

INTERNATIONAL STUDENT GUIDE

ENGINEERING, ARCHITECTURE, SCIENCE AND TECHNOLOGY

A School for the World

"We believe in those that think differently, in those that may one day change the world with a brilliant new idea or new technology."

Dear Students,

I welcome you to Técnico, the best engineering school in Portugal and one of the best in the world.

The quality of Técnico is a result of many factors that include the quality of our faculty, the excellence of our research and the culture of excellence that has been a hallmark of our school for more than one hundred years.

However, the quality of its students is the characteristic that is truly unique in our school and that sets Técnico apart from other similar schools, making it one of best engineering schools in the world. We receive very talented students, from Portugal and abroad, and we provide them with an education that puts our graduates, scientists, engineers and architects, amongst the best in Portugal.

Técnico has educated many generations of leaders and many of them have helped in the transformation and development of Portugal, Europe and the world. Our graduates are our best ambassadors because they show the world the quality of our school.

By choosing Técnico, you will have access to a world level education, you will be exposed to ideas that are at the cutting edge of science and technology and you will be living in a unique environment, located in the center of a cosmopolitan city, Lisbon. You will also be part of a network that includes the top schools of Europe in science and technology, providing you with unique opportunities for mobility and international exposure. You will belong to a uniquely international community that now counts more than 11.000 students, 700 professors, 25 research centers and more than 1.000 researchers.

You will have access to educational and scientific infrastructures that are unique in the country, distributed by the three campuses of Técnico. They will enable you to acquire a theoretically sound but also practical hands-on education on a variety of technical subjects that are at the forefront of science and technology. You will also be a part of the University of Lisbon, the largest and most competitive university in Portugal.

The education that you will receive here will open the doors to top-level positions in large, medium and small companies, but will also give you the skills to launch your own company, creating value for the country and for the world. The research driven education that is a hallmark of Técnico will also give you the possibility to choose a career in academia, in any top institution in the world.

At Técnico, we value mostly the talent and independent thinking of our students. We believe in dreamers, in students that do not accept the status-quo and that challenge us by asking "why?", "how does it work?" or "how do you build it?". We believe in those that think differently, in those that may one day change the world with a brilliant new idea or new technology.

I invite you to become familiar with our many different offers in engineering, technology, science and architecture, which represent an unmatched set of challenges and opportunities for those that have the talent, the will and the ability required to study here.

I look forward to welcoming you at Técnico Lisboa.

Arlindo Oliveira

President arlindo.oliveira@tecnico.ulisboa.pt



Our Academic Programmes*

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Undergraduate Programmes (3 years)
Applied Mathematics and Computation
Computer Science and Engineering
Electronics Engineering
Geological and Mining Engineering
Industrial Engineering and Management
Materials Engineering
Naval Architecture and Marine Engineering
Telecommunications and Informatics Engineering

Bioen	ineering and Nanosystems
Biome	dical Technologies
Biotec	hnology
Chemi	stry
Compl	ex Transport Infrastructure Systems
Compi	Iter Science and Engineering
Consti	uction and Rehabilitation
Electro	onics Engineering
Energ	/ Engineering and Management
Engine	eering and Water Management
	aphic Information Systems
	rial and Engineering Management
Inform	nation Security and Cyberspace Law
	als Engineering
	matics and Applications
	iology
Mining	g and Geological Engineering
Naval	Architecture and Marine Engineering
•••••	eum Engineering
Pharm	aceutical Engineering
Teleco	mmunications and Informatics Engineering
•••••	ort Infrastructure Engineering
	ort Planning and Operation
	Studies and Territorial Management

Integrated Masters programmes (5 years)**
Aerospace Engineering
Architecture
Biological Engineering
Biomedical Engineering
Chemical Engineering
Civil Engineering
Electrical and Computer Engineering
Environmental Engineering
Mechanical Engineering
Technological Physics Engineering

* Programmes running on the date of completion of this document

** Classes for Masters Programmes and final two years of Integrated Masters taught entirely in english. *** PhDs funded by Fundação para a Ciência e Tecnologia



