EQE512-Calendar

Monday, October 12, 2020 12:36 AM

Week	Date	Remark	Lectures
1	5/10	Intro	Defining the solution methods in engineering calcula of algorithms (Gerber beams analysis)
2	12/10	Theory	Introduction to Programming: PYTHON, Jupyter (Fu
3	19/10	Theory	Development of computer algorithms (Determinate
4	26/10	Theory	Development of algorithms for parametric calculatio (Design of the Determinate Single Degree Freedom S Combinations)
5	2/11	Theory	Visualization of the Parametric Analysis Computation constant ductility in nonlinear systems)
6	9/11	Theory	Displacement and Force Method in Structural Analys Displacement Matrices)
7	16/11	Theory	Construction of the System Stiffness Matrix (Determ
8	23/11	Midterm	Moving loads, Midterm Exam
9	30/11	Theory	Development of solution algorigthm using displacem
10	7/12	Theory	Development of solution algorigthm using force met
11	14/12	Theory	Development of solution algorigthm using direct me
12	21/12	Theory	Dynamic characteristics of the systems, computation
13	28/12	Theory	Free vibration Analysis and vibration modes (Multi D
14	4/1	Theory	Mod superposition and application in Earthquake En
15	11/1	TP	Term Project Presentations
16	18-29/01	Final Exam	Final Exam

	Assignments
tions using matrices and development	
ndemental Calculation Techniques)	1
Single Degree of Freedom systems)	
ns and optimal solution approach Systems under Desing Load	2
ns (Iteratitve computation of the	
sis (Calculation of the Force and	3
inate Truss Systems) (OpenSeesPy)	
	Term Project
nent method (Indeterminate beams)	
hod (Indeterminate beams)	4
thod (Indeterminate beams)	
ns (SDOF)	5
egree of Freedom Systems)	
gineering (MDOF)