# Politecnico di Torino



#### POLITONG PROJECT

Tongji University Shanghai, China

a.y. 2025/2026

#### Politong Current Programmes

- Bachelor ICT (Inform & Comp. Tech.) area:
  - Computer Engineering
  - Electronic Engineering
  - Electronic and Communication Engineering (ECE)
- Bachelor MPE (Mechanical & Production Engineering) area:
  - Mechanical Engineering



### Politong – ECE, Electronic eng., Computer eng.

#### **Program Timeline**









I <sup>st</sup> YEAR	2 <sup>nd</sup> YEAR	3 <sup>rd</sup> YEAR
Bachelor program in Computer Engineering, Electronic Engineering, ECE	Bachelor program in Electronic Information Engineering	Bachelor program in Computer Engineering, Electronic Engineering, ECE
in Italy – Torino	in China – Shanghai	in Italy – Torino

additional semester

Bachelor program in
Electronic
Information
Engineering

in China – Shanghai

Italian BSc degree in Ingegneria Informatica/Computer Engineering, Ingegneria Elettronica or ECE





## Politong – ECE, Electronic eng., Computer eng. First Year (in Italy)

- First year classes in Torino (Italian or English)
- Ask to enter the PoliTong program at the first year in Polito
  - Apply: within January 13<sup>th</sup> 2025 (h. 12.00)
  - Pass "Analisi Matematica I" within winter exam session a.y. 2024/25
  - Results and Interview: ~ February/March (from I sem. results)
- April 2025: start Chinese language course
- Pass 37 credits by July 2025



## Politong – ECE, Electronic eng., Computer eng. Second Year (in China)

- Classes given in English
- Courses in the Tongji University Catalogue
- Professors from the two Universities
  - About 1/7 from Politecnico (TO)
  - About 6/7 from Tongji University



## Politong - ECE, Electronic eng., Computer eng.

#### Second Year – Study plan

#### FIRST SEMESTER

Tongji University Courses	PoliTO Courses for credit recognition	CFU
Circuit theory		
Physics		
Complex functions and integral transform		
Analogue electronics		
Signal and systems	Information Technology Engineering 1	35
Communication technologies		
Mathematics II		
Advanced programming		
Digital Signal Processing (to be arranged in the latter part of the semester)		
*Chinese Language 1	Required for Chinese B.Sc. title	
*General View of China 1	nequired for Crimese B.Sc. title	

NOTE: Tongji courses have typical size equivalent to approx 2-4 CFU.



## Politong - ECE, Electronic eng., Computer eng.

#### Second Year – Study plan

#### **SECOND SEMESTER**

Tongji University Courses	PoliTO Courses for credit recognition	CFU
Communication networks		
Electronic devices		25 (ECE)
Digital electronics		/ 23 (ELN
Software engineering		& INF)
Computer architecture		
*Chinese Language 2	Described for Chinago D. Co. title	
*General View of China 2	Required for Chinese B.Sc. title	

NOTE: Tongji courses have typical size equivalent to approx 2-4 CFU.



#### Politong - ECE, Electronic eng., Computer eng.

#### Third Year (in Italy)

- Take BSc courses of the ICT area (see Didattica portal, Orientamento "Information technology engineering" – Shanghai)
  - Classes given in Italian or in English
  - Mandatory internship
  - 2<sup>nd</sup> year exams not previously passed (if any) organized in accordance to Tongji University schedule & rules
- Receive the Italian BSc degree in
  - Computer Engineering
  - Electronic Engineering
  - ECE



#### Program Timeline









1st YEAR	2 <sup>nd</sup> YEAR	3 <sup>rd</sup> YEAR
Bachelor program in Ingegneria Meccanica or Mechanical Engineering	Bachelor program in Ingegneria Meccanica or Mechanical Engineering	Bachelor Program in Machine Design & Manufacturing and their Automation
in Italy – Torino	in Italy – Torino	in China – Shanghai

additional	
semester	

Bachelor Program in Machine Design & Manufacturing and their Automation

in China – Shanghai

Italian BSc degree in Ingegneria Meccanica or Mechanical Engineering



Chinese BSc degree in Engineering in Machine Design & Manufacturing and their Automation





#### First & Second Year (in Italy)

- First and second year classes in Torino with regular study plan (Ingegneria Meccanica / Mechanical Eng.)
- Ask to enter the PoliTong program at the second year in Polito
  - Apply: by January 13th 2025 (h. 12.00)
  - Pass 46 CFU within December 2024
  - Results and Interview: ~ February/March
- Second year, 2<sup>nd</sup> semester courses:
   Applied mechanics (10 CFU)<sup>1</sup>, Experimental statistics and mechanical measurement (6 CFU)<sup>1</sup>, Fundamentals of Engineering Thermodynamics and Heat Transfer (8 CFU)<sup>1</sup>, Fundamentals of thermal machines (6 CFU)<sup>2</sup>
  - 1. regular courses from the standard program in Bsc Ing. Meccanica / Mechanical Eng.
  - 2. specific course for Politong Program; it substitutes the standard course Fundamentals of thermal and hydraulic machines and fluid power (10 CFU)
- April 2025: start Chinese language course
- Pass 88 credits by July 2025