Advanced Training Programmes (1)	PhD Programmes (3-5 years)	
Geotecnics for Civil Engineering	Aerospace Engineering	
Information Systems	Architecture	
Marine Renewable Energies	Bioengineering	
Refining, Petrochemical and Chemical Engineering	Biomedical Engineering	
Risks Assessment, Safety and Reliability	Biotechnology	
Sustainable Energy Systems	Chemical Engineering	
Technology Management Enterprise	Chemistry	
	Civil Engineering	
Specialization Programmes (1)	Climate Changes and Sustainable Development Policy	
Lean Six Sigma Black Belt	Computational Engineering	
	Computer Science and Engineering	
 Meeting the professional challenges increasingly demanding, Tecnico Lisboa iffers a top training specialized programmes. We provide a vast and wide-ranging 	Earth-Resources	
ourse supply, especially in science and technology, which is essential to assume a growing position worldwide.	Electrical and Computer Engineering	
	Engineering and Management	
ndação para a Ciência e Tecnologia PhDs***	Engineering and Public Policy	
Advanced Integrated Microsystems	Environment Engineering	
Advanced Materials and Processing	Information Security	
Advanced Program in Plasma Science and Engineering	Leaders for the Technical Industries	
Analysis and Mitigation of Risks in Infrastructures	Materials Engineering	
Applied and Environmental Microbiology	Mathematics	
Bioengineering - Cell Therapies and Regenerative Med.	Mechanical Engineering	
Biotechnology and Biosciences	Naval Architecture and Marine Engineering	
Catalysis and Sustainability	Petroleum Engineering	
Eco-Construction and Rehabilitation	Physics	
Environmental Hydraulics and Hydrology	Refining, Petrochemical and Chemical Engineering	
Inter. Doctorate Network in Particle Physics, Astrophysics and Cosmology	River Restoration and Management	
Lisbon Mathematics PHD	Statistics and Stochastic Processes	
Materials Chemistry	Sustainable Energy Systems	
Networked Interactive Cyber Physical Systems	Technological Changes and Entrepreneurship	
Physics and Mathematics of Information	Technological Physics Engineering	
River Restoration and Management	Territorial Engineering	
Robotics, Brain and Cognition	Transportation Systems	



Key Facts

1.302

PhD Holders (Professors and Researchers)

2.046 Scientific publications

(ISI Web of Science)

11.500

Students

54%

Undergraduate Students



13% International MSc Students

24% International PhD Students



32 PhD Programmes

19 Undergraduate Programmes

> **28** Masters Programmes

46% MSc and PhD Students $\mathbf{\mathbf{\Theta}}$

3 Campuses

Campus Alameda 107.137 m2

Campus Taguspark 19.380 m2

Campus Tecnológico e Nuclear 16.510 m2

43% Students employed before completing their programme

86% Students employed up to 6 months after completing their programme

> **46** Técnico Spin-offs

Internationalisation

Combining international, intercultural and global dimensions in research and education, allows Técnico to offer, in a stimulating environment, a higher education pursuant to the highest international standards as well as top level Research, Development and Innovation (RDGI) activities.

To promote international visibility and attract foreign students, researchers and professors Técnico invests significantly in international partnerships (e.g. EIT-KIC InnoEnergy, SEEEP-Sino-EU platform) and in a select number of international networks (e.g. CLUSTER, MAGALHÃES, TIME, CESAER).

In the last decade, Técnico has promoted and expanded the availability of double degrees (more than 50 currently available) and credit mobility master's and doctoral Programmes, not only by establishing bi/multi-lateral agreements (e.q. IST-EPFL Joint Doctoral Iniciative, SESE), but also through international programmes such as ERASMUS MUNDUS, KIC Education and SMILE.

Participation in Networks:

CLUSTER, EIT-KIC InnoEnergy, TIME, CESAER, MAGALHÃES, ATHENS

Joint Partnerships and PhD programmes: MIT, CMU, UT Austin, EPFL

ERASMUS MUNDUS Programmes (MSc and PhD):

euSYSBIO, EMDC, IDS-FunMat, EMJD-DC, SELECT + FUSION DC, SEED, NAMASTE, EXPERTS4ASIA, WELCOME, HERITAGE, ANGLE, EUROEAST, SMART2, GROUNDWATCHCH

EIT-KIC Programmes (MSc and PhD):

ENTECH, RenE, SELECT and CLEAN-COAL (Double Msc.); PhD in Sustainable Energy Systems for Renewables

Mobility Prgrammes:

ERASMUS +, SMILE, cooperations with Australia, Brazil, China, Canada, Japan, India, Russia and Thailand.

