“By becoming a member of the Técnico community, you will have a unique opportunity to contribute to the development of the economy, the improvement of society and the future of humanity.”
MESSAGE FROM
THE PRESIDENT

Dear Student

I am very glad that you decided to enroll at Técnico, to pursue your studies in the topic of your choice, and I welcome you to this renowned school of engineering, science, technology and architecture. By becoming a student of Técnico, you also become member of a large community of people that feel honored and proud for studying here.

Técnico is a demanding place, and succeeding here will certainly require a significant investment from you, in terms of time, effort and dedication. Your professors and colleagues will do their outmost to help you succeed but, in the end, it will be your dedication and ability that will make it possible to reach the goals you set for yourself.

You will be rewarded not only with a degree from one of the best engineering schools in the world, but by an experience and a body of knowledge that are one of the results of the intense experience that you will have here. You will get to know many interesting professors and colleagues, get acquainted with the theory of your field, use and develop some of the latest technologies in your area and, in the end, even contribute to the development of science and engineering, an achievement that is relevant in itself.

In this second decade of the 21st century engineering is, more than ever, a challenging field of central importance for the development of society. The future of humanity will depend on our ability to address the complex societal problems that we face, which include sustainable energy, environment protection, efficient industrial production and effective information management. By becoming a member of the Técnico community, you will have a unique opportunity to contribute to the development of the economy, the improvement of society and the future of humanity. Use this opportunity wisely and effectively, in order to pursue your own goals and to help develop our school and our society, the objectives envisaged by our founder, more than 100 years ago.

Welcome to Técnico!

Arlindo Oliveira

Arlindo Oliveira
arlindo.oliveira@tecnico.ulisboa.pt
DEAR STUDENT,

We are very pleased that you have shown an interest in the Masters in Petroleum Engineering (MEP) at Técnico Lisboa.

Técnico Lisboa, which is part of the largest university in the country (Universidade de Lisboa), is over one hundred years old and has a long tradition in teaching in the area of Energy. We are proud that many of our Masters’ graduates are elite engineers who have helped and continue to help transform the country in several important areas.

Since it was launched in 2012, this Masters has already celebrated student exchange partnerships with prestigious foreign universities, such as the University of São Paulo, Campinas State University, the University of Pernambuco in Brazil, the Universities of TU Clausthal, Montanuniversität Leoben, TU Delft, Heriot-Watt University in Europe. This degree is designed for those graduates in Engineering and Geosciences who wish to invest in a sound education in this field.

The exploration and production of conventional and non-conventional hydrocarbons, particularly of oil and gas, has experienced deep structural changes over the last two decades, which have primarily been brought about by growing demand, particularly from emerging markets. Nowadays, two realities characterise the exploration and production of hydrocarbons: on one hand discoveries of new reservoirs are increasingly more geologically complex-speaking, and on the other hand, these reservoirs are more difficult to access and to explore from a technological point of view. This reality has led to a growing demand by the oil companies for innovative and environmentally sustainable technological solutions and skilled technicians.

The Masters in Petroleum Engineering aims to provide training in the area of “upstream” exploration and the production of hydrocarbons.

As well as providing a unique environment with a first class faculty and excellent facilities, we pride ourselves on the quality of the academic staff who teach this Masters. Our students are provided with a solid education and a good capacity for the systematisation, analysis and synthesis of the knowledge required for their professions.

Finally, we also take great pride in the success of our alumni. For 104 years we have contributed to many of them being able to achieve their childhood dreams and to realise their talent to the full. They are our legacy around the world.

We are convinced that we offer a first class education at one of the top Engineering, Science, Technology and Architecture universities in Europe, which will undoubtedly add value to your future. In this spirit, I invite you to take a good look at the syllabus, our university and the kind of lifestyle that awaits you in Portugal.

Looking forward to hearing from you soon!

Maria João Pereira
MEP Coordinator
elisapirescosta@tecnico.ulisboa.pt
maria.pereira@ist.utl.pt
INSTITUTO SUPERIOR TÉCNICO AMONG THE TOP 50 ENGINEERING SCHOOLS IN THE WORLD (US NEWS RANKING)

1st BEST ENGINEERING SCHOOL IN PORTUGAL (ARWU, NTU, URAP, US NEWS RANKINGS)

25th AMONG THE TOP 25 ENGINEERING SCHOOLS IN EUROPE (ARWU, NTU, URAP, US NEWS RANKINGS)

