) swing while it was being cleaned. This brought the idea that was central to my subsequent studies.

What happened after is history. It was not always easy to disclose my studies and support my ideas, but my city gave me many instruments, many hints and great courage – the courage to always experiment – which allowed me to do everything I did. I think that if I had been born elsewhere, it would not have happened. Pisa is a perfect place for understanding, doing research and investing. In particular for young people, who I advise to do what another irregular person without a degree (just like me) said: “Feel madness, feel hunger”.

*Galileo Galilei**

**The text, apocryphal, is freely based on the biography of Galileo.*



*Pisa, veduta aerea di Piazza del Miracoli
(Imm. Comune di Pisa-Il Rapporto sullo Stato dell'Ambiente 2006)*

Six good reasons to invest here

It possible to summarize in the following important points:

Accessibility

Excellent network of transport infrastructures

Scientific Atmosphere

Skills in the scientific-technological and economic-managerial fields

Business Atmosphere

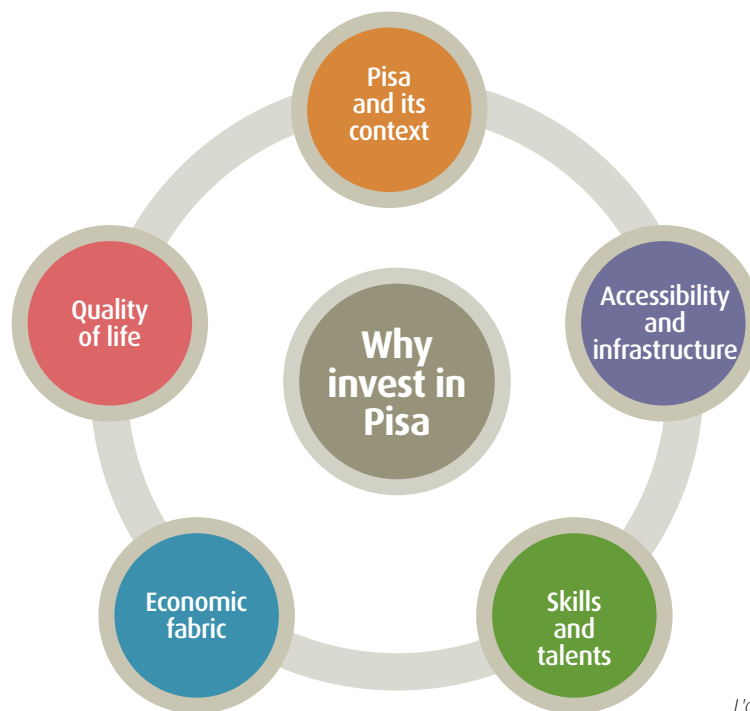
Rich and diversified economic environment

Competitive Costs lower than the Italian and European average for labour and for Rental Costs. Assistance: Services assisting in settlement and suitable spaces

Edutainment and quality of life.

Monuments and quality of life, with sea, and nature.

value drivers



For further informations:



L'anima scientifica della città





SCUOLA NORMALE
SUPERIORE

1

Pisa and its context

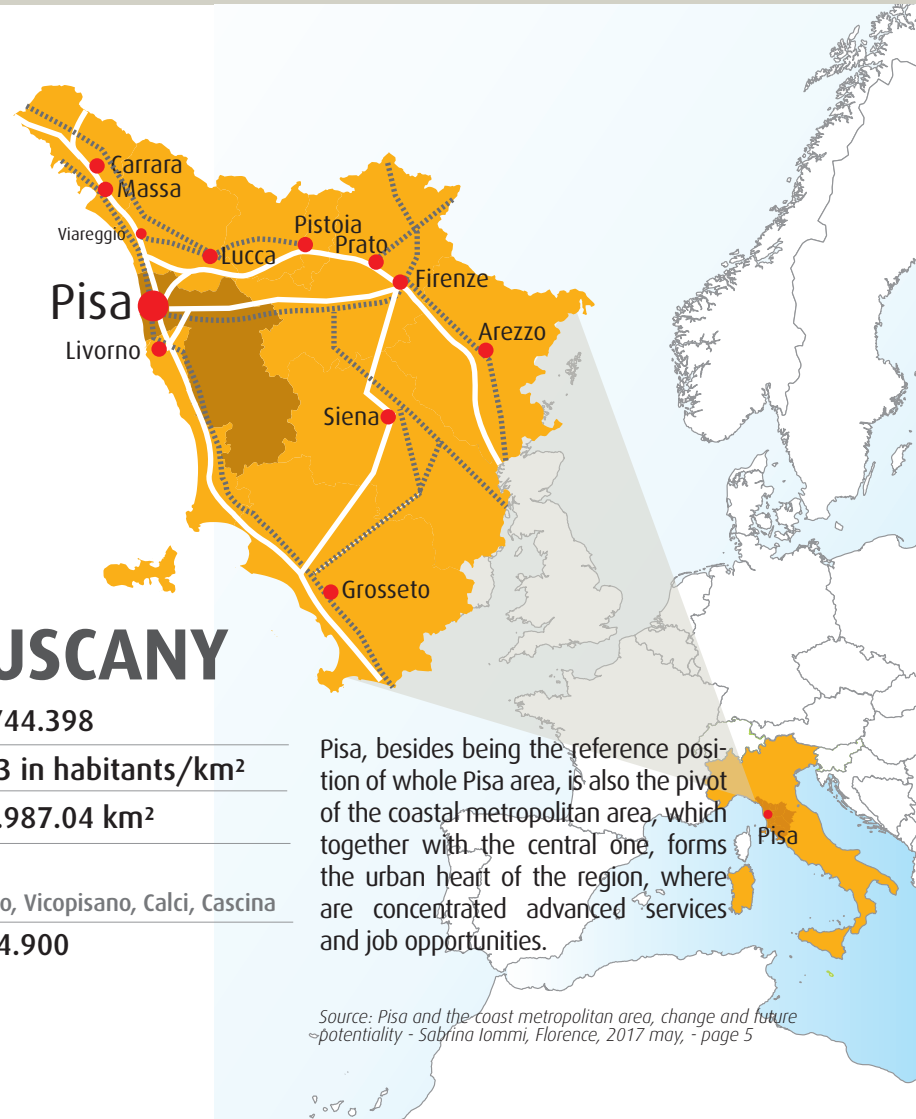
Let us look around

Pisa has an ideal dimension and a focal position. It hosts a large number of multinational companies, with a special propensity for those which operate in the field of research and innovation. It boasts an excellent quality of life.



1. Let us look around

Pisa has a central position within the Mediterranean, which over time has made it a centre of exchange and communication with the Mediterranean and the ports of Europe.



PISA

• Population	90.924
• Population density	491 in habitants/km ²
• Surface	185.2 km ²
• Population residing within the Pisa metropolitan area (2016)	194.754 Pisa, San Giuliano Terme, Vecchiano, Vicopisano, Calci, Cascina
• Companies present	43.791

TUSCANY

3.744.398
163 in habitants/km ²
22.987.04 km ²
414.900

Pisa, besides being the reference position of whole Pisa area, is also the pivot of the coastal metropolitan area, which together with the central one, forms the urban heart of the region, where are concentrated advanced services and job opportunities.

October 2016 vital statistics from Pisa Municipality

CCIAA Pisa 2016 data

Source: Pisa and the coast metropolitan area, change and future - potentiality - Sabrina Iommi, Florence, 2017 may, - page 5

For the high-tech companies

The Pisa area in Tuscany is an ideal the opportunity of fitting into a unique localization for the activities of environment, which ensures:

- the **capacity** to recruit highly qualified skills,
- **partnership** opportunities with universities and research centres acknowledged worldwide,
- **support services to facilitate their settlement, in a localization which is:**
 - competitive in terms of **costs**,
 - easily **accessible** and renowned for its **quality of life**.

