



INSTITUTO  
SUPERIOR  
TÉCNICO



Alameda Campus

# INSTITUTO SUPERIOR TÉCNICO

Lisbon-Portugal



Taguspark Campus

*“A School of the 21<sup>ST</sup> Century”*

Prof. Carlos Matos Ferreira  
President of IST

Barcelona, 25<sup>th</sup> February 2005

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## Summary



- History
- IST Campuses
- Mission
- Internal Organisation
- Education
- Facts and Figures
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# IST HISTORY

The **INSTITUTO SUPERIOR TÉCNICO** was established with the objective of providing the country with Engineers with know-how and the necessary skills to succeed in their professional lives, while simultaneously contributing to the economic development of the country.

**Alfredo Bensaúde**  
First Director of IST, 1911

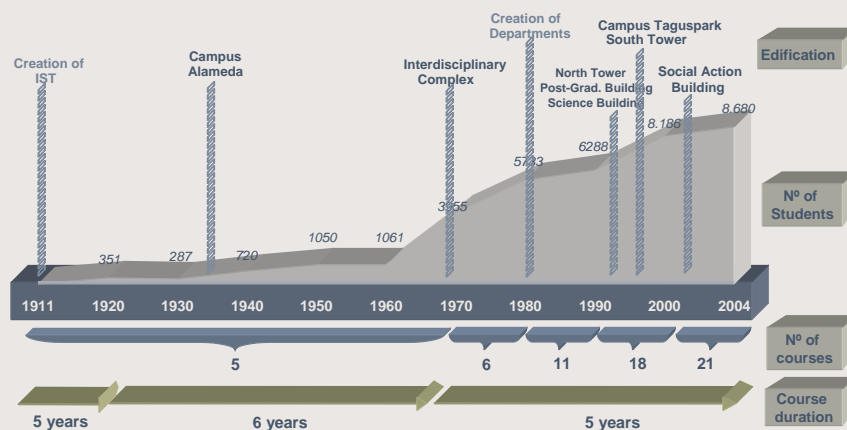


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# IST HISTORY

## CHRONOLOGY



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## The IST Campuses



*Alameda Campus*



*Taguspark Campus*

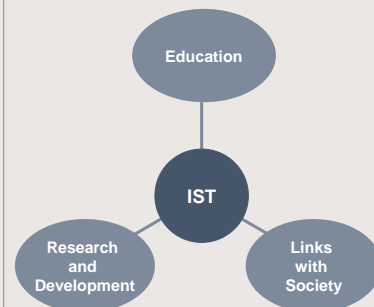
84 338 m <sup>2</sup>	Campus Total Area	116 000 m <sup>2</sup>
9 941 m <sup>2</sup>	Classrooms and Lecture Halls	1 526 m <sup>2</sup>
4 050 m <sup>2</sup>	Study Rooms and Libraries	1 346 m <sup>2</sup>
24 475 m <sup>2</sup>	Labs, Workshops and Computer Rooms	1 315 m <sup>2</sup>
24 360 m <sup>2</sup>	Offices, Secretariats, Services and Meeting Rooms	2 467 m <sup>2</sup>

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## Mission

The **MISSION OF IST** is to contribute to the development of society by providing quality higher education in the areas of Engineering, Science and Technology, at undergraduate and postgraduate levels as well as life-long learning, and by carrying out Research and Development activities in accordance with the highest international standards.

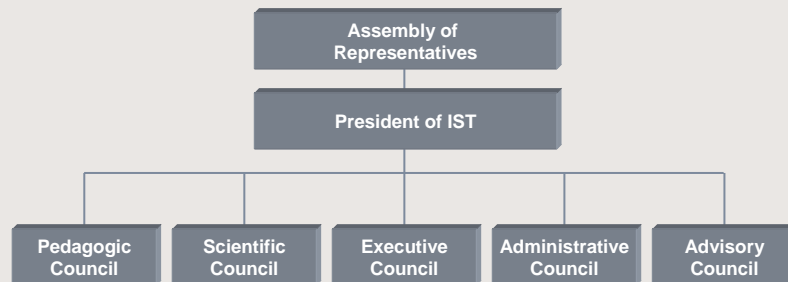


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## Internal Organisation

### Organogram



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## Internal Organisation

### Academic Units

#### Departments

- Civil Engineering and Architecture
- Mechanical Engineering
- Electrical and Computer Engineering
- Chemical Engineering
- Mining Engineering and Earth Resources
- Materials Engineering
- Physics
- Mathematics
- Information Systems Engineering
- Engineering and Management

