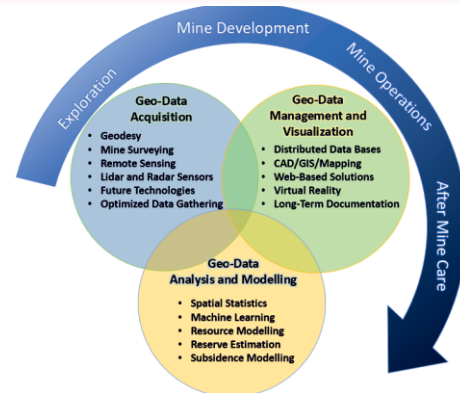


# EU KAVA-PROJECT (MASTER EDUCATION) EC-GEO-SUSTAIN

## EUROPEAN MSc IN GEOMATICS FOR MINERAL RESOURCE MANAGEMENT

A growing world population and technology development will require a continuous supply with raw materials, also and especially in the future. To meet this global demand, it will be necessary to progress the extraction of mineral resources in areas of the geosphere, which are more difficult to access and characterized by increased mining geological complexity and more harsh working conditions. At the same time the primary objectives will remain to ensure the highest level of operational and public safety, to comply with all environmental and social regulations/ boundary conditions and also to make best and optimal use of natural resources by maximizing recovery. This requires engineers being able to develop new innovative solutions, making best use of most modern technology, in particular in the fields of monitoring operational and public safety, impact on environment, compliance to planned processes and economic performance. The basis for this is the use of most modern sensing technologies for geo-data acquisition and geo-data management, state-of-the-art methods for information extraction and analysis and to assimilate this information in digital 3D decision making models, such as the resource models or mining subsidence prediction models. The European Course on Geomatics for Sustainable Mineral Resource Management aims to develop an European



MSC course that develops future leaders and innovators in this field. The educational content focuses on the pillars:

- Sensing technologies for mine data gathering,
- Spatial (big) data management and visualization and
- Spatial (big) data analysis and modelling.

The integration of the three pillars to innovative Geomonitoring concepts by the means of multinational group projects, will focus on competency development in more complex levels of educational learning, in particular case specific evaluation, analysis of technologies and methods to create case specific and new holistic concepts. With a guided but flexibly designed exchange program between involved Universities, students will be exposed to different fields of expertise and cultural environments. Graduates are expected to be the future leaders in the field of technology development and innovation bringing modern geomatics concepts to marketable products for a secured future in the mineral resource industry.



Reinfried **PILGRAM**

Senior Researcher

**Mine Surveying**

reinfried.pilgram@unileoben.ac.at



Wrocław  
University  
of Science  
and Technology

