

## **GEOINFORMATICS & CARTOGRAPHY**

at Palacký University Olomouc

Olomouc

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**PhD Study** 

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#### Palacký University Olomouc





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#### **Department of Geoinformatics**

The Department of Geoinformatics was founded in 2001. Today it's an academic department offering high quality research and education, respected both nationally and internationally. Its main fields are GIScience and geoinformation technologies in research, education and promotion. The Department has two specialised laboratories for GIS and Earth remote sensing, and one research laboratory for eye-tracking techniques in cartography. It is equipped by state of the art devices and software. Its teaching activities are in cooperation with prominent national commercial companies and renowned foreign universities.

### PhD study

The PhD study in Geoinformatics & Cartography focuses on the main theoretical and practical aspects of GIScience, geostatial technologies, Earth remote sensing, GNSS, digital cartography, spatial statistics, atlas production, etc. The aim of the study is to prepare highly qualified scientists for professional and research work in various specialisations in geoinformatics and cartography.

### **Fields of research**

Currently, the Department concentrates primarily on three research directions:

- Spatial modelling of geographical phenomena in GIS
- Digital cartography
- Remote monitoring of landscape

### Responsibilities

Bern Chain

- Four years of study
- Publish in scientific journals
- Present at scientific conferences
- Complete 3 month research internship
- Compile PhD thesis
- Lead seminars
- Participate in department activities

#### **Benefits**

- A diploma accepted worldwide
- Accommodation guaranteed
- Participation international projects
- Prolongation student life
- Living in a beautiful historical city
- Access to worldwide libraries, research, and latest technologies



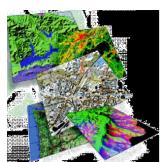






#### **Documents Required for Application**

- **Application form**
- Curriculum vitae
- Official transcript and a copy of your certificate/diploma
- English language proficiency certificate
- List of publications (if any)
- Two recommendation letters one from the graduation department (head or tutor), one from an external teacher
- Health status certificate (not older than one month)
- Selected field of Ph.D. thesis (from a list or after agreement with an selected supervisor)
- A non refundable processing fee of EUR 25 (free of any bank charges)
- http://www.prf.upol.cz/en/groups/studying/study-programmes-openin-english-language/documents-required-for-application/
- Tuition fee is determined annualy (living costs are approx. 400 Euro per month)







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## **Selected thesis**

- Advanced methods for landslide assessment using GIS
- Dynamic modelling of land use
- Photogrammetric approach to geodata collection with the use of unmanned aerial vehicles
- Processing and visualization of spatio-temporal data
- Visualization of uncertainty in environmental studies
- Eye tracking research in cartography
- GIS analyses of logistics issues in public transport
- Advanced analyses in spatial databases
- Data mining and parallel computing in GIS
- Map user profile
- Uncertain multidimensional data in GIS
- Concept of dynamic atlases
- Non-technical aspects of map creation in atlas cartography
- Fractals and fuzzy sets in GIS modelling
- Map content evaluation
- Visualization in GIS
- Comparative analysis of concept, content and symbology of school cartography
- Mapping, analyses and visualization in telecartography
- Soft computing and artificial intelligence in GIS

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