



Final exam questions

Subject group name: **Machine Design**

Neptun code: ZVEGEGTAGMD

Credit points: 4

Subject(s) in this subject group:

- **Machine Design** (BMEGEGEAGMD)

Program: Mechanical Engineering, BSc (2NAAG0)

Specialization(s): Engineering Design and Technology

Responsible person(s):

- Peter T. Zwierczyk PhD., z.peter@gt3.bme.hu, Department of Machine and Product Design, Faculty of Mechanical Engineering

You can check the current subject forms at the Educational Portal of the Faculty of Mechanical Engineering.

<https://oktatas.gpk.bme.hu/>

Always check for updates at edu.gpk.bme.hu before preparing for the exam, especially if the subject group contains at least one subject from your final semester!

Valid from 31 January 2024

Peter T. Zwierczyk, PhD

Assistant professor, lecturer

Questions

1. Describe the main steps of FE analysis!
2. Characterize the different FE element types!
3. Describe the integrated CAD/FE systems!
4. Explain the main steps of structure optimization!
5. Characterize the basic terms of structural optimization!
6. Illustrate and explain the material laws and material properties for FE Analysis!
7. Describe the FMEA analysis!