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Impact of cooperation between universities and industry on civil engineering study programmes – experiences of Polish technical universities

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ABSTRACT

The development of a knowledge-based economy requires stronger and continuous cooperation between the spheres of education, science and industry [1]. The universities create their surroundings through transfer of technology and scientific staff, and through graduates preparation. Benefits of scientific institutions, including higher education ones, in this type of cooperation consist mainly of: increasing their recognition among employers and candidates for study, improving the quality of education and research, receiving financial benefits and fulfilling legal obligations [2]. As to the second main partner, the industry can achieve, among others, the following benefits: improving the quality of human capital, using the university as a source of ideas, promoting the company's image as an attractive partner, creating a network of contacts with the academic environment [2]. Because of this relationships between universities and the socio-economic environment is becoming more and more intensive.

Research conducted at technical universities always had influence on what and how were students taught. Good and valuable teaching cannot exist without doing at the same time investigation in the field of study represented. From the other side, there must exist synergy between research and industry, and, what is nowadays extremely important, the result of education = knowledge and competences of graduates, have to fulfil needs of industry.

In the paper some experiences regarding cooperation between science and industry and its impact on shaping of education programs in civil engineering will be presented on basis of bachelor and master degrees studies at technical universities in Białystok and Wrocław.

REFERENCES

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