

Multi-Cycle Training of Technical University Students for Innovative Engineering Activities Using Rapid Prototyping Technologies

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Abstract: The paper focuses on the importance of training students of technical universities for innovative engineering activities (IIAs). It is shown that such training can be most effectively implemented using student training in digital manufacturing techniques for industrial products, in particular, rapid prototyping. The structure of the Rapid-Pro design and rapid prototyping center created at Mordovia State University, includes the following sectors: design and rapid prototyping, design of educational technologies, design of technical learning tools of a new generation, experimental and small-scale production, indicating the functional, organizational and integration links among them. The modular structure of the course design is presented.