To sum Up:

- Rich and diversified economic environment
- Accessibility and connectivity
- Competencies in the managerial, scientific, technologic and economic fields
- Scientific partnership opportunities with Universities and research centers
- Excellence in the following sectors: Engineering, ICT, Life Sciences, Energy...
- Competitive costs
- Quality of life
- Services of assistance to the establishment and suitable spaces

Pisa is a favorable area as far as the development of the 4.0 industry is concerned. This development is possible in a wide variety of sectors such as the mechanic, telecommunications, electronics, electromagnetism, robotic and biomedical engineering ones. All of this, is the

implementation of the guidelines of the work approved by the Regional Government of the Committee of the technological district Advanced Manufacturing 4.0, thanks to the regional industrial 4.0 platform. Examples of good 4.0 practices in Pisa are available at the DII. (Engineering Department of Information) at the following link:
<http://ww.ddi.unipi.it/ricerca/dii-e-industria-4-0.html>



The quality of life

Pisa can boast a quality of life acknowledged worldwide, which enables companies to attract or retain key skills. It has the sea, the mountain and a lot of green; it has an ideal dimension, a very mild weather. "If a paradise existed, I wish it would be like this city", thus did the dear departed Keith Haring (the last of many guests of a city which has turned welcoming reception into its hallmark) define Pisa. A unique heritage of art and history which also offers a thousand chances for amusements and encounters.



*Why Invest in Pisa - Testimonial
Interview with Prof. Guido Tonelli*



A city rich of geniuses

Besides **Galileo Galilei**

- **Enrico Fermi**, Nobel Prize for physics (1938)
- **CEP** (Pisa's Electronic Calculator), the first Italian Electronic Calculator (1957-1961)
- **1st degree course in IT technology** in Italy (1969)
- **Enrico Bombieri**, Medaglia Fields (1974)
- **Carlo Rubbia**, Nobel Prize for physics (1984)
- **Ennio de Giorgi**, Wolf Prize (1990)
- **Guido Tonelli**, Fundamental Physics Prize (2012)



Official turistic video
City of Pisa

http://youtu.be/YuGW_-V_WPg



2

Skills and talents

A campus as large as a city

Pisa's university is one of the oldest in Italy. Today it has three campuses, two of which are Schools of excellence. It hosts, among others, one of the most important seats of the National Research Council (CNR). Among Italian cities, it is the one which has, by far the highest number of students, structures, labs, professors and researchers, proportionately to the resident population.



2. A campus as large as a city

In Pisa there are three high-level university education institutions collaborating with one another in terms of both lecturers and services.

Mission of Pisa's university system:

- **Human capital factory:** training and qualification of human resources
- **Knowledge factory:** basic research and creation of new knowledge
- **Technology transfer factory:** constant interaction with the industrial world to enhance and transfer the results of the research

Subjects	Graduates – Pisa	% Pisa/Italy	% Tuscany/Italy
Engineering	1.255	3,2%	5,0%
Scientific subjects	389	4,7%	7,7%
Defence & Security	138	22,7%	22,7%
Chemistry-Pharmacy	301	3,3%	7,4%
Medicine	772	2,4%	7,5%
Agrarian sciences	219	3,3%	6,6%
Geology-Biology	405	2,9%	7,3%
Economics-Statistics	935	1,9%	4,9%
Jurisprudence	436	2,2%	5,5%
Total	4.850	2,7%	6,0%

Source: MIUR (2015)



Three universities and several talents

The University of Pisa



The University of Pisa has been founded in 1343 and is one of the most ancient and prestigious European and international institutes. Nowadays it counts around 48.000 students and 1300 professors. The institute boasts prominent professors and alumni, and some examples go from Galileo Galilei to Noble prizes like Giosuè Carducci, Enrico Fermi, and Carlo Rubbia as well as other illustrious personalities of the world of society and culture. The institution is characterized by a cutting-edge didactic research program with a particular focus on innovation and the world of work. www.unipi.it

The Scuola Normale Superiore



SCUOLA
NORMALE
SUPERIORE

Established in 1810, the Scuola Normale Superiore of Pisa is a public institute of university education with unique characteristics: selection of students purely on merit, lessons in seminar form, a deep education/research interconnection, an integrated college life, great openness to international exchanges according to the best model of Europe's Higher University Schools.

www.sns.it

The Scuola Superiore Sant'Anna



Scuola Superiore
Sant'Anna
di Studi Universitari e di Perfezionamento

The Scuola Superiore Sant'Anna is a public university institute with special status, which operates in the field of applied sciences: Economics and Management, Jurisprudence, Politics, Agrarian and Bio-technology studies, Medicine, Industrial and Information Engineering.

www.sssup.it

Formazione & Ricerca

Pisa boasts an excellent university and research system, acknowledged worldwide – holding significant positions in various international rankings:

Academic Ranking of World Universities (ARWU, Shanghai Jiao Tong University), QS World University Rankings, Times Higher Education World University Rankings...


UNIVERSITÀ DI PISA
 **Scuola Superiore Sant'Anna**
 di Studi Universitari e di Perfezionamento
 **SCUOLA NORMALE SUPERIORE**
 **Area della Ricerca CNR di Pisa**
 **Polo Tecnologico**
 **PONTECH**
 Pontedera & Tecnologia

Rankings

INTERNATIONAL SHANGHAI ACADEMIC RANKING E TIMES HIGHER EDUCATION (2017):

- **Pisa's Normale High School** is ranked among the top 9 universities worldwide and 1 in Italy
- **Scuola Superiore Sant'Anna** occupies the first position in the National and International rankings.
- **The university of Pisa** is among the first Italian academic institutions in the principal rankings indicating the best Universities in the world

OTHER RESEARCH INSTITUTE	
Research Center	ENEL
National Institute for the Nuclear Physics	INFN
National Institute for Volcanology and Geology	INGV



UNIVERSITÀ di PISA - TRAINING 2017-2018

- Degree courses (over 130 courses)
- Master (over 70 courses between first and second level)
- Summer school
- e-learning Pisa University
- Doctoral degrees
- Colleges health area, veterinary, law and cultural goods
- Further training

DEGREE PROGRAMMES AREAS

- AGRICULTURAL AND VETERINARY SCIENCES
- HUMANITIES
- ENGINEERING
- HEALTH SCIENCES
- SOCIAL SCIENCES
- MATHEMATICAL PHYSICAL AND NATURAL SCIENCES

FIRST LEVEL MASTER

- CHEMISTRY, BIOLOGY, AGRARIAN AND PHARMACY SCIENCES
- MEDICINE AND VETERINARY SCIENCES
- CIVIL ENGINEER AND ARCHITECTURE INFORMATION AND INDUSTRIAL ENGINEER
- ANTIQUITIES SCIENCE, ARTISTIC AND HISTORICAL, HISTORICAL SCIENCE, PHILOSOPHICAL, PEDAGOGIC AND PSYCHOLOGICAL SCIENCE
- LAW SCIENCE, ECONOMIC AND STATISTIC SCIENCE, POLITICAL AND SOCIAL SCIENCES

SECOND LEVEL MASTER'S DEGREES

- MATHEMATICAL, PHYSICAL, NATURAL AND COMPUTER SCIENCES
- CHEMISTRY, BIOLOGY, AGRARIAN AND PHARMACY SCIENCES
- MEDICINE AND VETERINARY SCIENCES
- CIVIL ENGINEER AND ARCHITECTURE INFORMATION AND INDUSTRIAL ENGINEER
- ANTIQUITIES SCIENCE, ARTISTIC AND HISTORICAL, HISTORICAL SCIENCE, PHILOSOPHICAL, PEDAGOGIC AND PSYCHOLOGICAL SCIENCE
- LAW SCIENCE, ECONOMIC AND STATISTIC SCIENCE, POLITICAL AND SOCIAL SCIENCE

