

POLITECNICO DI TORINO





POLITECNICO AT A GLANCE

For over 150 years, Politecnico di Torino has been one of the most prestigious public technical universities at both national and international level for education, research and technology. It was founded as School for Engineers in 1859, and then it became Regio Politecnico di Torino in 1906. This long history has turned Politecnico di Torino into a point of reference for education and research in Europe in the Engineering and Architecture fields; it is an international level Research University which attracts international students from over 100 countries and participates in the international scientific research at the highest level, with about 800 collaborations with companies, public and private institutions and local organizations.

According to the most prestigious rankings, Politecnico di Torino is positioned among the first twenty European technical universities; its position in Europe is officially recognized and confirmed by its presence in international networks and by its participation in the two programs FET Flagships (Human Brain Project; Graphene), where Politecnico is the only Italian partner.

The role of the European technical universities is changing: the best international universities are required to become key poles able to attract qualified human capital (talented students, researchers and business men) and strategic industrial investments. With a rigorous approach and a scientific methodology, these actions will support a sustainable growth and will meet the big challenges that our society has to face in next years on the main key topics such as energy, health, population, food and climate.

In this context, also Politecnico di Torino focuses its strategies on an even greater commitment in the social and economic field, in order to turn its campuses into neuralgic centers of an international network of academic, industrial and institutional partners, with the aim of sharing with them agreements and projects for an even more collaborative and interdisciplinary research. As a result, our University drafted its Strategic Plan-Horizon 2020, where two key concepts mission and vision have been identified together with their consequent objectives and priority actions that will be implemented in short and medium term.

Merit and talent are some of the key words of the Plan. On this basis Politecnico creates and disseminates new scientific and technological high content knowledge, educates and trains architects and engineers able to meet the challenges of a constantly changing society with competence and social responsibility and contributes to the cultural progress and to the competitive and sustainable development both of its territory and of the Country.

THE CAMPUS

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SCHOOL OF ENGINEERING Cittadella Politecnica

SCHOOL OF ARCHITECTURE Castello del Valentino

CITTADELLA OF DESIGN AND OF SUSTAINABLE MOBILITY Mirafiori

SCHOOL OF SPECIALIZING MASTERS Lingotto

The Politecnico campus model is similar to the Anglo-American Universities model, with four main seats in Turin, characterized by multipurpose facilities for teaching, for basic and applied research activities and for student services. Politecnico also has a regional network of technology centers (Alessandria, Biella, Mondovì, Vercelli, Verrès), dedicated to research, technology transfer, specialized training and local services. The historical site of our University, located on the banks of the river Po, is the Castello del Valentino, one of the Savoy residences in the seventeenth century, belonging to the list of the UNESCO World Heritage. It hosts Architecture courses in premises covering 23,000 sm. The large seat located in Corso Duca degli Abruzzi, covering 122,000 sm, hosts the Engineering Departments. It was opened in 1958 and now extends to the Cittadella Politecnica, a developing area next to the main site located in corso Castelfidardo; it is a modern campus of over 170,000 sm, with spaces dedicated to students, research activities, technology transfer and services. Politecnico's most recent campus is the Cittadella of Design and of Sustainable Mobility in Mirafiori, the FIAT plant that has now been re-developed, as well as the Lingotto site, which now hosts the School of Specializing Masters.

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organizing and managing the teaching activities.



GRADUATES

5.699 graduated in 2013

of which **3.182** are I level graduates (average age: 24 years)

of which **2.517** are II level graduates (average age: 26 years)

Employment rate of II level graduates in 2012 one year since the graduation

(Almalaurea, def.ISTAT-Work force):

- 84,4% (Italian average 68,2%)
- **37,5%** has a permanent job contract (Italian average 33,9%)

STUDENTS AND TEACHING

About 32,000 students attend Politecnico di Torino; 18% of them are foreign and come from over 100 different countries.

Each year about 5,500 students enroll in Politecnico in the first year. In the tradition of the best technical universities in Europe, Politecnico di Torino has a comprehensive range of programs in Architecture and Engineering (22 Bachelor-first level programs and 30 Master-second level programs in the Academic Year 2014/2015), with more than 30% offered completely in English. The course catalogue is enriched by first and second level Specia-lizing Master programs.

A further option is the Alta Scuola Politecnica (ASP), which merges the great traditions of Politecnico di Torino and Politecnico di Milano: it is a high-level joint educational program for talented students, that can be attended in parallel with the second level Master cycle.