#### Third Year (in China) - Study Plan

#### **FIRST SEMESTER**

Tongji University Courses	PoliTO Courses for credit recognition	CFU
Fundamentals of Control Engineering	Mechanical engineering 1	
Course Project for Fundamentals of Control Engineering		
Robotics Technology		
Circuits Theory		
Experiments for Major Courses		
Innovation and Entrepreneurship Project	Mechanical engineering 2	
Foundation of Mechanical Manufacturing Technology		
Course Project for Foundation of Mechanical Manufacturing Technology		
Production Systems		
Manufacturing Engineering Digitalization Technology		
Chinese Language 1	Paguirad for Chinaca P. Sc. titla	
General View of China 1	Required for Chinese B.Sc. title	

NOTE: Tongji courses have typical size equivalent to approx 2-4 CFU. They are gathered in 4 cluster courses for 13 CFU each for credits recognition in PoliTO



### Third Year (in China) - Study Plan

#### **SECOND SEMESTER**

Tongji University Courses	PoliTO Courses for credit recognition	CFU
Mechanical Design		
Course Project for Mechanical Design		
Sensor and Testing Technology	Na shawisal ayasiya ayiya 2	13
Course Project for Sensing & Testing Technology	echnology Mechanical engineering 3 1	
Intelligent Manufacturing Equipment		
Engineering Management and Economics		
Professional practice	Mechanical engineering 4	
Innovative Design in Mechanical Engineering (Course for Competition)		
Fluid Mechanics and Hydropneumatics		
Course Project for Fluid Mechanics and Hydropneumatics		
Machine Vision Theory and Applications		
Motors and Electric Drives		
	Final Project	3
Chinese Language 2	Required for Chinese B.Sc. title	
General View of China 2		

NOTE: Tongji courses have typical size equivalent to approx 2-4 CFU. They are gathered in 4 cluster courses for 13 CFU each for credits recognition in PoliTO



## Politong After Graduation

- Continue studies
  - Enter MSc Program in Italy, China, Europe, ...
  - Enter a First Level Specializing Master in Italy
- Enter the job market
  - Knowledge of Chinese culture, attractive to both
    - European Companies operating in China
    - Chinese Companies operating in Europe
  - Industries sponsor the campus for recruitment



#### Politong Double Degree

- Additional Semester at Tongji University
  - Mainly laboratories and research activity
  - Possible internship in a Chinese Company
  - Exam of Chinese language and culture
  - Graduation Thesis
- Get Chinese BSc degree from Tongji University
- The additional semester is organized entirely by Tongji University



#### Politong Selection process

- Student express interest
  - within January 13th 2025 (h.12.00)
- February/March 2025: selection of students
  - based on grades + interview
- April 2025: start of Chinese language course
- April/May: application to Tongji
- July 2025: confirmation of acceptance and VISA request
  - pass Chinese language exam by July 2025
  - pass at least 37 credits for ITE or 88 for MPE by July 2025



### Politong How to apply

```
Within January 13th 2025 (h.12.00) go to
       your personal page on Portale della Didattica
then go to
       «Segreteria online» section
then select
       «apply for outgoing mobility programmes»
then select
       «progetti speciali»
select
       «Politong» and confirm
```



#### Politong Finance

- Tuition fee paid only at Politecnico di Torino;
- Usual scholarships for the years in Italy (including Edisu);
- Scholarship for the year in China (last year: 535 Euro/month to be confirmed).



#### Politong Thresholds

- Admission to the program
  - Pass "Analisi matematica I" within winter exam session a.y. 2024/25 for ITE students and 46 CFU within December 2024 for MPE students
  - Pass 37 credits for ITE students and 88 credits for MPE students within July 2025
  - Pass Chinese language exam within July 2025 all students
  - B2 certificate of English language all students
- To avoid returning the scholarship
  - Pass 40 credits in China
- Admission to third year for ITE students:
  - Less than 10 credits failed in China, otherwise
    - Transfer to a regular BSc program
    - No double degree



#### Politong Visa Procedure

- Apply to Chinese Consulate (e.g., in Milan) with
  - Admission notice from Tongji University
  - Application form from Tongji University
- Required visa: Type X (xuexi)
  - Valid for one month
- Resident permit application upon arrival
  - Valid for 1 year

VISA application not before July 2025



#### Politong Reference People

- In Shanghai
  - Professors of active courses
  - Italian and Chinese Politong staff,
     <u>sinoitaliancampus@tongji.edu.cn</u>
- In Turin
  - ITE prof. Fabrizio Bonani, <u>fabrizio.bonani@polito.it</u>
  - MPE prof. Stefano Pastorelli, <u>stefano.pastorelli@polito.it</u>
  - Ufficio Mobilità internazionale
     Ticketing Service from Personal Page of Portale della Didattica
     (outgoing mobility progetti speciali).



