

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)