



State exam questions
Mechanical Engineering MSc
Production Engineering specialization

Optional:

Simulation of Manufacturing Systems and Processes and Production Automation

1. Please describe the concept of indicator system, please describe OEE indicator!
2. Please describe which cellular manufacturing layouts you know!
3. Please describe the concept of balancing (assembly line balancing)!
4. Please describe the concept and types of kanban!
5. Please describe the concept of cycle time!
6. Please describe the structure of pneumatic systems applied in the area of production automation!
7. Please describe the types and application areas of sensors applied in the area of production automation!
8. The integration of industrial robots in the complex manufacturing process. The types and constructions of industrial robots.
9. Rapid prototyping processes. Analysis of Objet Polyjet, Rapid Manufacturing and Hybrid technologies.
10. General construction of CNC machines. Function of ball circulating screw. The absorption of the tools in case of CNC machines.