

INSTITUTE
OF COMMUNICATION,
INFORMATION
AND PERCEPTION
TECHNOLOGIES



Sant'Anna
Spécialité en Études Avancées - 11100

Welcome to
**SCUOLA SUPERIORE
SANT'ANNA**

*Handbook
for PIXNET students*

The School

Sant'Anna School of Advanced Studies is a public university institute - with special autonomy - working in the field of applied sciences:

Economics and Management, Law, Political Sciences, Agricultural Sciences and Plant Biotechnology, Medicine and Industrial and Information Engineering.

Research and Education in an International Environment

The Sant'Anna School of Advanced Studies aims at experimenting innovative paths in research and education.

Professors and researchers live and interact with the students, day after day, enjoying a continuous cultural and intellectual exchange.

Innovative ideas, which are then developed in collaboration with foreign universities, organizations, companies and research institutes, are generated here.

Due to its international nature, education of excellence and scientific community, the Sant'Anna School of Advanced Studies established itself as a reference both in Italy and abroad. The Sant'Anna School of Advanced Studies is part of the EUA (European University Association) as an "individual full member".



The TeCIP Institute

The TeCIP Institute was created in Pisa in 2001 as a Centre of Excellence of the Italian University, Scientific and Technological Research Ministry.

Core activities of the Institute are research and education linked to Communication, Information and Perception Technologies. Main research areas are:

optical communication networks through the use of photonic technologies, also in the fields of sensors and biophotonics; IT applications of embedded real-time systems and sensor networks for the Internet of Things; virtual environments and interface robotic systems for the study of human-machine interaction and human perception.

Scientific and technological research has an interdisciplinary character and is developed inside Laboratories, equipped with the utmost leading edge instruments and technologies.

The around 300 professors and researchers can count upon an annual budget of more than 10 million euro to develop their research activities, with the main objective of leading the innovation to an extent of technological development to be used on field.

The innovative training initiatives, taught in English, such as PhD, Master's degrees and Italian University Masters, are in line with the highest international standards. The professional profiles are able to successfully find a position in either service/production bodies and businesses or public/private research structures.

Macro-area Communication

The research and teaching of the macro-area communications is particularly active in the field of Photonic Networks and Technologies, which stands as a unique example of a nationwide centre for research. The Institute TeCIP hosts at its headquarters one Research and Development Center of Ericsson and the National Lab of Photonic Networks CNIT (National Consortium for Telecommunications).

The recent Quality of Research Evaluation (Valutazione della Qualità della Ricerca - VQR), run by the National Agency for University and Research Evaluation (ANVUR), located the TeCIP Institute in 1st position in the national ranking for the Industrial and Information Engineering, among medium-sized departments.

ISTITUTO
DI TECNOLOGIE DELLA
COMUNICAZIONE,
DELL'INFORMAZIONE
E DELLA
PERCEZIONE



Sant'Anna
Scuola Universitaria Superiore Pisa



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THE TOWN

Pisa is best known for the world famous Leaning Tower, but those who come here with their mind already made up that the Tower is the only thing to see may miss the rest of the architectural and artistic marvels of this beautiful city.

Pisa would not be Pisa without the University. The city is animated by the students, who organize parties, shows, and cultural events, and fill the central street of the city at night.

The University of Pisa has 60,000 students in a city of about 100,000 inhabitants. You'll notice the student flair in the city once you leave the touristy campo dei miracoli.

Pisa is a safe city, you do not need to worry about your safety (except for some zone at night, such as the area surrounding the station). However, you should take the obvious precautions (like, if you stay in a very cheap hotel, take your valuables with you) and watch out for pickpockets in the touristy areas.



THE TOWER

The tower of Pisa (or Leaning Tower), situated in Piazza dei Miracoli together with the Duomo, the Baptistery and the Camposanto, is the symbol of the city besides being one of the most famous monuments in the world.

There is a controversy about the name of the original architect of the tower, but we know exactly that it dates back 1173.



For many years, until the recent excavations, the design was attributed by Vasari to Bonanno Pisano, but probably the tower was constructed by Gherardo di Gherardo. During the Middle Ages, people belonging to the aristocratic class visited and climbed the Tower. For this reason, the building material of the stairs was marble instead of wood. When the third ring was constructed, the building started leaning, because the structure weigh on the foundations. This was the principal reason why the construction was interrupted and continued only in 1275.

