

Global Survey on Academic Education in Land Surveying/Geomatics

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SUMMARY

As part of the plan proposed by Commission 2: Professional Education of FIG with the collaboration of the Young Surveyor Network (YSN) has been launched a project regarding the different university education in land surveying/geomatics given worldwide. One of its first steps is to conduct a massive survey among university professors in these disciplines around the world. This article aims to present the goals of the project, the work carried out for the preparation of the survey, as well as the future steps to follow for the implementation of the web map viewer of the global inventory. The project could strengthen many aspects of FIG, academic networks and increase synergies between the academic and professional world.

RESUMEN

Como parte del plan de trabajo de la Comisión 2 de la FIG con la colaboración de la Red de Jóvenes Agrimensores/Geomáticos (YSN) se ha puesto en marcha un proyecto sobre la educación universitaria de la agrimensura y la geomática brindada a nivel mundial. Una de sus primeras etapas es el llevar adelante una encuesta masiva entre el profesorado universitario de estas disciplinas alrededor del mundo. Por ello, el presente artículo viene a dar a conocer los objetivos del proyecto, las labores llevadas a cabo para la preparación de la encuesta, así como los pasos futuros a seguir para la implementación del inventario global como un visor de mapas web. Sin duda, creemos firmemente que este proyecto redundará en el fortalecimiento de varios ámbitos de FIG, las redes académicas e incrementará las sinergias entre el mundo académico y profesional.

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1. INTRODUCTION

This proposal is part of the working plan of Commission 2: Professional Education of the FIG and its objective is to better know, understand and disseminate all relevant information on the different academic studies in the field of Land Surveying/Geomatics that are offered worldwide. One of the objectives of this research is to elaborate a global inventory of university studies of our discipline. The data collected is related to the formative content, the degree awarded, duration, among others. This inventory is based on a massive survey conducted among the different academic centers worldwide with the support of FIG member institutions, collaborators and academic networks and institutions. As one of its products an accessible web map viewer will be shared.

The research being carried out will not only allow us to know the different university careers that are being offered in the world related to our profession, but it will also enable us to analyze the learning contents of different syllabus around the world. One of the most relevance subproducts that will be obtained from this survey is the information about the real inclusion or not of education of two important thematic in the curricula of Land Surveyors: SDGs and ethics in the use of geographic information. Likewise, the analysis of it will allow us to identify those institutions in which a specific area is being prioritized, such as geomatics, topography, geodesy and geophysics, cadastre and valuations, or others. In the same way, this research will give us the information to understand the differences between the different nomenclatures of the degree received and the regulated profession, if any, such as a land surveyor, geodesist, topographer, geomatics, cartographer or cadastral engineer, among others. Complementary, it will give additional information regarding the normative of regulation required in each country to work as Land Surveyors with focus in Cadastral Surveying.

2. METHODOLOGY

The methodology applied initially consisted in the design and implementation of a web survey. This survey can be carried out through this link: <https://forms.gle/WCcgSE3Nj2ex2ddJ9>. The survey is divided into different parts of great importance: the first one consists of basic information about the university, the second one has its focus in the degree of Surveying/Geomatics given by the institution, and finally there are some questions about the professional requirements of the country to work as professional and the last ones about personal opinions.

The questions in the survey are as follows:

- I. Which of the following bachelor's degree names corresponds, most closely, to the one offered at your university?
- II. What is the duration of this academic education at your university?
- III. When did the degree program begin to be taught at your university? In what year was the current syllabus implemented?
- IV. Indicate the relevance of the following disciplines in the syllabus.
- V. Our profession is in continuous scientific and technological evolution. In the case of a revision or update of the syllabus, what new subject or concept would you include or to which discipline would you give more relevance in the new syllabus?
- VI. Regarding the enrollment of new students, with which statement do you most agree for your program?
- VII. Regarding the academic future of our profession, with which statements do you feel identified?
- VIII. What do you understand by Geomatics, Land Surveying, Land Administration, Land Management and Geospatial Science? What do you think is the relationship between all them in your country?
- IX. Regarding the practice of the profession in your country, especially for Cadastral Surveys, is it regulated? If so, what are the requirements to obtain a professional license?

One week after we launched it, the participation of more than 25 countries worldwide with more than 60 responses can be confirmed. Participation is expected to continue to increase in the following weeks.

3. CONCLUSIONS

The information gathered from the survey and the easy-to-use and accessible map viewer will facilitate the analysis of the situation of the academic education in Land Surveying, Geomatics and Land Administration and Management worldwide.

This research could enable the development of future joint lines of action such as the consolidation of regional or thematic capacities networks, bridging the gap between the professionals, industries, and academia, etc. It is also expected that the experiences lived in some countries could empower others to make changes or accept new challenges building real virtual communities. Learning from pandemic times, the distance is not an obstacle to share knowledge and work together, so it is possible to have communities with educators from all around the world but improving capacities everywhere. But the first step to build this network is to know about its members, its realities, its strength, its weakness, and its challenges, so this inventory is the starting point to create this virtual community of education.

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BIOGRAPHICAL NOTES

Dra. Ing. Agrim. Rosario Casanova is Land Surveyor with Master's degree in urban planning and Doctoral degree in Land Surveying. She has been professor for more than 25 years at Department of Geomatics at the Land Surveying Institute of the Universidad de la República in Uruguay. She was the Director of the Land Surveying Institute in Uruguay (first woman in this charge). Currently, she is Vice-Chair of Commission 2 of FIG and the Chair of the Academic Network of UN-GGIM: Americas.

Prof. Angel Collado has a Bachelor's and Master's degree in Geomatics Engineering and Geoinformation and is currently pursuing his PhD in Geomatics Engineering. He is teaching and research staff of Geomatics Engineering at the University of Castilla-La Mancha (UCLM) in Spain. He is currently the Representative of the YSN in Commission 2 of FIG and the Social Media Officer of Commission 7.

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