PHD

- MATHEMATICAL, PHYSICAL, CHEMISTRY AND BIOLOGY SCIENCES
- LAW SCIENCE, ECONOMIC, POLITICAL AND SOCIAL SCIENCES
- ENGINEER AND COMPUTER SCIENCE
- MEDICINE, VETERINARY AND PHARMACY SCIENCES
- HUMANISTIC SCIENCES



For further informations:

www.unipi.it/index.php/offerta



Students e graduates

2016-2017



PISA UNIVERSITY

- **48.024 members** over 130 courses: in Mathematics; humanistic sciences, economy and business, engineer and technology, Medicine, Physics and natural sciences.
- **6941 graduates**, 11260 between PhDs, Master's degree graduates and second-level Master's degree graduates

2016-2017



SCUOLA NORMALE SUPERIORE

- **292** Students 151 mathematics, natural sciences and human sciences.
- **272** Undergraduate students, 226 graduate students in Mathematics, Physics and Natural Sciences
- **51** Undergraduate students who gained their Bachelor's degree (2016/2017)
 - 26 in the Sciences class
 - 25 in Human Sciences
- **62** PhD students who gained their Doctorate (2016/2017)
 - 30 in the Sciences class
 - 32 in Human Sciences

2015-2016



SCUOLA SUPERIORE SANT'ANNA

- **71 Professor:**
34 in disciplines related to scientific/technical and 50 research
- **285 student** (31.12.2016)
 - 172 Undergraduate students (2015/2016)
 - 378 PhD students (2016)

Student

- Industrial and Information Engineering 61
- Medicine science 56
- Agrarian and bio-technology sciences 25
- Economic and management sciences 44
- Legal sciences 56
- Political sciences 45

PhD Students

- Digital life and smart living 14
- Clinical ultrasonography & nephrology 12
- Management – Innovation, Sustainability and Healthcare 14
- Human right and conflicts management 26
- Cardiac Surgery 4
- Theory & practice of vascular access in patients on haemodialysis 11



Research & partnership

- Management and health 25
- Photonic networks engineer 4
- Diver and hyperbaric medicine

PhD+: RESEARCH VALORIZATION, INNOVATION AND ENTREPRENEURIAL MINDSET

The PhD+ programme, designed and fully developed by the University of Pisa, aims at fostering innovation and entrepreneurial mindset in Master degree students, PhD students, PhDs and academics. PhD+ consists of a series of interactive and engaging lectures combined with coaching and mentoring activities, given by top-level experts in innovation and technology transfer.

PhD+ is one of the best practice of training in research valorisation, innovation and entrepreneurship, also recognized by the Network of Design for Resilient Entrepreneurship, within the ENDuRE European project. To date, PhD+ has received many national and international awards, also thanks to the successes of its multi-awarded spin-offs.

The Pisa area exhibits one of the highest concentrations of skill and research networks in Italy and in Europe.

The Pisa area exhibits one of the highest concentrations of skills and research networks in Italy and in Europe. Pisa's university system strongly hinges around research activities, in fact, Public research alone can count on more than 3.000 researchers this boasts collaborations with the most important and prestigious companies in the world and it is also at the origin of several start up companies whose activities are increasingly oriented towards research and development. The city has even attracted leading companies in the R&D area, also favoring its own development in this domain.

Key players

The university system of Pisa is strongly developed in activities of research:

- **University of Pisa**
 - 1.295 Professors and Researchers
 - 1.537 technical employees
 - 20 department
- **Scuola Superiore S.Anna in Pisa**
 - 121 Professors and Researchers, 237 research fellows and 61 research institutes, 6 department of research
- **Scuola Normale Superiore in Pisa**
 - 84 Professors and Researchers
 - 234 technical employees
- **The research Area of Pisa's National Research Council (CNR)**
 - boasts 1.100 employees research
- **Pisa's University Hospital**
 - University Hospital and is advanced research activity – in collaboration with Pisa University and Sant'Anna's Higher School.

Research places



PISA UNIVERSITY

237 laboratories. 7% AGRICULTURAL, 16 Pisa chemistry, pharmacy, biology, 1 % low, economic and political 14% computer science, mathematics and physics, 20% engineer, 20% health science; 8% natural science, 7% humanities, 7% veterinary science

Library system allocated in 6 poles:

Pole 1 agriculture, economy, veterinary medicine

Pole 2 Low and Political Science

Pole 3 chemistry, mathematics, computer science, physics, natural and environmental sciences

Pole 4 medicine, surgery and pharmacy

Pole 5 engineer

Pole 6 English, linguistic, german, slavic, philosophy and history, languages and literatures, history of the art.

Museum system allocated in 4 poles representing 9 between museums and collections: museum of tools for the calculation, museum of the graphics museum of Egypt, chalks collection of ancient art, museum anatomical veterinarian, museum human anatomy, museum pathological anatomy, museum and botanical garden and Natural History Museum.

Further informations:

<https://www.unipi.it/index.php/ricerca>



SCUOLA NORMALE SUPERIORE

- 84 Professors and research;
- 234 technical employees

Centers, groups of search and laboratories:

- Smart labour (Multidisciplinary approaches for research and technology)
 - Nest labour;
 - Biology labour
 - De Giorgi Center;
 - Docstar labour;
 - Saet labour
 - Other groups of Mathematic and Natural science
- The Centre on Social Movement Studies (Cosmos)

For further informations:

<https://www.sns.it/ricerca/trasferimento-tecnologico>



SCUOLA SUPERIORE SANT'ANNA

- 121 Professors and Researchers, 237 research fellows;
- 19.0 Million Euro in research costs;
- 6 research scientific-technological institute

ICT Area

TeCIP Institute (Technologies of the Communication and information) – 32 professors and research, 50 research fellows and 3 areas: Communication Inrete Lab; Embedded systems RETIS lab; Perceptual robotics PERCRO lab;

Life Science Area

Life Science Institute, 21 professors and rearch, 26 research fellows 3 research area: Agroecosystem services; Plant and crop sciences; Translational medicine;

Robotics Area

Robotics Institute: 17 professors and research e 119 research fellows e 8 research areas: Artificial hands; Creative engineering design; Neurorobotics; Robot companion for citizens; Senso signals and information processing; soft robotics; Surgical robotics and technologies; Translational neural engineering.

For further informations:

<https://www.santannapisa.it/it/ricerca/collaborazioni-con-impres>





CNR

The CNR Research Area Pisa (Nacional Research Council) has 1.100 employees and 13 research institutes.

ICT AREA

- **Institute of Information Science and Technology "Alessandro Faedo":**
 - 116 Researchers and technologists, 38 associates, 86 research fellows...
 - Networking (Domotics, Internet Services Technology, Wireless Networks); Software (Formal Methods & Tools, Software Engineering & Dependable Computing, System & Software Evaluation); Knowledge (Human Interfaces in Information Systems, Networked Multimedia Information Systems, Knowledge Discovery & Data Mining); Visual & High Performance Computing (High Performance Computing, Signals & Images, Visual Computing Laboratory); Flight & Structural Mechanics.

- **Institute of Informatics and Telematics**

- 63 Researchers and technologists, 14 associates, 41 research fellows .. –
- Ubiquitous Internet; Security, Reliability, and Privacy for the Internet of the Future; Algorithms and Computational Mathematics; Web Technologies for the Internet of the future, Taxonomies, Thesauri and Classification Systems.

- **Institute of Computational Linguistic**

- 21 Researchers and technologists, 2 associates, 13 research fellows ...
- Automatic Processing of Text and Computational Philology; Natural Language Processing and Knowledge Extraction; Resources, Standards, and Infrastructure; Computational Models of Language Processing

- **National Institute of Optics (INO)**

- 21 Researchers and technologists in the Pisa headquarters – Optics, Photonics and Plasmas

LIFE SCIENCE AREA

- **Institute of Clinical Physiology (IFC, HQ in Pisa)**

- 500+ employees
- 129 researchers and technologists, 18 associate researchers, 54 holders of research grants, 42 PhD students and 101 affiliated researchers, – Cardiovascular diseases, with integrations and ramifications on the relationships (physiologically and disease-wise) between heart and lung, heart and metabolism, heart and environment, heart and brain, heart and cancer
- Approximately 350 publications in peer-reviewed international magazines in 2016.