Professional internships abroad:

ERASMUS PLACEMENTS, IAESTE, VULCANUS

MIT Portugal UT Austin | Portugal

SINO-EU



Carnegie Mellon | PORTUGAL



ATHENS NETWOR K



KIC InnoEnergy



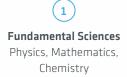
RGD at Técnico

Técnico Lisboa is nowadays a reference in everything concerning culture, learning, environment, methodology and results.

Research at Técnico is carried out in centres and institutes that pursue challenging research programmes in topics that are scientifically and socially relevant.

These Areas of Research are often intertwined together and many centers are interdisciplinary, working in multiple areas, crossing domains of competence and application. Research programmes range from long-term initiatives to more applied research with the involvement of industry.

Major research areas at Técnico:



(2)

Applied Life Sciences

Bioengineering, Cellular Biology, Biotechnology, Biomedical Engineering, Genomics and Systems Biology, Biological Systems Modelling

(3)

Energy, Environment and Mobility

Sustainable Development, Energy and Environmental Engineering, Land Use Planning, Urban Planning and Construction, Transport Systems

4

Production Engineering and Technology

Aerospace Engineering, Process Engineering, Manufacturing, Marine Technologies

5

Technology Management and Enterpreneurship

Risk Decision and Analysis, Management and Economics, Innovation and Enterpreneurship, Public Policies

Materials, Microtechnology and Nanotechnology

6

Electronic, Biological and Biomedical Devices, Micro and Nano Technologies, New Materials and Applied Materials Information and Communication Technologies

Computing, Computer Engineering, Computer Systems, Systems and Robotics, Telecommunications



Life at Tecnico

Sports

Recognizing the importance of sports activities, due to their social, cognitive and affective dimensions, the Students Union of Técnico Lisboa (AEIST), offers all its students several sports activities such as Basketball, Football, Rugby, among many others. There is also an indoor swimming-pool, a multi-sports field, a tennis court and a gym-sports pavilion.

Types of sports existing at Técnico:

Men's Handball Women's Basketball Men's Basketball Football Women's Futsal Men's Futsal Water Pool Rugby Surf/Body Board Tennis Women's Volleyball Men's Volleyball

Culture

Cinema, theatre, music, painting, academic journalism, photography, radio, among other activities have grown in importance at Técnico, contributing to stimulate and develop students' critical spirit and creative potential. The academic Tunas, such as TUIST, TFIST and TMIST, play a fundamental driving role in the academic culture and promotion of Técnico, both nationally and internationally: More than 40 thematic student groups contribute towards this goal.

Cultural units at IST:

CinemaparaIST	Técnico's Traditional Song
(Técnico's Cinema Unit)	Group
Diferencial (Técnico's Student	NAF (Técnico's Phtography
Newspaper)	Art Unit)
GTIST	Pulsar (Técnico's Physics Unit
(Técnico's Theatre Group)	Journal)
Radio Zero	

Health

Health services at Técnico Lisboa offer a wide variety of medical assistance and support on campus and have direct ties to city hospitals in case of emergency.



Some recent achievements



"15th Best Engineering School in Europe"

"1st among the best Engineering Schools in Portugal"

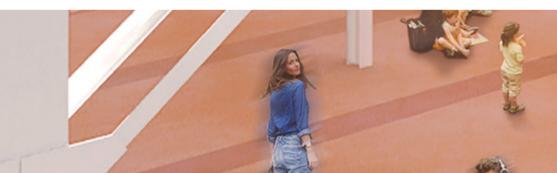
Técnico was ranked the **15th Best Engineering School in Europe** by US News and among the 20 best in the Shanghai ranking. Técnico was ranked **first among the best Engineering Schools in Portugal**, in US News and Shaqhai rankings.

¥ Entrepreneurship Highlights

Talkdesk and Unbabel, two of Técnico's spin-offs, have raised respectively USD 3.15 million and USD 1.5 million, in California.

Gatewit and Siscog, members of Técnico's spin-off community, were distinguished among the Best Places to Work in Portugal, according to a survey carried out by Exame/Accenture. Técnico's alumni, Jaime Jorge, won the world pit competition in the Dublin Web Summit with Codacy platform, which detects software errors automatically.

Joana Baptista and her team have developed '**Through My Eyes', an application that won the last Vodafone Big Apps Lisbon edition**. Organized by Vodafone in partnership with the Lisbon Clty Hall, this competition rewards the best apps for Lisbon. Digisfera is a startup established by Técnico's alumni that engaged in the area of high resolution photography. Digisfera covered the soccer World Cup and Obama's swearing-in cerimony with the production of gigapixel images that enables identification of people on-screen.





