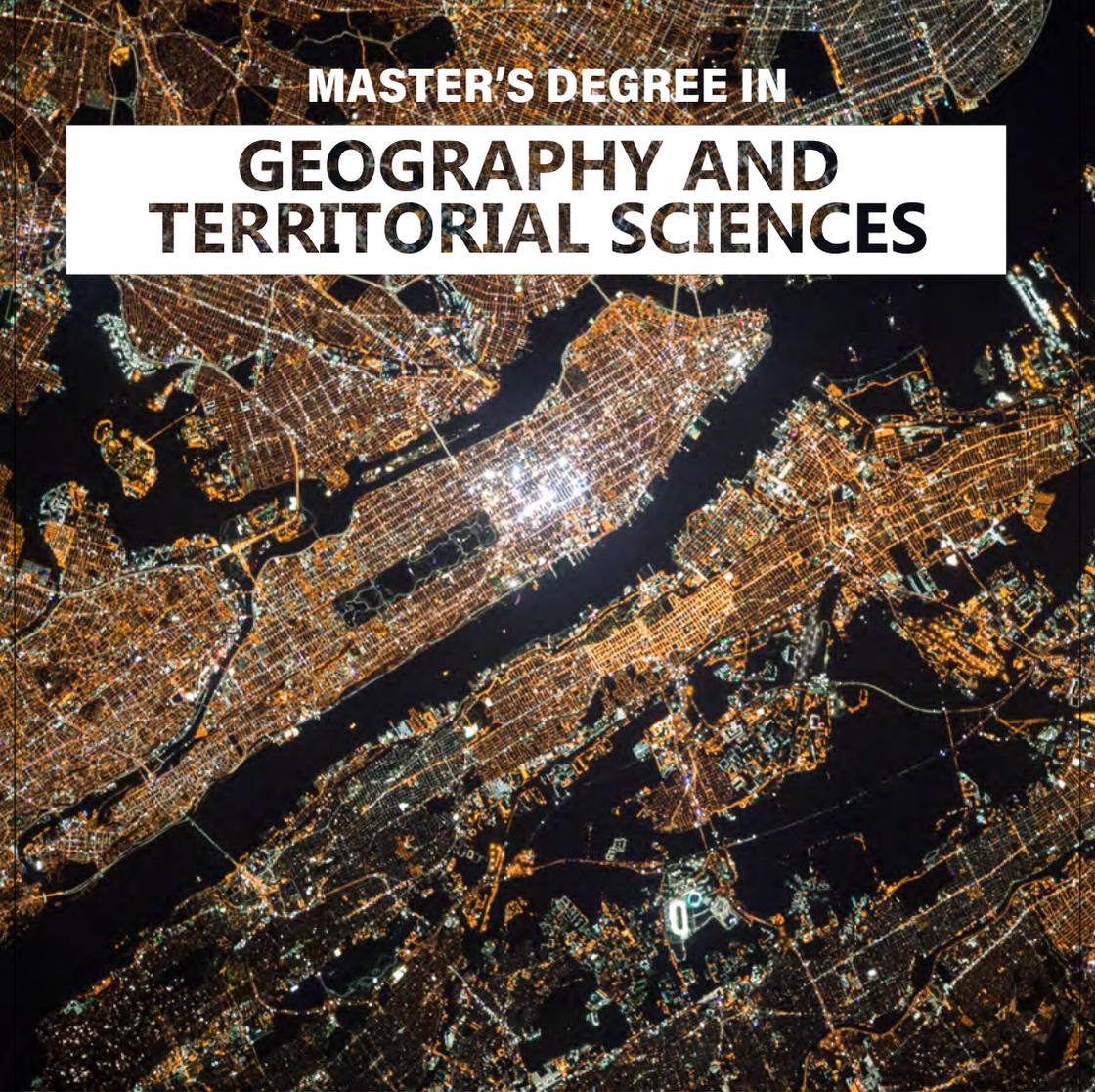




**UNIVERSITÀ  
DI TORINO**



**Politecnico  
di Torino**



**MASTER'S DEGREE IN  
GEOGRAPHY AND  
TERRITORIAL SCIENCES**



**Politecnico  
di Torino**



**UNIVERSITÀ  
DI TORINO**



Interuniversity Department of Regional and Urban Studies and Planning  
Excellence MIUR 2018-2022



