

Thus, according to the results of the experiment, the optimal cooking time "mushrooms fried with soy sauce and sour cream" for each type of mushroom was different from 7 minutes for oyster mushroom to 11 minutes for beech mushroom, but the best results were obtained when using golden oyster mushrooms, which was cooked for 9 minutes.

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## LAND MANAGEMENT EDUCATION: CHALLENGES AND PERSPECTIVES

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According to one of the world's leading futurists, Prof. Mityo Kaku, in order to achieve real success in the future, it is necessary to develop those abilities that are not available to work: creativity, imagination, initiative, leadership qualities. One of the most important and valuable professions today is Land surveyor. They work on land-use changes, such as converting underutilized land into desirable housing developments or industrial "abandoned sites" into new housing developments [2].

When thinking about the future of the topographic, geodetic and land management industry, it is necessary to clearly understand several important trends. It is already clear that the economy of the future will not need the current number of surveyors, cartographers, photogrammetrists and topographers because their jobs will be "stolen" by robotic and unmanned remote systems, software with artificial intelligence technologies. The world economy will need cheap, high-tech and fast engineering solutions that can only be provided by properly trained professionals. Higher education institutions have to adapt to the needs of the national and global labor market, offering curriculum based on advanced technologies and best industry practices [1].

Today, the education of qualified land surveyors is one of the most important priorities of every state but its quality is rather different. For example, the NCEES (National Council of Examiners for Engineering and Surveying) (USA) provides surveying courses whose curriculum is very similar to that one that we can observe in TSATU (Ukraine). It includes Surveying, Route Surveying, Geodesy, GIS, Land development design and planning, GPS, Photogrammetry, mapping, Boundary Law, Professional surveying and mapping, and Remote sensing [3]. Although both educational institutions have the same training programs the approaches differ a lot. Ukrainian educational institutions suffer

from poor funding and face lots of challenges from day to day. Therefore, Ukrainian land surveying and geodesy faculties and departments experience the lack of:

- professionals in this field, especially those ones, who have real experience in practical work;
- up-to-date equipment (scanners, total stations, drones, digital theodolites, etc.) and proper software as well as qualified staff who can teach how to operate it;
- access to modern textbooks and manuals;
- high-professional organizations that provides geodetic and land measurements and can provide an internships and practice for undergraduate students.

Moreover, the land management faculty of a modern higher education institution should no longer be just a training center. It should become an intellectual and expert-analytical center of the industry, a platform for testing and practical adaptation of advanced technological solutions, a platform for professional discussions and training. Only such an approach will allow keeping domestic land management education on the proper level in order to achieve the international recognition in the future.

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## ROBOTIZATION OF AGRICULTURE IN THE WORLD

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The article deals with the problem of automation and robotization of agricultural operations. The spheres of application were considered as well as prospects and difficulties. Some statistic data was also nalized.

Innovative developments are being introduced into different agricultural sectors nowadays. Large companies focus on key agricultural areas, practically not covering small industries. The main areas of robots designing and application are: systems for livestock farms, sowing, land-working robotics, unmanned tractors, UAVs (unmanned aerial vehicles), harvesting robots and agrobots for applying plant protection products, fertilizers and irrigation.

There is little competition in the robotics market. Basically, this is the struggle of large developers for new markets, as well as "confrontation" between different startups that are trying to solve the same problem. But the market is not saturated and needs technologies that will ensure food production with a minimum load on the environment and energy consumption.

Farming robots are a way to solve existing problems. But there are a number of difficulties that slow down their development and wide spread:

- heterogeneity of the working environment for robots;
- the problem of identifying and classifying targets and obstacles on the way;