#### Autonomous Section

- Naval Architecture and Marine Engineering

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## Education



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## Education

### Undergraduate Programmes

7719 students

#### Alameda Campus

- Aerospace Engineering
- Applied Mathematics and Computation
- Architecture
- Biological Engineering
- Biomedical Engineering
- Civil Engineering
- Chemical Engineering
- Chemistry
- Electrical and Computer Engineering
- Environmental Engineering
- Information Systems and Computer Engineering
- Materials Engineering

- Mechanical Engineering
- Mining and Geological Engineering
- Naval Architecture and Marine Engineering
- Physics Engineering
- Territorial Engineering

961 students

#### Taguspark Campus

- Electronics Engineering
- Industrial Engineering and Management
- Information Systems and Computer Engineering
- Information and Communication Networks Engineering

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## Education



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## Education

### *Master's (MSc) Programmes*

- Aerospace Engineering
- Biotechnology (Biochemical Engineering)
- Chemical Engineering (Applied Chemistry)
- Construction
- Earth Resources
- Ecology, Management and Modelling of Marine Resources (inter-institutional)
- Electrical and Computer Engineering
- Design Engineering
- Engineering Policy and Management of Technology
- Geographical Information Systems
- Geotechnics for Civil Engineering
- Hydraulics and Water Resources
- Information Systems and Computer Engineering
- Logistics (inter-institutional)
- Materials Engineering (inter-institutional)
- Materials Science and Engineering
- Mathematics and Applications
- Mechanical Engineering
- Naval Architecture and Marine Engineering
- Operational Research and Systems Engineering
- Physics Engineering
- Physics
- Rehabilitation and Conservation of the Built Heritage
- Safety and Health in the Workplace
- Statistics
- Strategic Management and Development of Tourism
- Structural Engineering
- Surface Science and Engineering (inter-institutional)
- Technological Innovation and Industrial Management
- Transportation
- Urban Studies and Territorial Management

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# Education

## Doctoral (PhD) Programmes

- Aerospace Engineering
- Biotechnology
- Chemical Engineering
- Chemistry
- Civil Engineering
- Electrical and Computer Engineering
- Engineering Sciences
- Environment
- Industrial Engineering and Management
- Information Systems and Computer Engineering
- Materials Engineering
- Mathematics
- Mechanical Engineering
- Mining Engineering and Earth Resources
- Naval Architecture and Marine Engineering
- Physics Engineering
- Physics
- Systems Engineering
- Technological Physics Engineering
- Territorial Engineering
- Transportation
- Urban and Regional Planning

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# Education



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## Education

### IST Position on the Bologna Process

Cycle	Duration	Degree	Obs.
1 <sup>st</sup>	3 years	Bachelor in Engineering Sciences	Scientific-based teaching oriented towards conceptual engineering
2 <sup>nd</sup>	2 years	Master (Engineering Diploma)	
3 <sup>rd</sup>	3 years	Ph. D.	

Specialisation	Specialisation courses of specific scope to complement 1 <sup>st</sup> and 2 <sup>nd</sup> cycle training
Mobility	"Bridging Programmes" for vocational 1 <sup>st</sup> and 2 <sup>nd</sup> cycle students to carry on scientifically oriented programmes

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## Facts and Figures

### Students & Staff

Undergraduate Students	8 680
Master's Students	1 089
Doctorate Students	596
<b>Total Students</b>	<b>10 365</b>
Professors	774
Non-teaching staff	565

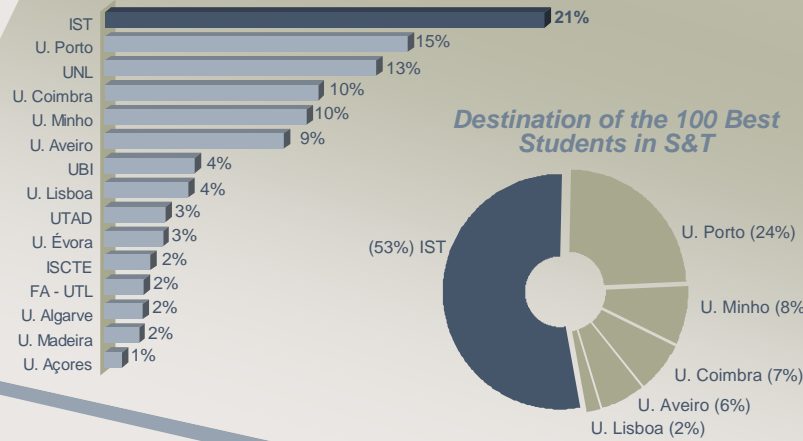
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## Facts and Figures

