

Tentative schedule
FEM for Civil Engineers (BMEEOTMMS51)

Semester 2018-19-1

Week	Date MM.DD	Theme
1	09.05	Mechanics of trusses, bars in torsion and twist; differential equation, direct solution
1	09.06	Mechanics of trusses, bars in torsion and twist; weak solution of the differential equation (energy methods)
2	09.12	Base functions, coefficients with physical meaning
2	09.13	FEM-like base functions, piecewise integration; issuing HW 1
3	09.19	Consultation, presentation of HW1
4	09.26	FEM for trusses
4	09.27	FEM for plane disks
5	10.03	Ansys presentation 1
5	10.04	FEM for beams I.: Euler-Bernpoulli beam
6	10.10	Ansys presentation 2
6	10.11	FEM for beams II.: Timoshenko beam
6	10.13	FEM overview, examples for beams, plane disks; submission of HW 1
7	10.17	Ansys presentation 3; issuing HW 2
7	10.18	FEM for plates I.: Kirchhoff plates
8	10.24	Ansys presentation 4
8	10.25	Test 1
9	10.31	FEM for plates II.: Mindlin plates
10	11.07	Ansys presentation 5
10	11.08	FEM for stationar heat problems
11	11.15	FEM for shells, FEM for 3D solids
12	11.21	FEM for transient heat problems
12	11.22	Ansys presentation 6; HW consultation
12	11.23	<i>Submission of HW 2</i>
13	11.28	Numerical integration, solution of the system of equations, mesh generation
13	11.29	Nonlinear problems
14	12.05	Integral formulation of BVPs, methods of Ritz, Galerkin, etc
14	12.06	Test 2

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