- **Institute of Neurosciences (IN, HQ in Pisa)**

- 18 researchers and technologists, 2 associate professors.
- Processing of the membrane's muscular proteins; Chemistry and Biology of natural compounds; Epidemiology of ageing and Biostatistics; Neuroplasticity
- around 200 "peer-reviewed" publications/ per year (average "Impact Factor" of 5).



- **Institute of Biomedical Technologies (Pisa unit)**

- 2 researchers
- Somatic Stem Cells
- Molecular Oncology

- **Institute of Biophysics (Pisa unit)**

- 9 researchers and technologists, 6 associate professors, 4 holders of research grants – Photoinduced processes in Biomolecules and Cells; Organization models and complex.
- systems dynamics; Protein structure and dynamics; Biodevices and biomolecules; Biophysics and molecular biology in the study of environmental processes.

- **Institute of Chemistry of Organometallic Compounds (Pisa unit)**

- 34 researchers and technologists, 5 associate professors – Development of analytical methods and instrumentation; Raman and LIBS spectroscopies and multi-spectral imaging; Set up & application of NMR and EPR techniques; Preparation & characterization of functional polymers and polymer-based nano-composites; Models & methods

for studying complex systems from (bio) molecules to advanced materials.

- **Institute of Biology and Agrarian Biotechnology (Pisa unit)**

- 12 researchers and technologists, 3 holders of research grants
- Soil Microbiology; Mutagenesis and Differentiation.



The Foundation Stella Maris, through own Institutes, develops an intense clinical activity for the infancy and the adolescence. Has started an intense activity of study and research in the sector of the neurological illnesses

The main activities of the Foundation are:

- Assistance, care and rehabilitation
- Didactics and Formation
- Teaching and training
- Scientific Search
- Scientific Publications



**PISA'S
UNIVERSITY HOSPITAL**

Pisa's University Hospital

Hospital founded in the 13th century:

- New structure with 70 operating units and 900 beds
- 5 000 employees
- 67 000+ admissions; 550 000+ patients for outpatient clinic services; 25% of patients from other Italian regions
- Transplants (source: AOUN, 2016 data): – 48 of kidney, 136 of liver, 84 of kidney/pancreas, 12 of pancreas

For further informations:
www.ao-pisa.toscana.it



Technology Transfer Factory

Thanks to its adhesion to the most prestigious international research projects, Pisa's university system constantly invests in frontier researches of international relevance, by systematically exploiting the results in terms of:

- Production of national, European and international Patents
- Creation of SPIN OFF businesses

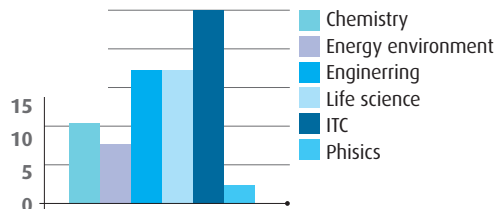
Patent's portfolio - Pisa University

as at 31.12.2016

APPLICATIONS	PATENTS
99 Italian National applicants	87
11 US applicants	7
17 EUROPEAN applicants	9

438.133 Euros of valorization of active patents, of which more than 50% concerning the last three years

tribution of patents granted by Pisa University



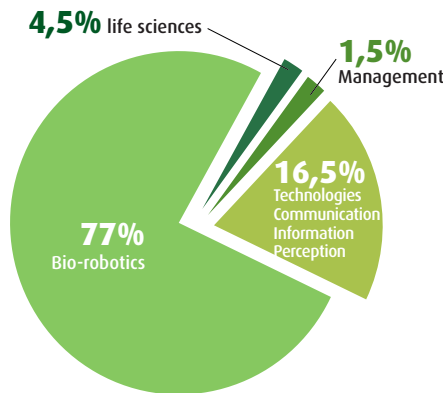
Spin-off – Pisa University

as at 31.12.2016

Accredited companies out of totale of 53 examined	33
Accredited companies of which, 12	33
Companies with 2012 turnover in excess of 1 millions E	2
Awards won by the currently accredited spin-offs	99
PhDplus's+ Spin-offs	12

Source: University of Pisa

Percentage of Scuola Sant'Anna active patents



Source: Scuola Superiore S. Anna
List of available patents accessible from the www.sssup.it/brevetti

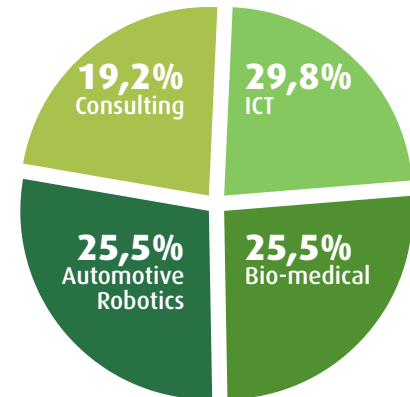
Patents' Portfolio – Scuola Sant'Anna

International patents	88
National patents	70
Total active patents	158

- 11** brands
- 3** designs at EC level
- 12** US and enjoyment agreements/licences/cessions within a technological context

Source: Scuola Superiore S. Anna

Percentage active Spin-off of Scuola Sant'Anna



Source: Scuola Superiore S. Anna
www.sssup.it/spinoff



3

Operating costs

The vocation to innovate, and thereby save

The cost of work in Tuscany is the lowest among the regions of Italy's centre-north, the costs of office rentals are nearly one-quarter of those in Rome and Milan. Offices of every size, equipped according to very high standards, are either ready or underway.



3. The vocation to innovate, and thereby save

Pisa is a competitive localization in terms of operating costs

Work costs

The cost of work in Tuscany is in fact lower than the Italian average.

Link www.investintuscany.com

Office rental costs

Office rentals are likewise moderate:

- 134 EUR/square meters/per annum on average compared to: 500 EUR/square meters/per annum in Rome and 400 EUR/square meters/per annum in Milan (Cushman & Wakefield, last date)

PRICES TO BUY/SELL AND RENT INDUSTRIAL FUNDS

- COSTO MEDIO DI ACQUISTO/VENDITA IN TOSCANA: 880 EURO/mq
- COSTO MEDIO DI LOCAZIONE IN TOSCANA: 3 EURO/mq

FONDI PER USO PRODUTTIVO - PREZZI PER ACQUISTO/VENDITA/LOCAZIONE (second metà anno 2014)

CITY	AREA	TYPE	TIPOLOGY	PURCHASE VALUE	RENTAL VALUE
				€/MQ (SUPERFICIE NETTA)	(€/MQ AL MESE)
				AVERAGE	AVERAGE
PISA	B1_CENTRAL	LABS	STANDARD	1.010	6,1
	D1_OUTLYING	ARTIGIANAL PREMISES	STANDARD	725	-
	E1_EXTRA URBAN	LABS	STANDARD	815	4,8
	E1_EXTRA URBAN	INDUSTRIAL PREMISES	STANDARD	750	4,1
	E1_EXTRA URBAN	INDUSTRIAL PREMISES	STANDARD	805	4,3
	E1_EXTRA URBAN	LABS	STANDARD	815	4,4

Source: Estratto di pagine 16 e 17 della "Guide To Business Cost" www.agenziaterritorio.it

2 incubators might host start ups and R&D activities

- Incubator of Pont-Tech – Pontedera / CERFIT;
- Incubator of Navacchio’s Technological Pole - a business incubator was recently activated under the Cittadella Galileiana (www.cittadellagalileiana.eu)



"Guide to business costs" (pages 9-12)
<http://www.investintuscany.com/download/InvestInTuscanyBusinessCosts-latest.pdf>



http://www.comune.pisa.it/uploads/2017_09_7_13_49_03.pdf

Cittadella Galileiana

Manufacturing costs

Pisa is a competitive localization in western Europe in terms of operating costs for a manufacturing activity

• The cost of work in Italy is in fact lower than the western Europe average (Eurostat) and the cost of work in Tuscany is lower than the Italian average.