### Percentage of Vacancies

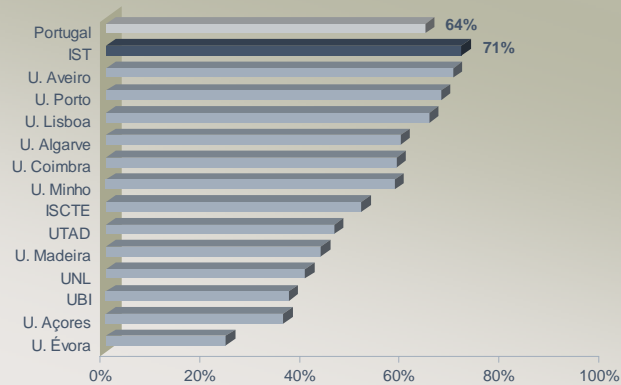


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## Facts and Figures

### Survival Rate (OECD)



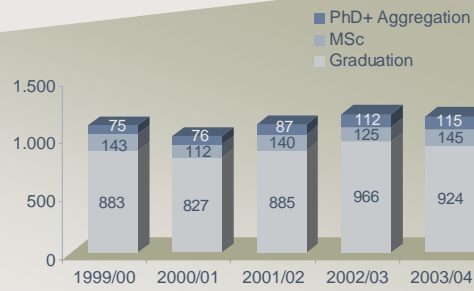
Source: National Observatory for Science and Higher Education  
(Ministry for Science, Innovation and Higher Education)

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## Facts and Figures

### Number of Diplomas from IST per Year

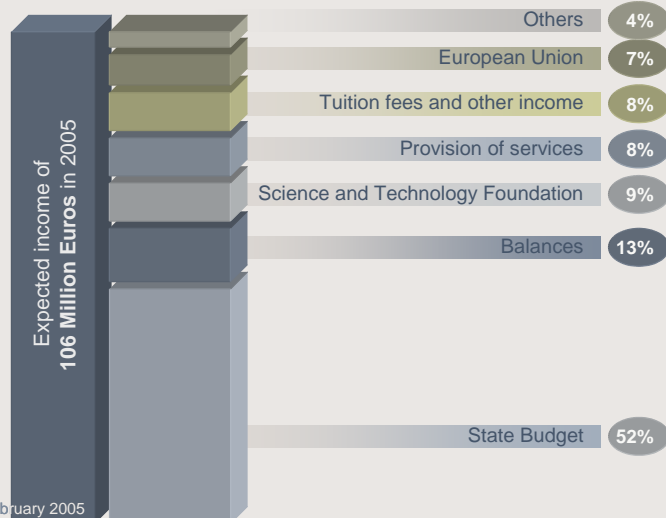


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## Facts and Figures

### Sources of Financing

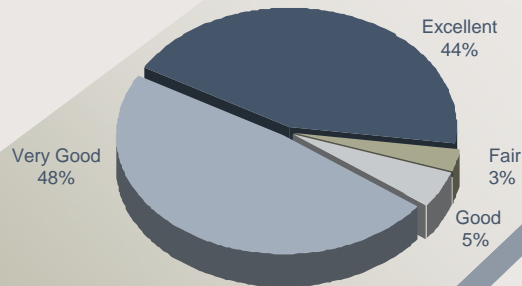


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## Research & Development

### *Distribution of PhD Holders According to the Rate of their Research Units*



78% of the research units rated **excellent** or **very good**

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## Research & Development

### *R&D Units Rated as Excellent*

#### **Mathematics**

Centre for Mathematical Analysis, Geometry and Dynamical Systems

#### **Physics**

Centre for Physics of Fundamental Interactions (CFIF)

Centre for Plasma Physics (CFP)

Centre for Nuclear Fusion (CFN)

#### **Chemistry**

Centre for Structural Chemistry (CQE)

Center for Molecular Chemical Physics (CQFM)

#### **Chemical Engineering and Biotechnology**

Institute for Biotechnology and Fine Chemistry

#### **Electrical and Computer Engineering**

Institute for Systems and Robotics (ISR)

Institute for Telecommunications (IT)

#### **Mechanical Engineering**

Center for Innovation, Technology and Policy Research (IN+)

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## Research & Development

### *R&D Units Rated as Very Good*

#### **Mathematics**

Centre for Logic and Computation  
Centre for Mathematics and Applications

#### **Physics**

Multidisciplinary Centre for Astrophysics (CENTRA)

#### **Materials Sciences and Engineering**

Institute for Science and Engineering of Materials and Surfaces (ICEMS)

#### **Information and Computer Engineering**

Institute for Systems and Computer Engineering (INESC-ID) – Lisboa

#### **Mechanical Engineering**

Institute for Mechanical Engineering (IDMEC) – Lisboa

#### **Naval Architecture and Marine Engineering**

Unit for Naval Engineering and Technology (UETN)

## Research & Development

### *R&D Units Rated as Very Good (cont.)*

#### **Civil Engineering**

Centre for Hydro-systems Studies (CEHIDRO)  
Centre for Urban and Regional Centres (CESUR)  
Institute for Structural Engineering, Territory and Construction (ICIST)