THE LUNGARNI

Many poets and artists have been fascinated by Lungarni Pisani having inspiration from the beautiful noble palaces that overlook the Arno river. Today, this location also features important museums along the Arno river creating a real "museum system." This is a picturesque walk which has the river as its theme; it has always been inextricably linked to the life of the city. On the Lungarni you can find:

Museo Nazionale di San Matteo - medieval art museum
Museo Nazionale di Palazzo Reale - local history museum
Palazzo Blu - exhibition centre

Palazzo alla Giornata - Università di Pisa's headquarter

Caffè dell'Ussero - historical caffè

Cinema Lumiere - oldest cinema in Italy



Some points of cultural interest

[Cineclub Arsenale](#) – cinema, events, music, expositions

[Palazzo Blu](#) - expositions

[Orto botanico](#) – botanic garden

[Teatro Verdi](#) – theatre

[Museo delle Sinopie](#) - expositions

CONNECTING THE WHOLE CITY

By bike

Pisa is a really nice city to ride a bike through. Bike prices are cheap and you can purchase it in many places around.

By bus

A Bus service connects the whole city. LAM RED and GREEN are the main bus-routes. For further information click [here](#)

By plane

Pisa has an international airport, Aeroporto Galileo Galilei (PSA), with daily flights to and from many national and international destinations; more than 50 airports are currently connected to the airport of Pisa via low-cost flights by carriers such as RyanAir (which has direct flights between Pisa and Barcelona, Dublin, Düsseldorf, Edinburgh, Glasgow, Hamburg, London, Madrid, Munich, Oslo, and Stockholm, among others) and EasyJet (which has direct flights between Pisa and Berlin, London, and Paris, among others). The timetable of incoming and outgoing flights is available at the relevant website.

As an alternative you may also wish to fly to Firenze's Aeroporto Amerigo Vespucci, since Firenze is just a one-hour train ride from Pisa, or Rome's Aeroporto - Fiumicino, just 3 hours away.

By train

The railway station is located on the main railway line from Roma to Torino. There is also a very frequent train service to and from Firenze. On the Ferrovie dello Stato—Trenitalia (the Italian national railway company) website you may find a train schedule and ticket booking service. For further information [click here](#)

By car

Pisa is near the intersection of two toll highways, A12 "Autostrada Azzurra" (Genova – Livorno) and A11 "Autostrada Firenze-Mare" (Pisa – Firenze). Pisa is also served by the (toll-free) motorway "Strada di Grande Comunicazione Firenze-Pisa-Livorno (FIPILI)". You may want to plan your route using Google maps.



Map of PISA

SCUOLA SUPERIORE SANTIAPPA

- 1 Hardwares
- 2 DAF (Divisione Area Funzionale)
- 3 Palazzo Toscanelli
- 4 Laboratorio
- 5 TeCIP Centre of Excellence for Information and Technology in Learning
- 6 TeCIP (Polo Sant'Anna Valserra)
- 7 College Fresh
- 8 College Innovation
- 9 College Landi

PUBLIC TRANSPORT

- 10 Central Railway Station
- 11 Bus Station
- 12 Sallio Galilei International Airport
- 13 Tram

PUBLIC BUILDINGS

- 14 Post Office
- 15 Town Hall
- 16 Unicef Bank
- 17 Ice Office
- 18 Emergency (RS)
- 19 Central Police Station (Quartiere)
- 20 Hospital
- 21 Emergency doctor
- 22 Pharmacy
- 23 Fire Station
- 24 Sanitary District

USEFUL NUMBERS

- 110 Ambulance
- 113 Police
- 112 Carabinieri
- 115 Fire Brigade (Vigili del Fuoco)
- 090 541600 Taxi
- P Car Park



TeCIP Institute



Center of Excellence for Information and Technology in Learning

PIXNET PATH AT SANT'ANNA SCHOOL

During your study period, you will follow many educational and training activities at Sant'Anna. The PIXNET Programme offers the following classes:

FIRST YEAR		TEACHING MODULES	ECTS
Scuola Superiore Sant'Anna (SSSA)	1° semester	Communication Theory and Digital Transmission	4
		Communication Networks and Network Security	6
		Stochastic Processes	3
		Electromagnetic Fields and Propagation	2
		Introduction to Programming Tools	2
		Network Simulation	3
		Simulation Techniques for Digital Communication Systems	4
		Photonic Integrated Circuits	3
		Photonic Technologies	3
	2° semester	Fundamentals of Applied Optics	4
		Photonic Integration for Sensing	2
		Fundamentals of Optical Communications	3
		Optoelectronic Devices for Metrology	3
		Design of Access, Metro and Core Networks	4
		Microwave Photonics	3
		Lab of Network Software	3
		Lab of Traffic Engineering	3
		<i>Choice between: Wireless communication Networks or</i>	3
		Photonic Integrated Circuit Laboratory	4
Photonic Integrated Technologies	3		