Comparison of labour costs Tuscany against other foreign regions Transportation / Logistics (Shared services centre)

TRANSPORT/LOGISTICS (SHARED SERVICES CENTRE)		CATALONIA (SPAIN)	RHONE-ALPS (FRANCE)	NORTHERN RHINELAND - WESTPHALIA (GERMANY)	AVERAGE LABOUR COST ABROAD €	TUSCANY (ITALY)
		TOTAL LABOUR COST €	TOTAL LABOUR COST €	TOTAL LABOUR COST €		TOTAL LABOUR COST €
GENERAL MANAGEMENT	BUSINESS PLANNING ANALYST	72.606	75.021	97.190	81.806	75.073
	ACCOUNTANT	53.402	56.052	77.429	62.294	50.749
FINANCE	CREDIT CONTROL OFFICER	39.184	42.002	57.740	46.309	37.194
	HEAD OF FINANCE AND ADMINISTRATION	155.078	151.557	181.072	162.569	187.665
	JUNIOR ACCOUNTANT	45.017	47.553	65.681	52.750	42.888
MARKETING	SENIOR ACCOUNTANT	61.017	66.273	88.839	72.185	62.168
	CUSTOMER SERVICES MENAGER	106.758	93.897	132.825	111.160	113.638
	COMPUTER OPERATOR	32.931	37.597	48.949	39.826	33.711
INFORMATION TECHNOLOGY	DATA ENTRY CLERK	24.807	29.250	38.961	31.006	28.106
	FACILITIES/OFFICE SERVICES SPECIALIST	47.944	50.324	69.515	55.928	45.563
ADMINISTRATION	SECRETARY	35.243	40.237	52.386	42.622	36.078

Source: Update EY benchmark data based on Eurostat data. Invest in Tuscany Business Cost pag. 12

Many places where to work

Solutions for Relocation

Cittadella Galileiana – Pisa

- The Citadel Galileiana represents a real Technological Scientific Park, where business, network, culture interactions of which of a wider project. The jobs of preparation are in phase of completion

Polo di Attività Montacchiello – Pisa (Forti Holding)

- 5,000 sqm of offices under construction - with an "LEED" Gold standard
- (6 000 sqm of offices already occupied – 50+ companies, 1,000 employees)

Pont-Tech Incubator – Pontedera / CERFITI, Research and Training Centre for Innovation and Technology Transfer

Incubator, Accelerator, Virtual Office Polo Tecnologico of Navacchio

- 10 000+ sqm of spaces for businesses and start-ups
- Incubator: 20 modules, over 1,200 square metres



Settlement solutions

<http://www.comune.pisa.it/it/default/21926/PUBBLICAZIONE-WHY-INVEST-IN-PISA-2017.html>





4

Accessibility and infrastructures

All the roads lead to Pisa

Two complementary international airports, a railway network of the highest importance, three highways and one freeway, one port, one freight terminal. Pisa's infrastructures make it easily accessible from every side by every means.



4. All the roads lead to Pisa

Pisa finds itself in a unique position within Tuscany, easily reachable from the whole of Europe and from the Mediterranean countries. It is additionally endowed with an excellent network of infrastructures for the movement of goods and persons.

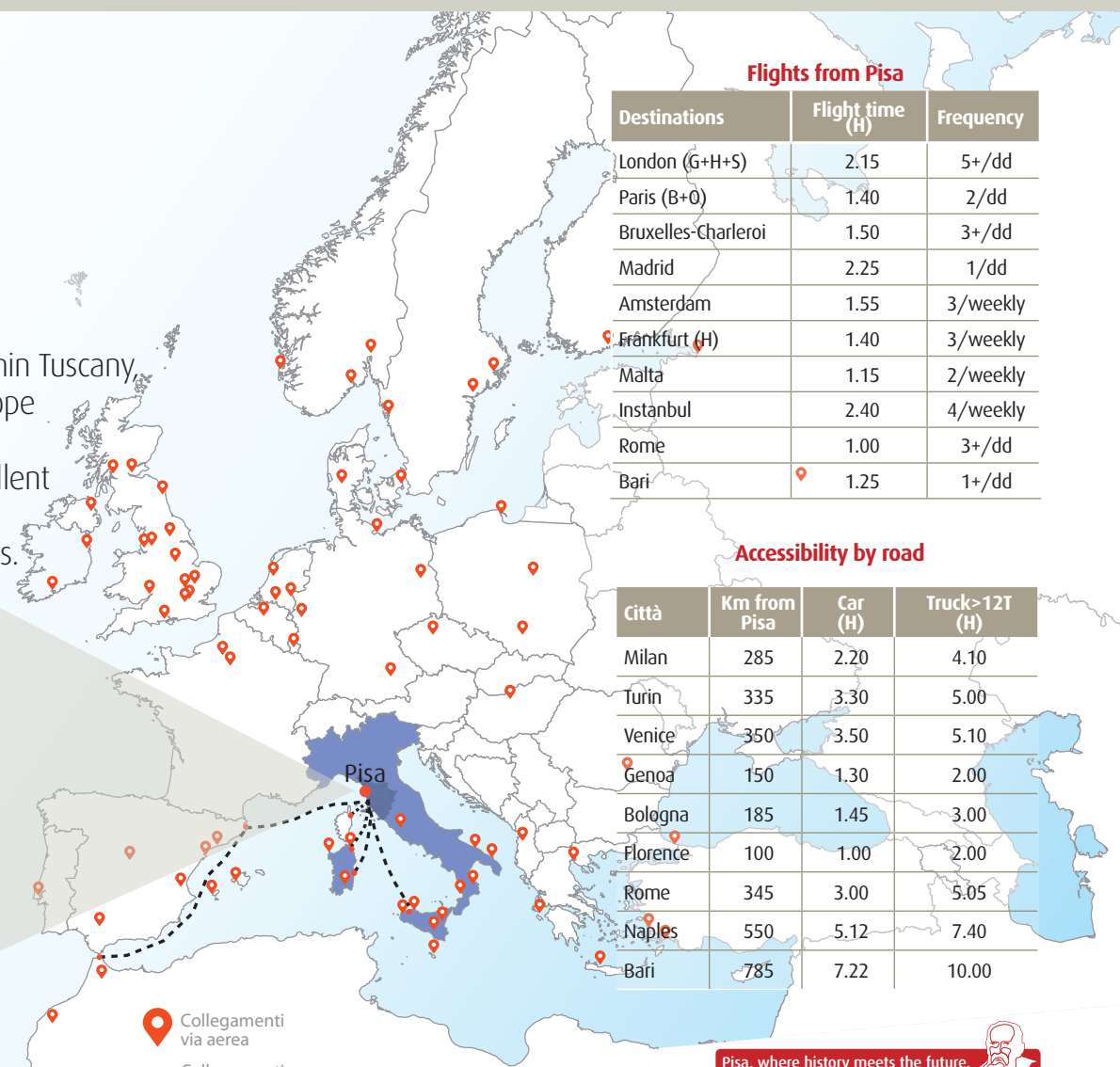


Flights from Pisa

Destinations	Flight time (H)	Frequency
London (G+H+S)	2.15	5+/dd
Paris (B+O)	1.40	2/dd
Bruxelles-Charleroi	1.50	3+/dd
Madrid	2.25	1/dd
Amsterdam	1.55	3/weekly
Frankfurt (H)	1.40	3/weekly
Malta	1.15	2/weekly
Istanbul	2.40	4/weekly
Rome	1.00	3+/dd
Bari	1.25	1+/dd

Accessibility by road

Città	Km from Pisa	Car (H)	Truck > 12T (H)
Milan	285	2.20	4.10
Turin	335	3.30	5.00
Venice	350	3.50	5.10
Genoa	150	1.30	2.00
Bologna	185	1.45	3.00
Florence	100	1.00	2.00
Rome	345	3.00	5.05
Naples	550	5.12	7.40
Bari	785	7.22	10.00



Collegamenti via aerea
 Collegamenti via mare

Pisa, where history meets the future.