ARCHIOLOGIA  
GEOGRAFIA  
STORIA  
STORIA DELL'ARTE  
STORIA DEL LIBRO  
E DEL DOCUMENTO

**DIPARTIMENTO DI  
STUDI  
STORICI**



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The master's degree in **Geography and Territorial Sciences** trains professionals capable of integrating cultural, socio-economic and technical knowledge for spatial and environmental analysis, organisation and management. As such, it trains a new generation of skilled workers and citizens who can effectively deal with the unprecedented contemporary societal, economic and political challenges both locally and internationally (e.g., environmental crisis, planetary urbanisation, globalisation, geopolitical tensions).

The master's degree in Geography and Territorial Sciences is an inter-university programme: this means that the degree is awarded jointly by the **Università degli Studi di Torino** and the **Politecnico di Torino**, two leading Italian and European universities.

In Italy and abroad, **geographers work** in: public and private research centres; development agencies, professional firms and companies operating in the field of spatial policies and sustainable development; public offices in the fields of environmental and landscape protection and management, preservation of historical-cultural resources, urban and regional policies; international and national agencies.

Overall, students will leave the master's degree in Geography and Territorial Sciences with the geography skills needed for jobs in natural resource management, research, sustainability, development and policy.



## Course organisation and pathways

In the first year, the degree includes courses aimed at acquiring an in-depth knowledge of physical and human geography: students will attend classes that are fundamental for understanding the environmental, socio-cultural and political phenomena connected to the main processes of global change. At the same time, students will learn to use the main IT tools for spatial representation, analysis and management.

In the second year, students can refine their skills, following their study interests and professional goals by choosing one of several different pathways. Two of them are entirely in English:

### ***URBAN AND POLITICAL GEOGRAPHY***

This pathway analyses the political and power processes operating at different territorial levels, which affect the urban domain.

### ***GEO-DATA SCIENCE***

This pathway integrates skills relating to geomatics (numerical cartography, GIS, remote sensing) with those of applied informatics (programming languages, databases, big data and artificial intelligence).

The master's degree also offers pathways in Italian: applied geomorphology, applied meteorology, landscape protection and enhancement, territorial development.

Faculty members acting as tutors will help students to choose their pathway and the related teaching activities.





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## URBAN AND POLITICAL GEOGRAPHY

Many of the most urgent challenges facing contemporary societies refer to urban issues: that is, they concern cities and the life that takes place within and around them. Indeed, it is often the urban level, given its demographic and economic centrality, that is the first to be confronted with the most concrete, immediate, and radical effects of the economic, social, and political crises of our time.

The pathway in **Urban and Political Geography** analyses the political, economic, social, and institutional processes that operate at different spatial levels and that significantly shape the urban domain. The course traverses multiple crucial topics (including migration, housing issues, urban economies, spatial development, geopolitics, planetary urbanisation, and the growth of inequality and poverty) that are approached through the lens of different disciplines dealing with the urban and political domain, including geography, economics, and political science. During the two years of coursework, students will have the opportunity both to deepen their understanding of the main theories and interpretative lines on and relating to the urban, and to acquire a methodological background suitable for understanding the various issues of urban and political geography. The aim of the course of study is to train experts in the social, economic, and political processes that govern territorial systems at all spatial scales.

### List of courses includes:

#### *First year*

- Geography, theory, and practice
- Urban political ecology
- Geomorphology and soil conservation
- Urban studies
- History, spaces and theories of capitalism
- Housing, property, and struggles
- Advanced GIS
- Laboratory "Chinese urbanism"

#### *Second year*

- Urban and Regional Development
- Critical migration studies
- Racialized and gendered cities
- Southern urbanism
- Laboratory "The geopolitics of the Israeli-Palestinian conflict"



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## GEO-DATA SCIENCE

This pathway combines knowledge of geomatics techniques with applied computer science to provide future GIS analysts with the necessary skills to develop new analytical methods and to implement automated workflows in the geomatics domain.