The Association of Energy Engineers, the largest international engineering association in the area of energy, **distinguished the** Técnico's Sustainable Campus as the International Energy Project of the Year 2014.

Professor Mário Figueiredo, researcher at IT, has recently become part of the ISI Thomson Reuters "Highly Cited Researchers".

Bruno Faria, a **graduate from Técnico,** and responsible for the Department of Geophysics of the National Institute of Meteorology and Geophysics of Cape Verde, **predicted the vulcano eruption of the Fogo Island in 2014, two days in advance.**

Técnico's students Andela Zaric and Catarina Cruz, who are also researchers at IT, won the "2014 IEEE Student Design Contest" final in Memphis, TN, which consists in developing a prototype for identifying and managing blood test packages by RFID tags.. Técnico's graduate **Ricardo Cabral** created the Google Maps Indoor algorithm.

A consortium formed by Técnico Lisboa, through its Instituto de Plasmas e Fusão Nuclear (IPFN) and by Technical University of Denmark (DTU) won a research contract in the amount of EUR 2 million, for the development of microwave diagnosis at ITER, the world's foremost facility for nuclear fusion. amounting to EUR 1.5 million. _____ Técnico's FST Novabase project,

Professor Vitor Cardoso was

awarded a grant from the European Research Council (ERC),

a student team dedicated to the construction of an electrically powered competition vehicle, was ranked 3rd in three competitions that took place in Silverstone, and 5th in the overall ranking of University Formula 1.

Técnicos's graduate Paulo Melo was ranked first in the Fraunhofer Portugal Challenge 2014.

"Portal da Sabedoria", a project of 2 Técnico's students, Francisco Lopes and Rogério Jorge, won the first edition of the Novabase GameShifters competition.

Jorge Santos, a Técnico alumni and currently Professor at the University of Cambridge (United Kingdom) and Researcher at Stanford (California, US), was awarded the famous 2014 "General Relativity and Gravitation Young Scientist Prize" edition. Técnico students, Ana Lessa and Daniel André, won the "Brilliant Young Entrepreneurs" competition promoted by Hyundai and JA-YE Europe.

Técnico Civil Engineering student Teresa Salvador won the 2014 Scott Lofgren Student Design edition, promoted by the Bentley Student Design Competition.

Técnico's student André Santiago was ranked second in the "Future Ideas Innovation Thesis Competition 2014", which took place in Venice, Italy.

MOBILITY PROGRAMMES ALL OVER THE WORLD

01 - Germany	07
02 - Armenia	08
03 - Argentina	09
04 - Austria	10
05 - Bangladesh	11
06 - Belgium	12

07 - Brazil	
08 - Bulgaria	
09 - Canada	
10 - Chile	
11 - China	
12 - Cvprus	

13 - Colombia
14 - Costa Rica
15 - Croatia
16 - Denmark
17 - Ecuador
18 - Eavot

19 - Estonia
20 - Slovakia
21 - Slovenia
22 - Spain
23 - Ethiopia

25	- F	Igi

- France

4 21

- **Georgia**
- **Greece**
- 29 Hungary
- **India**



31 -	Indonesia	
32 -	Israel	

- 33 **Italy**
- 34 **Jordan**
- 35 **Lithuania**
- 36 Macau (China)
- 37 Macedonia
 38 Morocco
 39 Mexico
 40 Mozambique
 41 Norway
- 42 New Zealand

43 - Netherlands
44 - Pakistan
45 - Poland
46 - Qatar
47 - Kenya

48 - United Kingdom

49 - Czech Rep.
50 - Romania
51 - Russia
52 - Serbia
53 - Sweden
54 - Switzerland

JJ JII Lainka
56 - Thailand
57 - Turkey
58 - Ukraine
59 - Venezuel
60 - Vietnam

Admission

Applications for our many programmes run throughout the year.

For specific dates to apply you should go to the candidate's site at:

tecnico.ulisboa.pt/en/prospective-students/admissions/, fill the application form and attach the required documentation.

The online application system will issue a username and a password that will allow you to edit your personal information anytime.

Your application will only be considered "Valid" after submission of all documentation and payment of the application fee.

Tuition fees

Application fee: €100,00

Tuition fee (non-EU nationals) : €7000 (Bachelor and Masters degree) €2750 (PhD degree)

Tuition fee (EU nationals): €1100€ (bachelor and masters degrees) €2750 (PhD degree)

Fees above are indicative. For further details, go to the candidate **site**, or send an email to: **academica@tecnico. ulisboa.pt**

More information obout Studying in Portugal can be obtained from **studyinportugal.edu.pt**

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What do you need to do before travelling to Portugal?

