Faculty of Technical Science activities in photogrammetry, remote sensing and geographic information systems

Faculty of Technical Science (FTS) is organized as a unique complex institution comprising smaller organizational units such as departments, chairs, research centres, registrar offices, etc. for appropriate scientific fields and laboratories. Faculty of Technical Sciences provides higher education in five areas namely: technical sciences and engineering, mathematics and natural sciences, arts and humanities as well as medical sciences in the following fields: Mechanical Engineering; Electrical and Computer Engineering; Civil Engineering; Traffic Engineering; Architecture; Industrial Engineering and Engineering Management; Environmental Engineering and Safety at Work; Geodesy Engineering (Geodesy and Geomatics Engineering); Interdisciplinary studies such as Mechatronics, Applied Mathematics, Graphic Engineering and Design, Logistic Engineering, Regional Policy and Development, Biomedical Engineering, Stage Architecture, Engineering and Design, Treatment and Water Protection, Energy Technologies, Computer Graphic; Energy Efficiency in Civil Engineering. Research activities of the Faculty are directed towards the realization of research within fundamental, innovation and technology development projects. Faculty is accredited as a research and scientific institution. The Faculty's research and development activities are conducted in modern laboratories and computer canters. The members of the faculty are the authors of numerous papers published in the leading national and international journals, and at the international conferences in the country and abroad. Currently, there are more than 120 projects supported by Serbian and provincial ministry of science and technology and 87 international projects realized in different frameworks: FP7, COST, EUREKA, H2020, INTERREG, ERASMUS+ and CEEPUS. The Faculty of Technical Sciences has been issued the certificates EN ISO 9001:2008, ISO 14001:2009 and OHSAS 18001:2007 as a form of recognition of the high quality of its work by the International certification house. Therefore, the FTS achieves its mission in three interrelated basic groups of activities: higher education, scientific research work and knowledge transfer in the economy.

At the FTS since 2003 working a Centre for Geoinformation Technologies and Systems as organizational part, which has been reorganized as a Geoinformatics Laboratory since 2016. This Laboratory has participated so far in more than 50 projects related to modern technologies in field of Earth observation, especially GNSS, Remote Sensing, Photogrammetry and Ground Penetration Radar. At the moment Geoinformatics laboratory is involved in one national scientific project, 2 COST action and 2 Erasmus+ Ka2 CBHE project and one H2020 project. Main activity of Geoinformatics laboratory are: Education of students in the field of geoinformatics; Realization of research and scientific projects in the field of geoinformatics, development of software products and specialized software solutions in the field of geoinformatics; Development and
realization of systems in the field of geomatics, geoinformatics and geoinformation technologies; Consulting and other services in the field of geomatics, geoinformatics and geoinformation technologies; Reengineering the work process in geoinformation systems, education, specialization and certification of engineering personnel, organization of professional and scientific meetings cooperation and realization of joint projects with companies in the field of geomatics, geoinformatics and geoinformation technologies

FTS with a lot of different study programs, with more than 1200 employees and more than 18000 students is one of the biggest Faculties in eastern Europe. Geoinformatics Laboratory with its academic staff at the FTS is involved in holding classes from different fields, which are mainly related to Geographic Information Science, Software Engineering in Geospatial Systems, Geoinformatics, Photogrammetry, Remote sensing and computer image processing, Laser scanning, GNSS and location-based services, Geosensor networks, Detection of underground infrastructure objects, Geospatial Data Infrastructure and Standardization, Geoportals and Geospatial Services, Visualization of geospatial data, Geographic information systems and Geospatial databases. All these courses are held in different study programs, mainly on study program Geodesy and Geomatics, but also on study programs Computing and Control Engineering and Disaster Risk Management and Fire Safety on the levels of users, system integrator or developer.

FTS is networked with most relevant institutions in Serbia. We have actively participated in Projects of implementing remote sensing techniques in Agriculture of Vojvodina and developing of first GNSS permanent network station in Serbia in 2003, and from that period we have also academic GNSS permanent network station for academic purposes. From 2007 we are member of OGC and FIG.

On international level FTS and Geoinformatics laboratory have established several network of cooperation. In frame of Erasmus+ program, we have tight relations with all faculties providing studies of geodesy and geomatics in south east Europa area. For example, Erasmus+ Ka2 CBHE project "Modernising geodesy education in Western Balkan with focus on competences and learning outcomes (GEOWEB)" gathered together 12 partner, and also “Western Balkan Academic Education Evolution and Professional’s Sustainable Training for Spatial Data Infrastructures – BESTSDI” which gathered together 22 partner.

Our motivation to become member of ISPRS is based on the desire to improve cooperation and transfer of new skills, services and knowledge of ISPRS on internal education level on FTS, but also national and international level.