

Mapping for a sustainable world

The unique joint degree is dedicated to educating global talents not only for the cartographic profession, but basically for all research domains where **interdisciplinary competence such as geodata and graphic literacy, critical reflection of ethical values and design thinking** play a fundamental role in addressing the grand challenges of achieving the Sustainable Development Goals. It is **jointly designed, promoted and operated by four partner universities across Europe.**



Cartography M.Sc. is proudly co-funded by the Erasmus+ Programme of the European Union. After an initial funding in 2014, it was awarded the Erasmus Mundus Joint Master (EMJM) grant in 2017 a second time and finally a third time in 2022.



4 Program structure by our PARTNER UNIVERSITIES


1 SEMESTER
Chair of Cartography and Visual Analytics, **Technische Universität München** (TUM, Germany)

2 SEMESTER
Research Unit Cartography, **Technische Universität Wien** (TUW, Austria)

3 SEMESTER
Institute for Cartography, **Technische Universität Dresden** (TUD, Germany)


4 SEMESTER (THESIS)
coordinated by: Department of Geo-information Processing, **University of Twente** (UT, The Netherlands)

The program provides excellent job employment prospects. Here are **VOICES BY OUR ALUMNI**, who founded companies in the field, serve as active members of the cartographic community and whose work is featured in popular cartographic publications:



Sifa Mawiyoo
GIS Service Technician, Historic Environment Scotland, UK
Country of origin: Kenya
Graduated: 2021

As a graduate of the M.Sc. in Cartography, I can confidently say that it sharpened my skills and elevated the caliber of my map production. Through the program's network, I had the opportunity to collaborate with SHARING WATER (an Austrian NGO) on a multimedia project on Water use and resources across Europe. The program's breadth provided an excellent foundation to compete globally. Since completing the program, I've moved to Scotland, UK, where I support transformational infrastructure change, agile development, and GIS service provisioning at Historic Environment Scotland. Here, I have extended the lessons learned and continue to stand out due to the program's experiences. From visual design, to data manipulation and effectively communicating to diverse audiences to achieve common goals, I am grateful to have had the M.Sc. in Cartography as part of my career development.



Armand Kapaj, PhD
Senior Scientist, University of Zurich, Switzerland
Country of origin: Albania
Graduated: 2018

Attending the M.Sc. in Cartography was a great experience for my professional and personal life, and it will always have a special place in my memories. By studying at four different universities during my Master's, I gained more experience in the field and got to know many experts from different European research groups. The extensive coverage of theoretical knowledge and emerging technical tools equipped me with various skills in map design and spatial data analysis that I could use during my PhD studies. Now, as a senior scientist at the Department of Geography of the University of Zurich, I use this knowledge and technical skills for my everyday work and also disseminate them during teaching and supervision activities. In addition, the Master offered a great opportunity to make many friends and collaborators worldwide. Even to this day, when attending international conferences and research activities, I meet many proud alumni of the Master's program and exchange our great experiences and favorite moments.

Armand serves as Vice-Chair of the Commission on Ubiquitous Mapping of the International Cartographic Association.



Syed Miftah Zeya
Co-Founder & CEO, SPACE-SHIP Munich, Germany
Country of origin: India
Graduated: 2022

My career journey has been profoundly transformed since graduating from the M.Sc. in Cartography in 2022. Following graduation, I founded my own software company in Munich, a venture made possible by the exceptional support from our program's chair and TUM Start-up consulting. The program and the university equipped me with the necessary skills and connected me with the vibrant start-up community and Venture labs, paving the way for my entrepreneurial journey. The connections and resources provided by the program, coupled with TUM's start-up ecosystem, greatly facilitated the process of securing funding and establishing a solid foundation for our business. Beyond the tangible career benefits, the Cartography program has enriched my life by introducing me to remarkable people from diverse backgrounds, many of whom have become cherished friends. Overall, the Cartography program has been instrumental in shaping my career trajectory and enabling me to pursue my entrepreneurial aspirations.



Camila Narbaitz-Sarsur
Freelance Cartographer, Vienna, Austria
Country of origin: Argentina
Graduated: 2023

When applying for the master, I was expecting to become an expert in Cartography. Well... I did not. But let's be real, expecting to master it all would've been pushing it, right? Still, what I got was even better. I got hands-on with a variety of GIS and map-making tools, and what made it even cooler? It was not just about coursework. Living in different cities and hanging out with people from all over the world with such different backgrounds has exposed me to different cultures and viewpoints everyday. And let me talk about networking... Coming from across the ocean, the master was like a springboard for my career: It opened doors, helped me grow professionally, and provided me with connections around the world. And even if after the master, I have to strive to achieve what I want, I am immensely grateful for the enriching experience and the invaluable platform it provided for my personal and career growth.

Camila's map **Wien Secession – An Artsy Walk through Vienna** won the **Ravenstein-Förderpreis 2022** and will be featured in **The Atlas of Design!**

50 More than **THESES RESULTS** HAVE BEEN PUBLISHED in scientific journals. Some showcases:

- (1) Integrating Geospatial Linked Open Data and Knowledge Networks into Business Intelligence (Ostrovna, 2020)
- (2) Supporting Enhanced Disaster Management with Interactive 3D and Mixed Reality Maps (Helzel, 2019)
- (3) Sustainable Development Goals and uncertainty visualization (Gosling-Goldsmith, 2018)
- (4) Methodology for Producing a Hand-Drawn Thematic City Map (Jensen, 2017)
- (5) Do Taxi Drivers Choose the Shortest Routes? (Li, 2017)

