

Evaluation of teacher training needs in engineering pedagogy

- Gormaz-Lobos D.^a
- Galarce-Miranda C.^b
- Hortsch H.^c

Abstract

In European countries, primarily in German-speaking countries, first of all, in Germany (Dresden), the concept of engineering pedagogy (EP) has existed for more than 70 years. In Eastern Europe, particularly in the Russian Federation, the tradition of EP has more than 20 years and shows an extensive network of universities actively participating in IGIP (International Society of Engineering Pedagogy). Several universities offer the IGIP curricula and work on various projects related to majoring in engineering education and pedagogy in Russian Higher Education Institutions. In Spanish-speaking countries the concept of EP is relatively recent. Particularly, since 2014, the Technical University of Dresden (TU Dresden) works in cooperation with Chilean universities to strengthen engineering pedagogy and education in the university context. This goal was concretized through two cooperation projects "Engineering Didactics at Chilean Universities" (PEDING-Project) and "Strengthening engineering training at Chilean universities through practice partnerships" (STING-Project), both financially supported by DAAD. The main goal of this paper is to present the results of a survey about teaching needs in engineering pedagogy in a Chilean university. In general, the results showed the high level of interest and motivation that a training course on engineering pedagogy specifically oriented for the academic staff of engineering faculties may have. The project was led by the International Center of Engineering Education (CIEI) at the University of Talca (Chile) under the pedagogical support of the TU Dresden (Germany). © 2021 Moscow Polytechnic University. All rights reserved.

Author keywords

Engineering education; Engineering pedagogy; International society of engineering pedagogy; Teacher training in Chile