The city of Pisa configures itself as a real complex logistic node of the North Tyrrhenian sea, integrated with trans-European transport corridors, given the vast network of intermodal services present within the area. In particular, the infrastructures present in the city jointly with the re-opening of the "porte vinciane", are reinforced by strategic harbor infrastructures located alongside the coast, mainly Livorno (core of the Ten-T network) and Piombino, as well as other logistical facilities such as the international airport of Guasticce and Faldo's motor pool.

Pisa exhibits an excellent network of transport infrastructures which facilitates the city's accessibility

- a nearby international airport (less than 5 km from downtown Pisa), Tuscany's top airport and among the top 10 airports in Italy
- another international airport in Florence, 85 km from Pisa
- railway connections enabling one to be in less than: 3 hours in Rome and 3 and a half hours in Milan (and only 1 hour from Florence)
- a highway network enabling one to reach in less than 4 hours the other major Italian cities: Milan, Rome, Turin, Venice.



Nautical and ports:
http://www.comune.pisa.it/uploads/2017_09_7_13_47_54.pdf



Navicelli:
http://www.comune.pisa.it/uploads/2017_09_7_13_48_26.pdf



Flights connections

Pisa's "Galileo Galilei" airport, the top airport in Tuscany and among the top 10 airports in Italy in terms of passenger traffic (only 1,5 km away from the city)

- 4.683.811 passengers (2014 – a rise of 4,6%)
- regular flights to the main Italian and European cities
 - London, Paris, Munich, Berlin, Amsterdam, Charleroi, Madrid, Barcelona, Valencia, Dublin, Istanbul...
 - Rome, Cagliari, Palermo, Catania, Bari...
- seasonal flights to New York (USA) and many other European cities
- closeness to the city center, railway connection with Pisa's station



Accessibility goods

Pisa is at 5 hours driving from (by truck>12T) the other major Italian cities: Milan, Turin, Venice, Bologna and Rome

Pisa benefits in fact from an excellent highway network:

- North-South highways: A12-E80 Genoa-Livorno (+ Civitavecchia-Rome) and A15-E33 La-Spezia-Parma + A1-E35 Parma-Milan
- East-West airway: A11-E76 Pisa-Florence

Pisa's airport boasts a Cargo Village for air freight

- with a handling capacity of 30 000T, 4 200 square meters of warehouses, 6.950 square meters of handling/car parking service areas by the air-side and 7.300 square meters of a handling/car parking service area by the land-side

Pisa is located near 2 of the top 6 Italian ports:

- Livorno's Port (the 6th Italian port), 25 km from Pisa, Genova's Port (the 2nd Italian port), 165 km away



Railway network

Main station right in the city centre.

Direct connections with other cities in Tuscany and Italy Florence (1h/1h15 min), Livorno (15/20 min)... Rome (2h30/2h50) , Genoa (1h45/2h15), Turin (4h00/4h15)...

Connections through high-speed trains with Milan (3h10/3h20), Bologna, Venice, Rome, Naples... – via Florence



Highway network

– North-South highways:

- A12-E80 Genoa-Pisa-Livorno +Civitavecchia-Rome
 - A15-E33 La-Spezia-Parma + A1-E35 Parma-Milan
- East-West highway :
- A11-E76 – Pisa-Florence

The Inland Navigation System

The system of inland water with Navicelli canal will connect Pisa with the Porto of Livorno.

- A width of 16.5 km
- A surface of 31.60 m

http://www.comune.pisa.it/uploads/2017_09_7_09_38_51.pdf 5
 LIVORNO's NAUTICAL AND PORT sheet

http://www.comune.pisa.it/uploads/2017_09_7_09_43_38.pdf
 NAVICELLI's sheet





Besides the municipal wi-fi infrastructure, the whole city of Pisa is equipped with **optical fibre**, and most of it with **ultrafast fibre**

INFRASTRUCTURES OF A SMART CITY



Infrastructures WiFi (2015)

27	Hotspot
80	Access points
92.720	square meters of cover area
79.560	Registered users
94%	Customers positiv (since january 2015)
1.080	Daily connection

The city of Pisa invests in smart technologies for the sake of a significant reduction in the emission of CO2:

- **People Mover** will ensure a fast connection between airport and station, thereby facilitating the tourist and business flow from and to the airport
- **E-Mobility**, the capillary infrastructure for electric cars
- **Bike Sharing** (www.ciclopi.it)
- **Info-mobility** boasting traffic detectors and panels for car drivers Also underway are the Car Sharing and Electric Busvia

Route projects which will take one from the station to Cisanello Hospital and which can count on a network of power stations for the utilization of electrical cars.

Pisa sceglie il futuro.



MORE PRACTICAL

- 1330 parking spaces in the San Giusto/Aurelia Station.
- San Giusto/Aurelia Station, two minutes from the FS/Pisa Central Station and two minutes from the Airport.

MORE TECHNOLOGICAL

- Totally automated.
- Cost-effective power supply.
- Environmentally friendly.

MORE CONVENIENT

- A run every 5 minutes.
- 365 days a year, from 6.00 a.m. to 12.00 a.m.
- Discounts for Carpooling users



1760 m
route length



5 minutes
travel time
including stopover



107 seats
per car



40 Km/h
maximum
speed



2 trains
operating at the
same time



Pismoover is active 365 days a year, from 6,00 to 24,00 The car parks are always open. Any change will be published on this site.

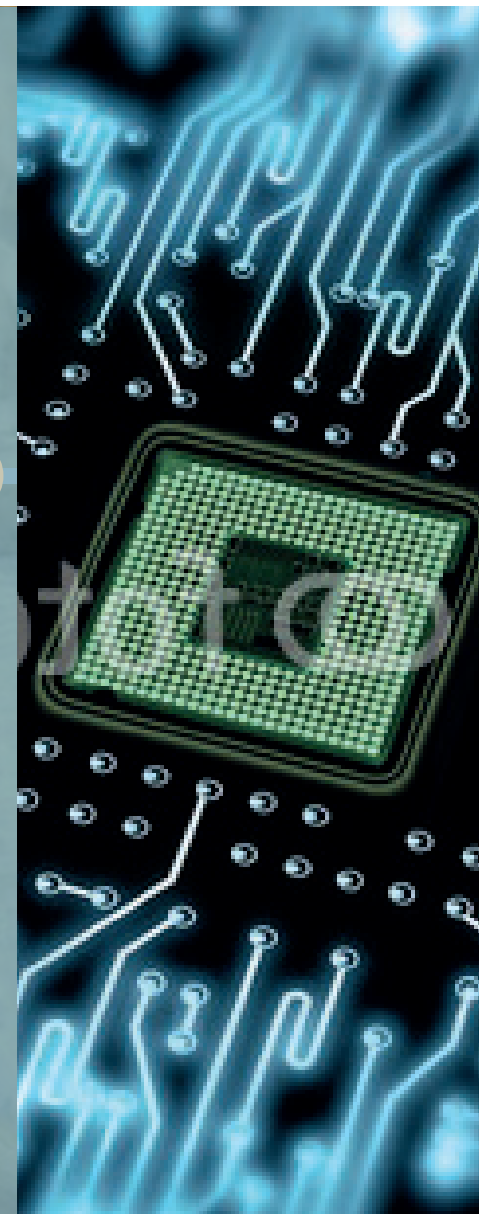


5

The economic fabric

Fertile ground for innovation

Pisa's area boasts a rich presence of manufacturing industries brimful of quality and history (the legendary Vespa was born here). It is Tuscany's number one in province in terms of number of ITC companies. Many were born here, others have chosen it as their natural and functional seat due to the opportunities it offers.