STUDENTS

31.800 enrolled (2013/2014)

30%	female population
43 %	residents outside Piedmont
18 %	international students
5.500	first year students
13%	first year international students
199	specializing Master students (a.y. 2013/2014)
180	enrolled in Lifelong Learning courses (a.y. 2013/2014)
700	PhD students

PROGRAMS

- 22 first cycle-Bachelor programs (3 in Architecture and 19 in Engineering)
- **30** second cycle-Master programs (6 in Architecture and 24 in Engineering)
- **18** curricula offered completely in English
 - **1** I level Specializing Master program
 - **9** II level Specializing Master programs
 - **4** Lifelong Learning programs
- **14** PhD programs
 - **3** Advanced Training Programs
 - **1** Specialization Program
 - 1 Educational program for talented students (Alta Scuola Politecnica-ASP)



PhD PROGRAM

Teaching and Research are even more linked through the PhD programs,III level of the higher education.

PhD students of Politecnico di Torino acquire a scientific research independent ability through which they express creativity and methodological accuracy in the professional context, both in the academic and even more in the industrial fields.

In 1999 Politecnico established a specific structure aimed at the management of all the PhD programs offered by our University: the Doctorate School.

PhD students of Politecnico are about 700, which corresponds to 2% of the total number of Politecnico students.

This percentage is high compared to the percentage of other Italian universities and includes high quality students coming from all over the world: the foreigners who attend the PhD program corresponds to 36% of the total number.

PhD programs duration:

3 years (1/3 education activity, 2/3 research activity)

More than 70% of the PhD students

are students who obtained at least 105/110 as degree final mark and 35% obtained 110/110 cum laude

Foreign PhD students: 36%

AN INTERNATIONAL UNIVERSITY

Politecnico di Torino aims to compete at the same level with internationally recognized technical universities in the education and research fields. The fostering of the programs offered in English, the support to the international mobility of students and professors, the attraction of foreign students, PhD students and researchers, the participation in world joint research projects and programs on all the main reference topics make our University a truly international and multicultural environment.

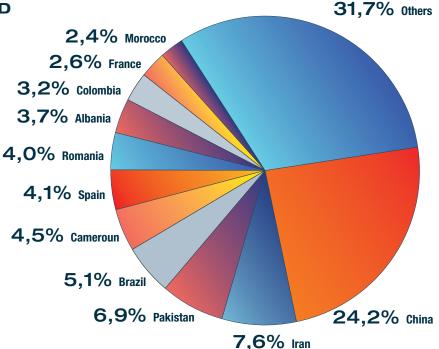
INTERNATIONAL CONTEXT

- **387** International agreements
- 425 LLP/Erasmus agreements
 - **118** Double Degree agreements

MOBILITY STUDENTS

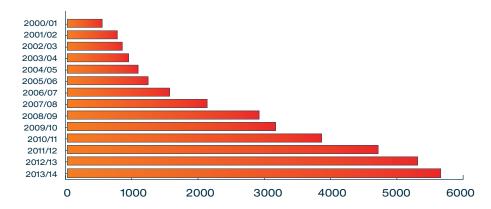
- **1.090** Incoming students (a.y. 2012/13)
 - 950 Outgoing students (a.y. 2012/13)

DISTRIBUTION OF ENROLLED FOREIGN STUDENTS



INCREASE IN THE NUMBER OF INTERNATIONAL STUDENTS

Number of enrolled foreign students



RELATIONSHIPS WITH THE REST OF THE WORLD

International agreements

- 29 Africa
- 75 Latin America
- 93 Asia
 - 6 Australia
 - 5 Canada
- 139 Europe
 - 19 Middle East
 - **21** USA

Business Research

RESEARCH AND TECHNOLOGICAL TRANSFER

Politecnico di Torino is a "Research University" which particularly cares about a balanced development of basic and applied research. Our University aims even more to create networks within its socio-economic context and to initiate partnerships with national and multinational companies. Fostering collaborative and interdisciplinary research and promoting the knowledge sharing with the industrial partners are some of Politecnico main objectives. Technological transfer becomes a real "knowledge sharing", a relationship based on the complementarity of competences, which is reinforced by the presence of joint laboratories in the campus and by the participation through partnerships in research projects, besides the traditional activities of the knowledge enhancing.

Politecnico offers to the companies interested in the innovation its own scientific skills, research and consulting services with an interdisciplinary, multiservice and customer oriented approach, a support for lab tests and analysis and in particular the possibility to share laboratories and services within the Business Research Center located within the Cittadella Politecnica. Among the industrial partners, our University counts, among others, the following partnerships: Avio, ENI Corporate, Ferrari, FIAT, General Motors Powertrain Europe, HP, IBM, Indesit, Italdesign Giugiaro, Michelin, Microsoft Italia, Nokia, Philips, Piaggio, Pininfarina, Pirelli, Siemens, SKF, STMicroelectronics, Telecom Italia, Thales Alenia Space.