50th AMONG THE TOP 50 ENGINEERING SCHOOLS IN THE WORLD (US NEWS RANKING)
**KEY FACTS**

- **16%** International Master’s students
- **31%** International PhD students
- **19** Undergraduate programs (Bachelor’s and Integrated Master’s degrees)
- **31** Master’s programs
- **32** PhD programs
- **42%** Students employed before graduating
- **86%** Students employed up until six months after graduating
- **3** University dormitories
- **3** Campi
  - Alameda Campus 107,137 m²
  - Taguspark Campus 19,380 m²
  - Technological and Nuclear Campus 16,510 m²
- **11,412** Approximate number of students
  - 53% Undergraduate students
  - 47% Master’s and PhD students
- **1,200** Doctorates
- **2,237** Scientific publications (ISI Web of Science)
- **56** Spin-offs since 2009
  - Listing of spin-offs by area:
    - 28 Information and Communication Technologies
    - 10 Robotics, Automation and Electronics & Computer Vision
    - 8 Biotechnology and Biomedical Engineering
    - 5 Aeronautics and Space
    - 5 Environment and Clean Energies
Masters in Petroleum Engineering

The Masters in Petroleum Engineering is taught in semesters, with a mean number of 5 Course Units per semester, taught over 3 semesters. The 4th Semester is devoted to the preparation of the thesis. The student has to complete 30 ECTs (European Credit Transfer and Accumulation System) per semester and a total of 120 ECTs to complete the degree.

In the 3rd Semester, bearing in mind the thesis plan and the grades achieved for the CUs from the 1st and 2nd Semesters, students have the option to carry out an internship at a foreign university or industry, or in an oil company.

### Mandatory Courses (84 ECTS)

<table>
<thead>
<tr>
<th>CURRICULAR UNITS</th>
<th>1ST SEM.</th>
<th>2ND SEM.</th>
<th>3RD SEM.</th>
<th>4TH SEM.</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geostatistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Oil then Gas</td>
<td></td>
<td></td>
<td></td>
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<td>6</td>
</tr>
<tr>
<td>Geophysical Digital Signal Processing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Reservoir Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Applied Geophysics for Hydrocarbon Exploration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Stochastic Modelling of Oil Reservoirs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Petroleum Engineering Seminars</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Petroleum Engineering Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Dissertation in Petroleum Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

### Elective courses (36 ECTS)

<table>
<thead>
<tr>
<th>CURRICULAR UNITS</th>
<th>1ST SEM.</th>
<th>2ND SEM.</th>
<th>3RD SEM.</th>
<th>4TH SEM.</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil and Rock Dynamics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Geology of Petroleum Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Petroleum Refining</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Drilling and Completion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Internship in Petroleum Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Environmental Fluid Mechanics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Mechanical Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Well Logging and Formation Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Petroleum Geochemistry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Multiphase System Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.5</td>
</tr>
<tr>
<td>Logistics Management &amp; Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Advanced Process Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Portfolio in Petroleum Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>Geological and mining exploration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Free Optional</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
I’m Mariana and I’m currently enrolled in Petroleum Engineering Master at Instituto Superior Técnico. I chose this master because, as a geologist, it allows me to widen my knowledge in other field of studies, namely, geophysics as well as other important subjects that are going to enrich my academic background for sure.

Until now, this Master program is meeting all my expectations because it encompasses some other important topics that my bachelor didn’t approach so deeply, allowing me to develop some other important hard skills inside the geosciences as well as soft skills that are a plus in today’s working world.

In the future, I hope this experience would bring me some opportunity to work in some oil or consultancy companies in order to be able to develop and apply all the knowledge and skills that were acquired during the time that I enrolled this Master, complementing the skills that I previously had.

As I said before, my background is not engineering, so I decided to move to Técnico because it offered this Masters that really caught my eye in terms of the subjects that interested me in the first place but also because this university always captivated me and I couldn’t miss the opportunity to study in Técnico.

Because I always loved challenging myself I can say that the experience of studying in Técnico it’s been something amazing and that I’m really enjoying not only in academic level but also in social level, allowing me to know some new colleagues as well as fantastic teaching professionals.
Dear Colleague, I am very pleased that you have shown an interest in the Masters in Petroleum Engineering (MEP) at Técnico Lisboa.

First of all, Técnico Lisboa is top national engineering school and a top-20 in Europe according to Shanghai ranking with over an one-hundred years of technology improvement. We can proudly say that we have the tools to change the world of today and to create the world of tomorrow.

With the current demand for new enhanced recovering techniques for existent oil and gas reservoirs to face the very competitive price of oil and with the current global demand for an energy mix followed by major oil operators opens opportunities for a career in a global energy sector, if you want to work on this industry you must give a change to this master.

From my experience, I came with a background in Civil Engineering and a dream to work in the oil and gas industry. This master provided me the necessary knowledge regarding Geosciences, Seismic Processing, Reservoir Engineering and Drilling and Completion to pursue my dream.