SECOND YEAR		TEACHING MODULES	
Scuola Superiore Sant'Anna (SSSA)	1° semester	Mandatory	
		Photonic Integrated Circuits	3
		Design of Optical Communication Systems	3
		Optical Amplification and Fibre-Optic sensing	3
		Photonic Integrated Circuit Packaging	3
		Elective	
		Advanced Optical Networking	3
		Photonics for Switching and Remote Sensing	3
		Laboratory of Photonics for Switching and Remote Sensing	3
		Lab of Photonic Systems	3
		Network Simulation	3
		Lab of Photonic Sensing and Components	4
		Photonic Technologies	3
		Simulation Techniques for Digital Communication Systems	3
		Monte Carlo Simulation Techniques	3
	2° semester	Independent research work finalized to Master's thesis	3

RULES TO BE ATTENDED AT SANT'ANNA SCHOOL

During your time at Sant'Anna School, any student is requested to maintain a polite and respectful behaviour. Therefore, we care to highlight some basic rules:

Buildings, furnitures, Lab materials, devices are shared goods. When you use them, you must care about. Someone will use them later on.

People are friendly if you are. The Staff is there to help you, not to serve you. At any time, show you are kind and cooperative.

Classes are important, even when you got advanced skills on the subjects. **Be on time and participate actively** to the lessons.

Study! It may sound obvious, but it isn't. Your high-performance is the only chance you have to remain in the programme. PIXNET is a **high-selective curriculum**, you should respect the prestigious institutions you are in.

Anyone makes mistakes. Anyone can be forgiven. But chances are limited. Don't throw your twos!



Some other advice

Bank account

Upon your arrival you are advised to open a local bank account and to provide the PIXNET Secretariat with your IBAN code via email

In order to open it, the PIXNET Secretariat will provide you with a fiscal code to go to your preferred bank.

We will suggest you a range of banks in Pisa, however feel free to open a bank account as you prefer.

IMPORTANT: your bank account must belong to the [SEPA Area](#)!

Documents to stand for your enrollment and residence permit application (for the following 2 sections you will receive more detailed information in your welcome letter)

Here, it follows a list of documents to send or handle to the PIXNET Secretariat:

- ❖ **Declaration of Value (DVL)**, a document issued by the competent Italian diplomatic authority in your Country which attests the foreign study qualification or **Cimea Certificates**
- ❖ Full copy of your passport
- ❖ Full copy of your visa

Permit of stay

Within 8 working days from your arrival, you are obliged to apply for a permit of stay. Please, inform the PIXNET Secretariat promptly about your expected arrival date, in order to make an appointment with the International Relation Office of SSSA. It will guide you in your permit of stay process. Further important information are available at

www.santannapisa.it/it/internazionale/welcome-and-support

Please read them carefully and inform us in case of doubts.

Accomodation

Once you will be applying for an Italian visa, you shall prove your future accomodation in Italy.

Students usually find housing through the city's many estate agents or by checking out postings placed online or on notice boards in many University's departments. Students often share an apartment with other Italian or international students.

The cost of renting a room in a shared flat is roughly 250-350 euros per month, excluding the cost of utilities and the individual share of general expenses for the building's maintenance.

We suggest you to scroll some relevant webpages, which offer accomodation in Pisa:

[AirBnB](#) - [HousingAnyWhere](#) - [Erasmusu](#) - [Subito.it \(only Italian version\)](#)
[UniAffitti](#) - [Roomgo](#) - [HomeToGo](#) -

There are also many facebook groups using the following keywords: *rent room Pisa, student room Pisa*

The school cannot manage in any way this private dealing for you. We suggest you to check carefully the quality of the accomodation and the leasing condition.

Italian vocabulary for the house

Imagine you are visiting a friend in Pisa, and he/she has just moved into a brand new apartment. He/she invites you over for *aperitivo*, and when you arrive, he/she gives you a tour of the apartment. Suddenly the vocabulary has gotten very specific, and knowing how to say words like "hallway" or "cupboards" become essential.

Whether you are in a situation like that or you want to be able to talk about your home, here is vocabulary and phrases to help you have that conversation

<https://www.thoughtco.com/italian-vocabulary-for-the-house-4080793>

Enjoy your PIXNET Master, Enjoy your Italy.

The TeCIP Institute