5. Fertile ground for innovation

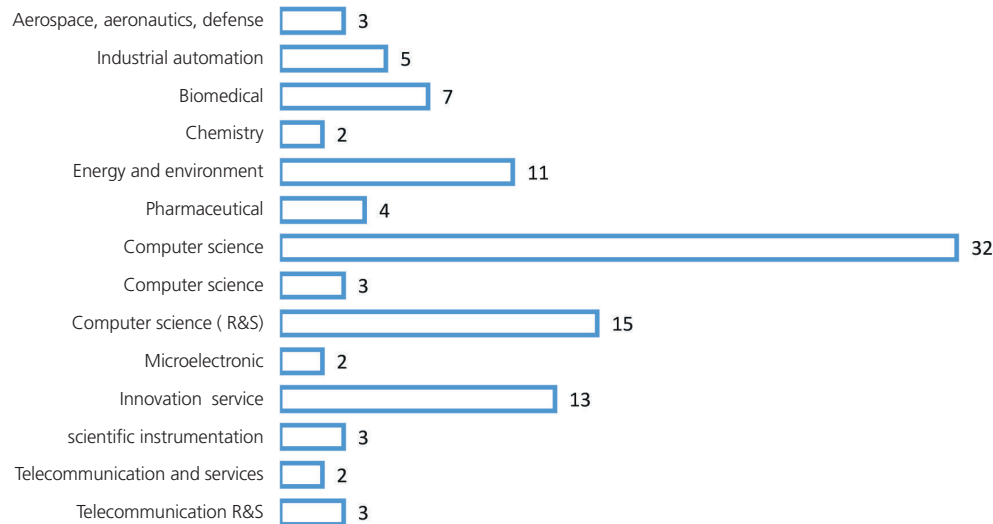
Dynamic and diversified territory where traditional companies and innovative ones coexist.

Local Social Fabric

The Pisa area represents an important productive pole in Tuscany's economy, second only to that of Florence. It has a strong specialization in the fields of light vehicles – including a world leader in Piaggio (3 000 employees) – and pharmaceutical drugs – including Baxter, Octopharma, Guidotti (Menarini), Abiogen Pharma, Farmigea, Laboratori Baldacci...It represents reference sites of large international groups such as Continental (car components, 1 000 employees – including a R&D centre) or Saint-Gobain (glass, 300+ employees) In the city of Pisa itself, a substantial concentration of research, development and technical support activities are linked to information and communication technologies.



Distribuzione settoriale delle imprese high-tech nel comune di Pisa



Source: Istituto management Scuola Superiore Sant'Anna "PISA HIGH-TECH IMPRESE AD ALTA TECNOLOGIA, FILIERE TECNOLOGICHE, GESTIONE DELL'INNOVAZIONE, PERFORMANCE". autori Cristina Marullo e Andrea Piccaluga

Foreign companies

The Pisa Province boasts **50 sites** controlled by **foreign companies**, with a great diversity of sectors and activities, and the presence of several world leaders

Manufacturing & Logistic – automotive (Continental), building material (Knauf, Lafar-

geHolcim), glass (Gerresheimer, Saint Gobain), chemistry (Caparol-Daw, McPhy), mechanics (DAB Pumps-Grundfos, Pentair Water, Smith Bits Schlumberger, United Technologies), consumption electronics (Linn), pharmaceutical drugs (Baxter, Octopharma), food (Carlsberg, Heineken), lea(K-ering)...

Pisa's economy - High-Tech

	Local Units %/Tuscany	Staff %/Tuscany
Life sciences	12%	7%
Mechanical	27%	12%
Chemistry	16%	13%
Electronics and optics	12%	3%
Energy and environment	21%	42%
ICT	21%	21%
Innovation services	20%	28%
Other	32%	39%
TOTAL	19%	13%
Unit local Total	291	
Enterprises in Pisa	239	
Local Staff	6.135	
Staff avarege	21	
Revenue	1.053.225.548	

Source: Toscana High-Tech,
by Scuola Superiore S. Anna (2015)

On February 1st 2017, **ISI Foundation** (within the Chamber of Commerce) has started with the purpose to innovate and to establish business development. The Scientific committee consists of professional associations, entrepreneurs and the 3 High Schools of Pisa.

Service, ICT & R&D – engineering (Altran, Aarhus Geophysics), software (IOS Trading, Aspen Technology), electro- nics (AMS, Dialog Semiconductor, Ericsson, Maxim Integrated), call centers and shared service cen- ters (Experian, Vodafone)... Pisa is considered the cradle of Italian information technology, with the first electronic calculator (CEP) in the mid 50s. The area of Pisa sees a concentration of favorable factors of development:

University, from which comes 60% of graduates in technical and scientific information, the National Research Council (CNR) and also the activities of the three Innovation Poles (Navacchio Pole in Hi-tech; Sant'Anna Valdera in the biomedical, micro-engineering, robotics, Pont-Tech as incubator). The results show that there is an incidence of 6% of patents registered in Italy and the 8% of the Italian university spin-offs. The province of Pisa is the second in Tuscany by High Tech start-ups, with companies especially in ICT, Advanced mechanics and Chemistry.

Target Sectors are

Pisa is considered the cradle of Italian information technology, with the first electronic calculator (CEP) in the mid 50s. Target sectors are:

- ICT and Robotics
- Life Science

Tuscany has the F.O.R.T.I.S. "Technological District", which is an organisation of clusters in the ICT & Electronics sectors:

- Photonics, Optoelectronics, Robotics, Telecommunications, ICT and Space.

It brings together more than 700 companies - representing 27,000 employees - and the University system and research.

The cluster is supported by the Regione Toscana.

Source: Istituto management Scuola Superiore Sant'Anna "PISA HIGH-TECH IMPRESE AD ALTA TECNOLOGIA, FILIERE TECNOLOGICHE, GESTIONE DELL'INNOVAZIONE, PERFORMANCE" . autori Cristina Marullo e Andrea Piccaluga

ICT

ICT Sector Pisa, the top Tuscan Province for numerous companies in ICT, has seen the birth of and has attracted many leading Italian and International companies in the various segments of ICT "Technological District", which is an organisation of clusters in the ICT & Electronics sectors:

Software:

- Acta, Apparound, Aspen Technology, Insurance Online, ION Trading, List Group, PC System...

Digital content & media:

- Biobeats, Italiaonline, Tiscali - istella, Synthema...