Besides the acquired knowledge with this master you could expand your network and cross country experience through the partnerships between prestigious foreign universities, such as Brazil, Netherlands, Germany, Austria and United Kingdom, and a create a relationship with major oil and gas stakeholders like Total, BP, Galp, Shell, Cepsa and services companies like Subsea7, Schlumberger and Halliburton.

With MEP I have found very talented and experienced teachers and professionals always open to discussion and to support me. I have got full support to enrol my internship in Subsea7 and to develop my master thesis in partnership with them for further progress in my career in this industry.

If you have a background in engineering or geosciences I am convinced that this course is a major improvement in your academic record and for sure will open many opportunities in your future career in Oil & Gas.

I just want to wish you all the best of luck. Looking forward to hearing from you soon!

André Reis Antunes
MEP Alumnus
Graduate Engineer at Subsea7
In my case I had five years of experience in the oil and gas industry and this Master was really good for revisiting geological and geophysical concepts and learn new concepts in petroleum engineering. This Master is also an excellent opportunity for people without experience in the industry, because its program offers a solid base in geoscience and reservoir characterization. In the different subjects students will face real study cases and will be able of learning software and tools commonly use in the industry.

During the second semester are including Seminars where people with trajectory and experience in the oil and gas industry are invited, giving to the students a good chance for learning from real study cases and being update about new technologies applied in all the phases in the industry from the hydrocarbon exploration to the recovery.

An important event is the Annual Meeting, where students have the opportunity to present their dissertation advances to companies and other student community members. It is also an occasion to share and meet company representatives. In my case this event was decisive to open the doors at Galp Energia, company where I currently work. I obtained a scholarship to perform my dissertation with Galp and afterwards I was hired to be a member of the Geosolutions team.

My advice to new students is to have an active participation in all the activities organized by the University and societies related with geosciences. Take the chance to enjoy Lisbon, it is a beautiful city with wonderful people where you are going to fell at home!
Admission

Applicants should consult the Regulation of Access and Admission of International Students to 1st, 2nd and 3rd study cycle at IST for additional information on document content and validity.

Required Documents
Applications for a specific course or study cycle programme are made online. The applicant must provide all the documents mentioned in the Regulation, as well as a motivation letter referring to the selected course or study cycle. To complete the application process it is necessary to submit the following scanned documents as PDF files:

- Recent photo;
- Up-to-date CV;
- Official academic transcript of the applicant’s secondary school or university records;
- Document specifying the type of grading scheme of the academic records;
- Cover letter or motivation letter and in the case of an application to a PhD Programme, reference letters should be submitted;
- Identification document;
- Document certifying the applicant’s Portuguese language level (this applies only to the 1st study cycle);
- Statement under oath, that the applicant does not have portuguese nationality and fulfills the requirements needed for the Access and Admission category for International Students;
- Bank transfer slip of the payment for application fee.

Application Fees

In order for the application process to be assessed it is required that the applicants pay the application fee (€ 100) and send the bank transfer slip with the required Documents.

The bank transfer should mention the applicants first and last name.

Bank transfer information:
Institution: Instituto Superior Técnico
Bank name: Santander Totta S.A. (IST branch)
IBAN: PT50 0018 000344000867020 17
BIC/SWIFT: TOTAPTPL

Tuition Fees

1st and 2nd study cycles:
7000 €/year. 2000€ upon pre-registration (corresponding to the first two installments) and the remainder in accordance with the 1st, 2nd cycles and integrated study cycles of IST. (Not applicable to students from the European Union and foreign students residing in Portugal uninterruptedly for more than 2 years).

3rd study cycle:
2750€/ano. 2750 €/year, 50% upon registration, 50% until 28th February 2018.
What do you need to do before travelling to Portugal?

Before arriving in Portugal
Citizens of countries outside the European Union or the Schengen Area have to apply for a visa in their home countries at a Portuguese Embassy/Consulate. Please note that a ‘tourist’ visa is not valid for studies in Portugal.

The visa application should be submitted several months in advance because it can take up to 12 weeks depending on the country of origin. Some visa applicants may also be subject to security clearance checks.

It is essential to obtain information at the closest Portuguese Embassy or Consulate, about the type of visa to be requested and the required documents to complete the application.

The basic application should include the following documents:

• Application in a standard form;
• Valid travel document (+3 months beyond the validity of the visa);
• 3 passport-sized colour photographs;
• Certificate of criminal record issued by the country of origin;
• Medical certificate and/or Vaccine Bulletin and travel medical insurance;
• Proof of accommodation in Portugal;
• Proof of means of subsistence in Portugal;
• Proof of admission/acceptance or registration;
Accommodation

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

In Portugal, the size of apartments is classified by the code T#, where # refers to the number of rooms (eg. T2 has 2 rooms and includes a living room, a kitchenette/kitchen and a bathroom).