RESEARCH FUNDING 2011/2013

	Number	Mln.€
E.U Projects	125	30
National projects	121	20
Regional projects	222	22
Third-party activities	1.834	62
Total	2.302	134

- FET Flagships Initiatives UE
 -Human Brain Project
 -Graphene
- **39** Spin-off until December 31st2013
- **225** Patents until December 31st 2013
- 159 Start up since 1999

4 Highly cited Researchers



In November 2013 the European Commission conferred the Politecnico di Torino the HR EXCELLENCE IN RESEARCH logo, awarding the commitment of our University in the implementation of the principles of the European Charter for Researchers & Code of Conduct for the Recruitment of Researchers.

VII FRAMEWORK PROGRAM OUTCOMES

- **63,4** Mln.€
 - **31** Projects coordinated by Politecnico
 - 1st Institute of Research in Italy for the ratio between obtained funds and number of researchers

POSITIONING OF THE POLITECNICO DI TORINO IN RANKINGS

ARWU Academic Ranking of World Universities	2013
ENGINEERING IN THE WORLD	51-75
ENGINEERING IN EUROPE	7-14

QS World University Ranking	2013
ENGINEERING AND TECHNOLOGY IN THE WORLD	68
ENGINEERING AND TECHNOLOGY IN EUROPE	22

The Innovation Front End (IFE)

is a privileged access channel, created for the Companies which want to get in touch with the Politecnico: this channel is useful to welcome, identify, acknowledge and interpret research and innovation needs coming from the industrial world and from public and private bodies, in all Engineering sectors (industrial, ICT, civil/architectural/environmental/ management engineering), Architecture and Design.

I3P THE INNOVATIVE ENTERPRISE INCUBATOR

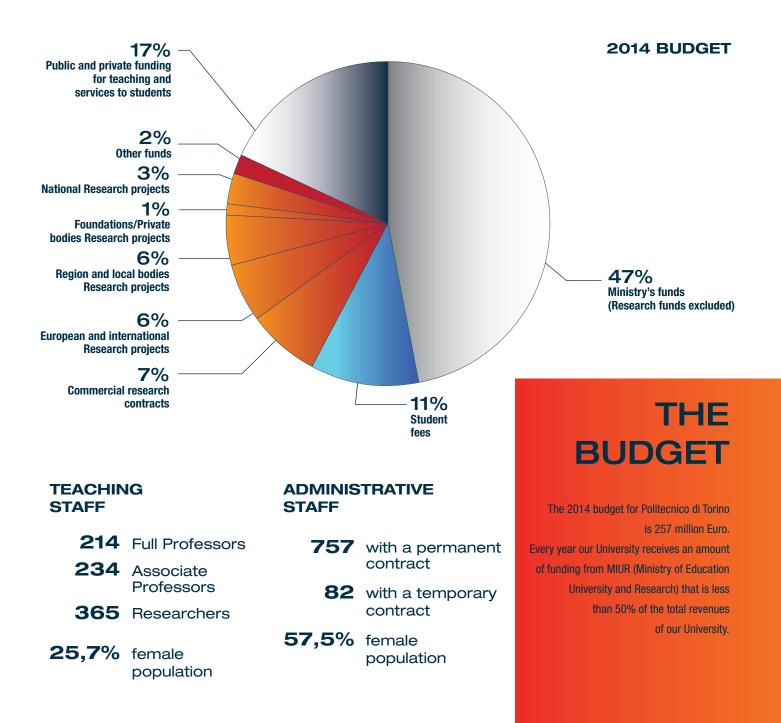
The Innovative Enterprise Incubator of the Politecnico of Torino is the main university based incubator in Italy, one of the best at European level and one of the best in the world for outcomes and companies. It supports the creation of new science-based companies, founded both by university researchers and by external professionals, providing them with well-equipped spaces, consulting and professional services. as well as a network of professionals, managers and investors. Founded in1999, I3P is located in the Cittadella Politecnica and it has launched 159 start up as of today, that have been able to exploit the results of research in different fields: ICT, Cleantech, Medtech, Industrial, Elettronics and Automation, Social Innovation. In 2011, I3P launched TreataBit, an incubator dedicated to consumers digital projects, such as portals,

e-commerce solutions, social networking sites, web and mobile applications, which has already supported more than 120 business teams, of which 23 have become companies.

I3P is one of the first Italian incubators to be recognized as "Start Up Innovative Certified Incubator". On average, every year I3P collects some 300 new business ideas, examine about 100 business plans and launch about 15 new start-up.

OPERATORS IN THE I3P COMPANIES





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