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