Geomatics techniques and tools enable the management of georeferenced spatial data and the creation of value-added information; they can be applied in multiple application areas (environmental planning, cultural heritage, emergency management, agriculture, etc.) and in response to various challenges (environmental sustainability, socio-economic resilience, socio-spatial justice and inclusion, space security, geo-marketing and cooperation development, etc.). In this context, Geographic Information Systems (GIS) and remote sensing play a key role, making it possible to acquire data, to position them with respect to a reference coordinate system (georeferencing), to structure them effectively, to analyze them, to share them and to produce cartographic outputs.

These competences are complemented by state-of-the-art techniques for: analyzing big data by means of artificial intelligence methods; automatizing processes by means of programming languages such as Python; and storing and analyzing massive and complex data by means of database management systems.

Finally, several laboratories have been devised to deepen techniques for raster management and analysis, for acquiring data by means of RPAS (drones) and to acquire ECDL GIS certification.

During the first year, students can follow courses such as "Remote sensing" and "Advanced GIS"; during the second year, courses include "Geoinformatics", "Data science Lab", "Spatial data-bases" and "Environmental spatial analysis".





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## Entry requirements

The usual entry requirement is a bachelor degree or equivalent qualification preferably in: Geography; Architectural Sciences; Urban Planning; Urban Design; Geological Sciences; Cultural Heritage; History; Civil and Environmental Engineering; Agricultural and Forestry Sciences; Environmental and Nature Sciences; Economics; Political Science; International Relations; International Development and Cooperation.

Students with different degrees may still be admitted to the individual preparation test interview if they have taken core examinations in physical geography (or geomorphology) and in human geography in their university career.

An adequate knowledge of the English language is also required.

For more information, go to: <https://en.unito.it/studying-unito/application-international-students>.





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## **Studying in Turin: An affordable campus, a vibrant city, a surprising Italian region**

Turin is a city with a lively cultural and youth scene. It is also a desirable and safe place to study and live, a city that is easily negotiated by public transport or bicycle, with amazing parks. The Piedmont region is home to five UNESCO World Heritage sites and is renowned as one of Italy's premier food and wine destinations. Moreover, Turin is far more affordable than other Italian cities, in terms of rental housing, cost of living and access to services. In addition, the Università degli Studi di Torino offers a wide range of student funding through scholarships and grants.

### **Our campuses**

The Università degli Studi di Torino and Politecnico di Torino are top European universities. They are among Italy's leading universities and occupy top positions in global university rankings. Together, they host more than 100,000 students, coming from all over the world.

*Geography is a very multidisciplinary discipline [...] I think there is within geography the possibility of bringing together the social and the natural sciences more than we have historically done [...]. In an age which is faced by environmental problems such as we have, with climate change, with pollution questions, which are utterly social too, then I do think that the natural and the social sciences need to talk to each other more. And geography, maybe, is one of the places that could happen.*

(Doreen Massey, 2013)



## Contacts

### *Tutor for international students*

Dr. Mara FERRERI  
mara.ferreri@polito.it

### *Coordinator of the master's degree*

Prof. Giandomenico FUBELLI  
giandomenico.fubelli@unito.it

### *Student Office*

Ms. Rossana PETEAN  
rossana.petean@unito.it

## Key information

### *Start date*

September 27, 2023

### *Programme duration*

The programme is normally completed over 2 years, full-time

### *Fees*

Tuition fees are related to family or individual income, up to a maximum of 2,840 euros per year for those with the highest incomes. Further details at: <https://en.unito.it/studying-unito/tuition-fees>

For detailed information, visit:

[www.geography.unito.it](http://www.geography.unito.it)