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# Methodological approaches to the degree work preparation

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*The article presents the methodological approaches to consistent implementation of students' research work, which starts in junior semesters and finishes with implementing their degree work. The paper examines methodological and pedagogical approaches to encouraging senior students to do independent and creative research work. We propose steps to arouse students' interest to scientific work, so that they can later do their post-graduate degree. The work contains an example of implementing the research work devoted to a particular subject, with step-by-step increase of volume of work, and completing it in the final graduation project.*

**Keywords:** *methodology, training, degree work, research, design, competences, planning.*

## REFERENCES

- [1] Zubkov N.N., Ovchinnikov A.I. *Sposob polucheniya poverkhnostei s chereduiushchimisya vystupami i vpadinami i instrument dlya ego realizatsii* [A method of producing surfaces with alternating proteberances and hollows and a tool for its realization]. Patent RF no. 2044606, publ. 13 June, 1994. Bul. no. 27, 1994.
- [2] Zubkov N.N., Vasiliev S.G. *Uprochnyayushchie tekhnologii i pokrytiya — Hardening technology and coatings*, 2013, no.8.
- [3] Zubkov N.N. *Razrabotka i issledovanie metoda deformiruyushchego rezaniya kak sposoba formoobrazovaniya razvitykh makrorel'efov*. Dokt. Diss. [Developing and studying the method of deforming cutting as a way of shaping developed macro-relief. Doct. Diss.]. Moscow, 2001, 478 p.
- [4] Osnovnaya obrazovatel'naya programma Vysshego professional'nogo obrazovaniya. 151701 *Proektirovanie tekhnologicheskikh mashin i kompleksov* [Basic educational program of higher education. 151701 Technological machines and systems design.] Moscow, 2013.

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