Description:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0</td>
<td>Studio, with a separate bathroom</td>
</tr>
<tr>
<td>T1</td>
<td>1 bedroom and living room *</td>
</tr>
<tr>
<td>T2</td>
<td>2 bedrooms and living room *</td>
</tr>
<tr>
<td>T3</td>
<td>3 bedrooms and living room *</td>
</tr>
<tr>
<td>T4</td>
<td>4 bedrooms and living room *</td>
</tr>
</tbody>
</table>

* also includes a kitchen and a bathroom

The best areas to live in near to 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 campi.

University halls of residence:

Técno has three halls of residences, each with different characteristics, locations and prices:

1 - Residência Prof. Ramôa Ribeiro (Taguspark campus)
2 - Residência Universitária Baldaques (downtown Lisboa)
3 - Residência Eng. Duarte Pacheco (Parque das Nações)

For further information, contact the Accommodation Office:

nucleo.alojamentos@tecnico.ulisboa.pt
+351 21 841 99 05

Other options for accommodation:

A wide variety of online platforms exist, where it is possible to find rooms and houses for rent.

ERASMUS LISBOA
ERASMUS LIFE LISBOA
ESN LISBOA
UNIPLACES
ALAMEDA RESIDENCE
HOUZE STUDENT
U.HUB
FRATERNITY “DESORDEM DOS ENGENHEIROS”
FRATERNITY “DO SANTO CONDESTÁVEL”
DOORM
INLIFE PORTUGAL
ONDA CITY
PLACE TO STAY
BQARTO
TÉCNICO MAIN BUILDING BILLBOARDS
5 ROOMS 4 STUDENTS
STUDENTS ACCOMMODATION

The Técno Students Association - AEIST:

An online platform is managed by the Students Association, where information about rooms and houses for rent in Lisbon can be found. Simply click on the map to select the area where you would like to live (check the recommended areas above), and see what is available.

For further information, contact AEIST:

www.aeist.pt
aeist@tecnico.ulisboa.pt
+351 21 841 72 48
Cost of Living in Portugal

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. Below gives an idea of an average monthly budget for a student in Lisbon.

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Average Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>300€ / 450€</td>
</tr>
<tr>
<td>Monthly Living Costs</td>
<td>150€ / 300€</td>
</tr>
<tr>
<td>Transport</td>
<td>35€ / 40€</td>
</tr>
<tr>
<td>Leisure</td>
<td>100€ / 120€</td>
</tr>
<tr>
<td>University (books, etc..)</td>
<td>100€</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>685€ / 1,010€</strong></td>
</tr>
</tbody>
</table>
Cost of Living in Portugal

Below you will find the prices of some everyday articles, to give you an idea of how much things cost in Portugal:

<table>
<thead>
<tr>
<th>Articles</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>0.65 €</td>
</tr>
<tr>
<td>Coke (33cl)</td>
<td>1.20 €</td>
</tr>
<tr>
<td>A bottle of water 50cl (Cafeteria)</td>
<td>1.00 €</td>
</tr>
<tr>
<td>Cinema ticket</td>
<td>5.20 €</td>
</tr>
<tr>
<td>Daily newspaper</td>
<td>1.50 €</td>
</tr>
<tr>
<td>Disco admission</td>
<td>10.00 €</td>
</tr>
<tr>
<td>Full meal in a middle-range restaurant</td>
<td>15.00 €</td>
</tr>
<tr>
<td>Full meal at the Técnico canteen</td>
<td>2.65 €</td>
</tr>
<tr>
<td>Subway ticket</td>
<td>1.45 €</td>
</tr>
<tr>
<td>Carris bus ticket</td>
<td>1.80 €</td>
</tr>
<tr>
<td>1 Beer (Bar)</td>
<td>3.00 €</td>
</tr>
<tr>
<td>1 Beer (Supermarket)</td>
<td>0.80 €</td>
</tr>
<tr>
<td>1 lt Petrol</td>
<td>1.60 €</td>
</tr>
</tbody>
</table>
10 Reasons for choosing to study in Lisbon

01 Education of Excellence
02 Fees and Cost of Living
03 Accommodation and Housing
04 Sports and Climate
05 Multiculturalism and Hospitality
06 Culture and Creativity
07 Security
08 A Green City
09 Leisure and Entertainment
10 A Cosmopolitan City which is Open to the World

Meet our 3 Campi

Come and get to know the city of Lisbon

Get to know Portugal and the Portuguese

What our students say about us