



OpenSEES Days Eurasia 2019

Workshop Programme

18 – 19 June 2019

Before the workshops:

Kindly note that all attendees are asked to kindly:

1. Bring your own laptop (**only windows operating system for developers workshop**)
2. Install OpenSEES and Tcl/Tk as shown [here](#)
3. Download and install [Notepad++](#)
4. Throughout the users' workshop you will need to access the files [here](#)
5. Developers' Workshop attendees are also required to download Visual Studio Community Edition (*windows only*) and install the associated C++ windows app development suite from this [link](#). There is no C++ development within Visual Studio for Mac devices.
6. Developers' workshop files will be located [here](#)

Users' Workshop: 18 June 2019

time		duration	session	outcomes	instructor
Begin	End				
08:30	09:00	00:30	Registration		
09:00	09:15	00:15	Opening	Framework, aims, and scope of Day 1	Prof. Asif Usmani
09:15	09:45	00:30	Getting started	Understanding the general paradigm for working with OpenSEES and its traditional capabilities	M Anwar Orabi
				General Tcl syntax	
09:45	12:00	02:15		Simple linear elastic structure in OpenSEES	Tejeswar Yarlagadda and Venkata Ramakanth
12:00	13:30	01:30	Lunch break		
13:30	16:00	02:30	Basics of static nonlinear analysis	Static nonlinear analysis of a simple structure in OpenSEES using the concentrated plasticity <i>AND</i> fiber approaches	Dr. Fabio Di Trapani
16:00	16:30	00:30	Tea break		
16:30	18:00	01:30	Basics of dynamic analysis	Dynamic analyses of a simple structure using OpenSEES and modelling of 3D structures	Dr. Cristoforo Demartino

Developers' Workshop: 19 June 2019

time		duration	session	outcomes	instructor
Begin	End				
08:30	09:00	00:30	Registration		
09:00	09:15	00:15	Opening	Framework, aims, and scope of Day 2	Prof. Giorgio Monti
09:15	10:30	01:15	Background	Introduction to C++ and Object Oriented Programming	M Anwar Orabi
10:30	12:00	01:30	OpenSEES architecture and interface	General OpenSEES architecture	Dr. Liming Jiang
				Uniaxial material interface	
				Domain classes, elements interfaces, and analysis classes	
12:00	13:30	01:30	Lunch break		
13:30	15:00	01:30	Implementing changes: material models	Modifying existing material models	Dr. Liming Jiang
				Implementing new materials	
15:00	16:00	01:00	Implementing changes: element models	Modifying existing element models	Prof. Jian Jiang
				Implementing new elements	
16:00	16:30	00:30	Tea break		
16:30	17:30	01:00	MATLAB to OpenSEES	Connecting MATLAB to OpenSEES	Dr. Cristoforo Demartino
17:30	18:30	01:00	Developer sharing	Collapse simulation of large-scale structures and city-scale nonlinear time-history analysis	Prof. Xinzheng Lu