TOPICS IN PERFORMANCE-BASED EARTHQUAKE ENGINEERING



Topics Covered

- Principles of performance-based earthquake engineering
- Seismic hazard and seismic risk snalysis
- Geotechnical earthquake engineering
- Methods of analysis
 - Pushover-based methods
 - Nonlinear response history methods
- Passive energy systems
 - Displacement dependent
 - Velocity dependent
- Seismic isolation
- Nonbuilding structures



Structural engineering is the Art of using materials

that have properties which can only be estimated

to build real structures
that can only be approximately analyzed

to withstand forces that are not accurately known

so that our responsibility to the public safety is satisfied

