#### **Admission Requirements**

Applications are open to candidates with an above-average Bachelor degree or its equivalent in science or engineering, e.g. cartography, geography, geodesy, computer science.

Non-native speakers of English will be required to submit an adequate TOEFL or IELTS score. The application deadline is around March the 15 th for the following winter term (starting in mid-October).

## **Programme Highlights**

- gaining the expertise of three well known European Technical Universities
- international study environment
- individual supervision in small courses
- studying at three charming European cities (Munich, Vienna, Dresden)

## **Programme Structure**

- 1st semester at TU Munich (Germany)
- 2nd semester at TU Vienna (Austria)
- 3rd semester at TU Dresden (Germany)
- 4th semester for Master's thesis preparation either at TU Munich, TU Vienna or TU Dresden.

During the first semester at TU Munich the foundations in Cartography and Geovisualization are taught. In the second semester at TU Vienna and in the third Semester at TU Dresden students will deepen their knowledge. Thus the Master Programme of Cartography consists of 4 Semester (2 years). It is based on lectures combined with exercises. Students will be encouraged to continue with a PhD study to achieve a Doctoral degree.

The curriculum is structured in complementary and consecutive modules towards developing cartographic skills, thus enabling students to acquire specific and precisely defined learning outcomes in each module. Joint education will take place within student and research projects, publications and supervised Master theses.

## MSc Cartography at a glance

Degree: Master of Science (MSc) in Cartography of TU Munich, TU Vienna and TU Dresden

Start of the program: Mid October of each year

Language of instruction: English

Tuition fees: 863 € for the entire 2 years

Programme size: 15 - 25 students

Programme duration: 4 semesters (24 months)



Master's Programme in Cartography			Credits	Semester	
Cartographic Foundations Scientific Visualization	Geostatistics Geovisualization	Image processing, Photo- grammetry & Remote Sensing	30	1 (TU Munich)	
Theoretical Cartography Cartographic Interfaces	Location Based Services Multimedia Cartography	Cartographic publishing, Web- mapping, Geomedia Techniques	30	2 (TU Vienna)	N.
Mobile Cartography Geodata generalization	Georelief and Cartography GIS Applications	True-3D, Dynamic Geo-Features Radar Cartography	30	3 (TU Dresden)	

Master's Thesis preperation (at one of the 3 cooperating universities)

## **Career Perspectives**

With its unique features, the master programme is an innovative approach that provides excellent job opportunities. The cooperation of three universities intents to give the graduates an access to an international research network and an optimal start to a scientific career. Job possibilities ensue not only in their home countries, but also worldwide. Degree holders in cartography are employed for example at universities or research institutes as well as for private cartographic / GIS companies like Intergraph, Siemens, ESRI. Cartographers as mapmakers work in large governmental agencies or for well known atlas publishers.

Degree holders in Cartography can work:

- in many different research institutions and organizations
- in governmental agencies
- in private cartographic companies
- in companies dealing with GIS, Navigation Systems, Geodata-Analysis etc.
- in map/atlas publishers



## Background

At least 80% of all company data and of all political and business decisions have spatial relevance. To analyze and visualise this data Cartography as a science is a crucial key instrument. Cartography acts as an interdisciplinary field since many of the earth-related subjects involve the use of cartographic representations.

Graduates will be highly qualified to deal with challenges of modern cartography as an interdisciplinary area. With a very high concentration of scientific competence in cartography, the programme is outstanding not only in Europe, but also worldwide. It will be the first Master of Science in Cartography taught in English.

The International Master of Science programme (MSc) in Cartography is a cooperation of :

- TU Munich, Department of Cartography
- TU Vienna, Institute for Geoinformation and Cartography
- TU Dresden, Institute for Cartography

## Contact

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## Cartography (MSc)

## International Master's program a cooperation of







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## **Programme Objectives**

The programme aims to educate students to become future engineers in Cartography and to prepare them either for a career in the scientific or in the commercial field of cartography. Students will be prepared to use cartographic tools to analyze and visualise our rapidly changing world. Moreover, the programme will provide students with the necessary skills to prepare them for doctoral studies on a European level.

Graduates will be highly qualified to deal with challenges of modern cartography as an interdisciplinary area. A main goal of the Master of Science programme in Cartography is to spearhead the cartographic research not only in Europe but also worldwide. Thanks to the strategic partnership of this programme innovative standards in international cartography education and research shall be set.

Furthermore, the programme improves the exchange of students and scientists worldwide. Due to comprehensive education this programme will educate top-level researchers in Cartography. The unique curriculum taught by the three cooperating Universities TU Munich, TU Vienna and TU Dresden distinguishes the Cartography programme from other master's programs in related fields. With its unique features, this innovative and sustainable programme provides excellent job opportunities.





Technische Universität München

# International Master's programme in

# Cartography MSc

ΤШ

24-month programme Conducted in English

**Cooperation of 3 European Technical Universities** 

- 1st semester at TU Munich
- 2nd semester at TU Vienna
- 3rd semester at TU Dresden

## - 4th semester: Master's thesis at one of the 3 universities

## www.cartographymaster.eu