

Strength of Materials
BMEEOTMAS41
2024-25, spring semester, BSc

| week | Thursday 14.15-16.00 | topic |
|------|--|--|
| 1. | 02. 13. | 01. Repetition of the fundamental equations. The Euler-Navier beam |
| 2. | 02. 17. MONDAY 18.15-20.00 K.mf.78. | 01. Boundary and continuity conditions of Euler-Navier beams |
| 2. | 02. 20. | 06. Differential equations of Euler-Navier beams. Solution methods |
| 3. | 02. 27. | Quiz 1.: Fundamental equations and the Euler-Navier beam 09. Deflection diagrams for frames |
| 4. | 03. 06. | Quiz 2.: Deflection diagrams for frames 02. The potential energy. Kinematic degrees of freedom |
| 5. | 03. 13. | 02. The theorem of potential energy. Examples |
| 6. | 03. 20. | Quiz 3.: The theorem of potential energy 03. The complementary potential energy. Static indeterminacy |
| 9. | 03. 27. | 03. The theorem of complementary potential energy. Examples. 04. Overview of energy theorems |
| 10. | 04. 03. | Quiz 4.: The theorem of complementary potential energy 07. Energy theorems for Euler-Navier beams under static loads |
| 11. | 04. 10. | 08. Energy theorems for Euler-Navier beams under kinematic loads |
| 12. | 05. 08. | Quiz 5.: Energy theorems for Euler-Navier beams 11. Basics of stability analysis |
| 13. | 05. 15. | 12. Buckling of bars under compression |
| 14. | 05. 22. | Quiz 6.: Stability and buckling Preparation for the exam |

Budapest, 02 February 2025.

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