

EO4GEO High level capacity building Workshop organized by
NEREUS and Podkarpackie/Mazovia regions:

Shaping the future workforce of the space / geospatial sector in Poland: EO/GI Skills needed & EO4GEO solutions

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Rzeszow University of Technology

provides technical education since 1951

State university with higher education at 7 faculties:

- The Faculty of Chemistry
- The Faculty of Civil and Environmental Engineering and Architecture
- The Faculty of Electrical and Computer Engineering
- The Faculty of Management (non- engineering)
- The Faculty of Mathematics and Applied Physics
- The Faculty of Mechanical Engineering and Aeronautics
- The Faculty of Mechanics and Technology

Number of students: 11 260 (2021)

<http://www.prz.edu.pl>

The competencies and experience of the Rzeszow University of Technology can be used for skills development of public and private sector employees to improve the increase of Earth Observation (EO) and Geoinformation (GI) data usage:

- Many years of experience in the field of education of engineers for the industry sector (Aerospace, IT, communication);
- High-level competencies in the area of data collection, processing, analysis and application;
- High-level competencies in the field of aviation, especially in the area of Unmanned Aircraft Systems (UAS) technology.

High experience and skills in the field of designing and implementation of UAS allow the use of UAS as a part of data collection and validation system.

Identified skills, important in the process of EO/GI skills development of public and private sector staff (must-have)

- analyse business requirements
- define software architecture
- provide technical documentation
- create data models
- execute feasibility study
- manage database
- migrate existing data
- operate relational database management system
- perform (big) data analysis
- administer ICT system
- report analysis results

Identified additional skills, important in the process of EO/GI skills development of public and private sector staff (nice to have)

- create software design
- define technical requirements
- design database scheme
- approve engineering/technical design
- perform scientific research
- analyse software specifications
- design process
- create data sets
- collect ICT data
- implement ICT risk management
- monitor technology trends

The Rzeszow University of Technology has competencies in the field of education and research, resulting from many years of experience, which can be used to educate and train experts for the EO and GI sectors. The increase in the number of experts on the market will have a positive impact on the improvement of the satellite data usage in various areas of the public and private sectors, increasing the competitive advantage of Poland and the EU by maximizing economic and social benefits.