Electronics/Microelectronics:

- AMS, Dialog Semiconductor, Ericsson, Maxim Integrated and Spaced

Consultancy services in Technology and Information Technology It brings together more than 700 companies - representing 27,000 employees - and the Uni-

<http://www.festivalinternazionaledeellarobotica.it/it/session/investors-day/>

<http://www.internetfestival.it/eventi/bootstrap-2017-startupitalia/>



Multinationals in province of Pisa

http://www.comune.pisa.it/uploads/2017_09_8_12_12_49.pdf

versity system and research:

- Altran, Aruba, Exis, Extra, Sysdat.it, Tea Sistemi, Team Duemila, TD Group, Aarhus Geofisica Srl, Atmosphere Srl, Bureau Veritas, Steam Srl, Steamcert Srl, Tecnalnia Italy

ICT - Foreign Companies

- Altran (technology consulting & outsourced research) The cluster is supported by the
- Apparound (software - CPQ/Configure, price & quote) Regione Toscana.
- Aspen Technology (software for process industries)
- AMS/Austriamicrosystems (microelectronics - sensors)
- Dialog Semiconductor (microelectronics - semiconductors) www.optoscana.net
- Ericsson (Electronics - photonics)
- Italiaonline/Libero (digital media)
- ION Trading (software - fintech)
- Maxim Integrated (microelectronics - semiconductors)
- Unique Lights (electronics - LED)
- Vodafone (telecommunications)

ICT - Italian Companies/Start-ups

- Aruba - Exentrica (computer services - security)
- Extra (computer services)
- Sysdat.it (consultancy, IT services and solutions)
- TD Group (computer services)
- Exis (computer services for Oil & Gas)
- Tea Sistemi (engineering & software for Oil & Gas)
- Insurance Online (software - fintech)
- List (software - fintech)



- PC System (enterprise management software)
- Syntheta (computational linguistics)
- Tiscali (digital media - search engine "istella")
- Acta (software - industrial and nuclear security)
- BioBeats (digital media - e-health)
- Erre Quadro (software - IP)
- IngeniArs (software and electronics - space, telemedicine, vehicles, energy)
- Kiunsys (software and electronics - mobility/ Smart City)
- NetResults (telecommunications - components/ network equipment)
- Wittech (telecommunications - wireless)
- QB Robotics (robotics - Natural Motion™ engines)
- Marwan Technology (optics - laser)
- PlasmaTech (optics - laser)
- JOS Technology (electrical systems)

Life Sciences

The Pisa area represents an important productive pole in Tuscany's economy, second only to that of Florence. Pisa has witnessed the creation of, and has attracted, several leading Italian and international companies across the different Life Sciences segments, such as:

- Guidotti (Menarini group), Abiogen Pharma, Farmigea, Laboratori Baldacci... Baxter (USA), Octapharma (Svizzera)

Pisa currently boasts around 40 companies and more than 850 jobs in activities associated with the Chemical-Pharmaceutical and Biomedical fields. Most of these companies carry out in Pisa activities focused on the production, research and development functions.

Life Sciences - Companies

Leading companies

- Baxter (human albumin)
- Octapharma (plasma)
- Guidotti - Menarini group (cardiology e diabetics)
- Abiogen Pharma (Primary Care and rare diseases)
- Farmigea (ophthalmology)
- Baldacci Labs (drugs, medical devices, food supplements)
- Pharmanutra (nutraceutical)
- Gensan (nutraceutical)
- Regulatory Pharma Net

Smart Specialisation Strategy S3

Pisa contribute to develop to the three priority of the Tuscany technology:

- ITC photonics, chemistry and nanotechnology
- Incubator and Technological Pole in Tuscany

Per approfondimento:



start-up innovative



Why Invest in Pisa Hi tech

	% Local Units/ Tuscany	% persons/ Tuscany
Life Sciences	12 %	7 %
Advanced Mechanics (of which Robotics)	27 %	12 %
Chemistry	16 %	13 %
Electronics	12 %	3 %
Energy & Environment	21 %	42 %
ICT	21 %	21 %
Services for innovation	20 %	28 %
Other	32 %	39 %
TOTAL	19 %	31 %



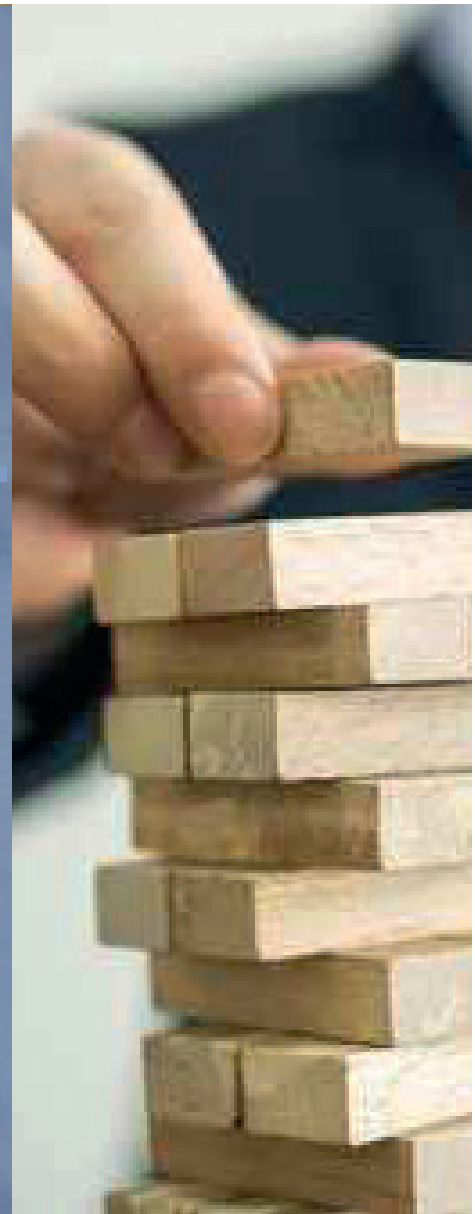


6

Support services

What is needed to grow

All the necessary services. Environment, logistics, information, facilitations and assistance for the best reception of companies which will choose to invest here.



6. What is needed to grow

Services to companies

The six steps to set up The Pisa Municipality – in collaboration with the **a business in Italy** (Shop for Productive Activities), the Tax Agency (as Tuscany Region and its agency Tuscany Promotion regards VAT), and the INPS-INAIL portal as regards offers free of charge information, liaison work and As regards the information and the procedural to the pension fund and insurance positions. assistance to the establishment and development of new companies within the territory:

- information about the territory, the sector, the infrastructures, the operating costs – liaison with



Incentives guide

How to make a business in Tuscany?



qualified service providers (advocates, accountants), universities and research support, there is at present a national online service, called “Business in one day”¹. It consists in a portal which aims at facilitating communications between companies and Public Administration (PA). Since 2010, the Single Business Communication (“ComUnica”)² was introduced, thereby sim-

There are, moreover, various sites where one can find information on what are the laws and the regulations which are part of the European network EUGO4. The procedure for opening a business in our Country, according to the reconstruction by Doing Business 2013 in collaboration with lawyers centres • assistance incentives staff.in the search for offices/spaces, to R&D, employment of qualified plifying the relationship between Companies and

Public Administration. Now, therefore, all the necessary obligations might be complied with by resorting to a single online pole 3. By means of a notification to the Chamber of Commerce, one can perfect even the information and professionals, necessitates six procedures, each of which requires approximately one day to be finalized. The costs of those procedures come up to close to Euros 4.000 overall, in addition to the starting capital. Such costs decrease for persons under 35. tion for the Municipality (SUAP Office: One Stop



Link data: RT “Guide doing business in Tuscany”
<http://www.investintuscany.com/download/InvestInTuscanyDoingBusiness-latest.pdf>



Galilei International Airport

FONDAZIONE HEINRICH
MANGANELLI
LABORATORIO

CHECK-IN
← → ↑ ↓





invest in tuscanY



YOUR KEY PUBLIC PARTNER FOR BUSINESS IN TUSCANY

Invest in Tuscany is the programme promoted by the Region of Tuscany to assist investors in the setting up and the expansion of their operations in Tuscany. To provide a comprehensive support to foreign investors establishing businesses or planning equity investments in Tuscany. It assists investors in creating and developing networks with Tuscan partners and facilitates the relations with the local authorities and public and private institutions. The Tuscan Region (Investment Attraction Sector) coordinates activities of investment promotion and investor assistance and supports enterprises interested in making direct investments. Toscana Promozione performs international promotion activities and offers expert consulting services in support of decisions to locate investment projects. Tuscany's Provincial and Municipal Administrations offer a service of assistance connected with the local area and with harnessing their own points of excellence and locations, emphasising their advantages and skills.

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Jos Technology

Biocare Provider

Source International

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Otsuka

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Quipu

Net result

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