#### **Earth and Space Sciences**

Centre for Petrology and Geochemistry (CEPGIST)  
Centre for Geotechnics (CEGEO)  
Centre for Geo-systems (CVRM)

#### **Maritime Sciences**

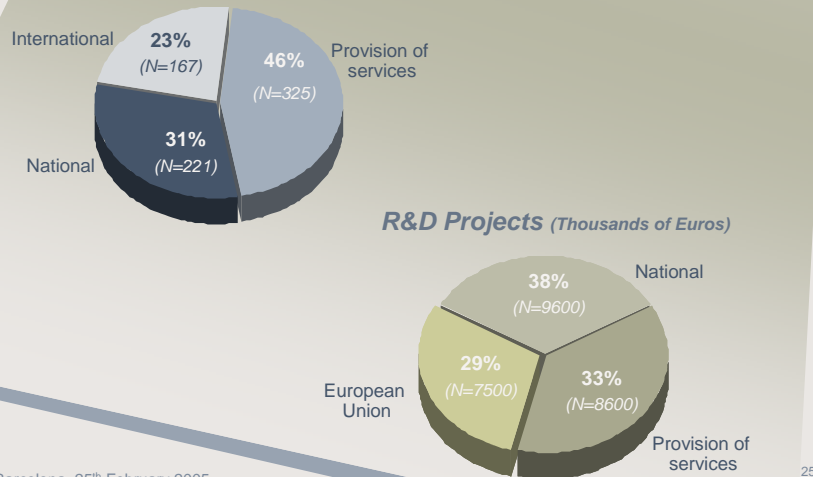
Centre for Environment and Maritime Technologies (MARETEC)

#### **Engineering and Management**

Centre for Management Studies (CEG-IST)

## Research & Development

### Type of R&D Projects

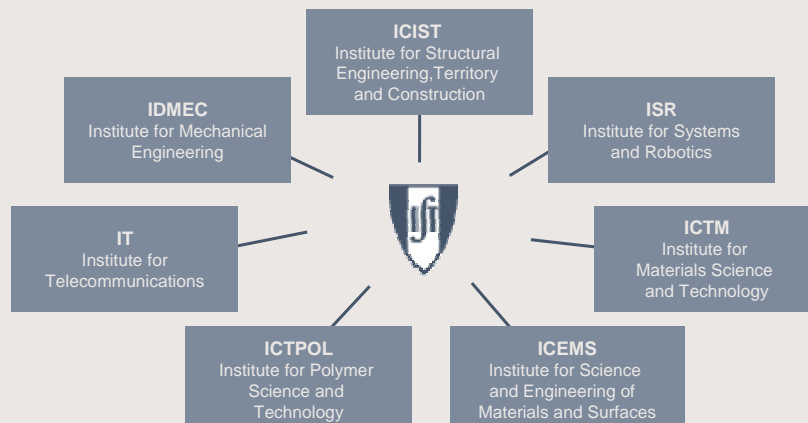


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## Links with Society

### Interface R&D Institutes



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## Links with Society



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## Internationalisation

### Mobility / Cooperation (2004/2005)

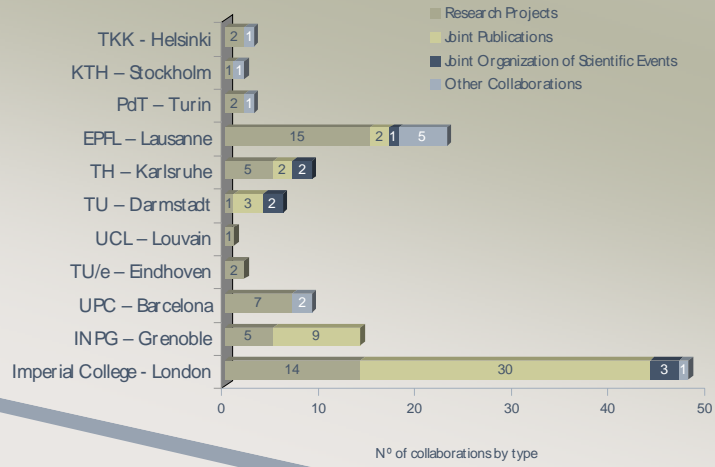
Mobility under SOCRATES/ERASMUS PROGRAMME	
Students Abroad	132
Foreign Students in IST	124
Mobility under ATHENS PROGRAMME	
Students Abroad	40
Cooperation Protocols with universities	
Exchange students/professors	256
Other Cooperation Programmes	
Portuguese Speaking African Countries	190 students enrolled at IST
Latin America & Caribbean	10 students received and 9 sent abroad

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# Internationalisation

## Collaborations with Cluster Universities



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