Students from EU countries are not required to have a VISA to study in Portugal. Non-European Students should contact the Portuguese consular representative (Embassy or Consulate) in their home country to request information about the VISA application process.

Depending on the duration of your stay in Portugal, one of the following visas can be requested (visas cost up to 170 Euro and can take up to 2-3 months to be issued):

- A short-term visa for a maximum of three months (valid for 3 months);
- A temporary stay visa for periods longer than three months (valid up to one year);
- A residence visa

Necessary documents (may be different from country to country):

- Valid Passport expiring no earlier than 3 months after returning home and with at least one blank visa page;
- One passport size photograph in color;
- Letter of Acceptance / Admission at Técnico Lisboa;
- Residence Letter with a Portuguese address;
- Proof of Means of Subsistence (statement of monthly allowance/scholarship/grant);
- Proof of Health Insurance Coverage;
- Valid Travel Document

For further information, please contact International Affairs office at Técnico: nmci@tecnico.ulisboa.pt



Traveling to Portugal

Situated in the extreme south-west of Europe, just a few hours away from the major European capitals,

Lisbon's excellent geographical position in the country, makes it a stopover point for many foreign airlines. In fact, this city is easily reachable from anywhere in Europe, from Brazil, North-America and the Middle East through all major airlines and more than 50 low cost connections.

Accommodation

Most of our exchange students rent a room in a shared house. The other option is to live in a university residence.

In Portugal, the size of apartments is classified by the code T# (e.q. To - Studio, with a separate bathroom, T1 - 1 bedroom and living room, T2 - 2 bedroom and living room, etc).

The best areas to live in near Técnico are: Alameda, Arco do Cego, Areeiro, Arroios, Campo Pequeno, Estefânia, Praça de Londres and Saldanha. These areas are located within a 15 minute walking distance from the Alameda Campus. Transport to the Taguspark Campus is provided by a free bus service between the Alameda and Taguspark campuses.

University residences:

Técnico has three residences, each with different characteristics, locations and prices:



1 Residência Prof. Ramôa Ribeiro Campus Taquspark

Residência Universitária Baldagues Lisboa (downtown Lisboa)

Residência Enq. Duarte Pacheco Parque das Nacões





Cost of Living in Lisbon

The cost of living in Portugal is lower than in most EU countries. Depending on the type of accommodation that you choose, you will end up spending more, or less during your stay. The following numbers give you an idea of an average monthly budget for a student in Lisbon.

Expenses	Average Price
Accommodation	300€/450€
Meals	200€/250€
Transport	35€/ 40€
Leisure	100€/ 120€
University (books, etc)	50€
Total	685€/910€

Cost of Living in Portugal

Articles	Average Price
Coffee	0.65€
Coke (33cl)	1.20€
Bottle of water 50cl (Cafeteria)	1.00€
Cinema ticket	5.20€
Daily newspaper	1.50€
Disco admission	10.00€
Full meal near Técnico	7.00€
Full meal at the Técnico canteen	2.50€
Burger Menu	5.00 €
Bread Unit	0.15€
Subway ticket	1.40€
Carris bus ticket	1.80€
1 Beer (Bar)	3.00€
1 Beer (Supermarket)	0.80 €
1 It Petrol	1.60€



10 Reasons for choosing to study in Lisbon

- **o1** Education of Excellence
- **o2** Fees and Cost of Living
- **o3** Accommodation and Housing
- **04** Sports and Climate
- **o5** Multiculturalism and Hospitality
- **o6** Culture and Creativity
- **07** Security
- **o8** A Green City
- **og** Leisure and Entertainment
- **10** A Cosmopolitan City which is Open to the World



Campus Alameda

Av. Rovisco Pais, 1 1049-001 Lisboa Tel: +351 218 417 000 Fax: +351 218 499 242

tecnico.ulisboa.pt mail@tecnico.ulisboa.pt

Campus Taguspark

Av. Prof. Doutor Cavaco Silva 2744-016 Porto Salvo Tel: +351 214 233 200 Fax: +351 214 233 268

Campus Tecnológico e Nuclear

Estrada Nacional 10 (ao Km 139,7) 2695-066 Bobadela LRS Tel: +351 219 946 000 Fax: +351 219 946 016