

Project subjects:

- 1- Vibration control :
 - a. Passive control.
 - b. Active control.
 - c. Semi-active control.
 - d. Hybrid control.
- 2- Vibration control devices:
 - a. Negative Stiffness Device.
 - b. Semiactive variable stiffness device.
 - c. Tuned Mass Damper (TMD).
 - d. MR damper.
 - e. Base Isolation.
 - d. Viscous and friction dampers.
- 3- Modern control method:
 - a. Robust control.
 - c. Adaptive control.
 - d. Predictive control.
- 4- Structural Health Monitoring (SHM):
 - a. System identification.
 - b. Damage detection.
 - d. Blind system identification.
 - e. Vision based damage detection methods.
- 5- Tall buildings
- 6- Adjacent Structures.
- 7- Smart Structures (only building structures)