

Tantative schedule  
Structural Dynamics (BMEEOTMMN-1)

2023-24-2. semester

| Week      | Date        | Topic                                                                                                                      | Pages in LN                  |
|-----------|-------------|----------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 1         | 2024.02.12. | Free and forced vibration of SDOF and MDOF systems I.                                                                      | 1-6, 18-24                   |
| 2         | 2024.02.19. | Free and forced vibration of SDOF and MDOF systems II.                                                                     | 7-17, 24-38,<br>172-175      |
| 3         | 2024.02.26. | Vibration of continuum bars: free vibration, harmonic forcing                                                              | 46-72                        |
| 4         | 2024.03.04. | Vibration of continuum bars: moving loads<br><b>03.04. 14:00 – 03.05. 08:00 1st Individual Assignment</b>                  | 72-79                        |
| 5         | 2024.03.11. | Vibration analysis of frame structures: dynamic stiffness matrix, exact mass matrix                                        | 80-111                       |
| 6         | 2024.03.18. | Vibration analysis of frame structures: approximate mass matrices                                                          | 112-122                      |
| 7         | 2024.03.25. | Support vibration: mechanical basis of earthquake analysis<br><b>03.25. 14:00 – 03.26. 08:00 2nd Individual Assignment</b> | 123-140, 175-<br>188         |
| <i>SB</i> | 2024.04.01. | <i>No class (spring break)</i>                                                                                             |                              |
| 8         | 2024.04.08. | <b>04.08. 11:15 – 12:45 1st Mid-term test</b><br>Damped vibration of SDOF systems                                          | 148-155, 200-<br>206         |
| 9         | 2024.04.15. | Damped vibration of MDOF systems, frame structures: proportional damping                                                   | <i>148-155, 200-<br/>206</i> |
| 10        | 2024.04.22. | Damped vibration of frame structures: rate-independent damping. Elastic support of soil                                    | 155-161                      |
| 11        | 2024.04.29. | Radiation damping: dynamic support of soil<br><b>04.29. 14:00 – 04.30. 08:00 3rd Individual Assignment</b>                 | 161-171                      |
| 12        | 2024.05.06. | Basics of aeroelasticity                                                                                                   | ---                          |
| 13        | 2024.05.13. | <b>05.13. 11:15 – 12:45 2nd Mid-term test</b>                                                                              | ---                          |
| <i>14</i> | 2024.05.20. | <i>No class (Whit Monday)</i>                                                                                              | ---                          |
| R-week    | 2024.05.27. | <b>05.27. 11:15 – 12:45 retake mid-term test</b>                                                                           | ---                          |

Dr. Németh Róbert  
Assoc. prof., Lecturer

2024.01.25.