

# C E 412: Design of Concrete Structures

## Civil Engineering

Strength analysis and design of reinforced concrete structural elements using ACI requirements. Rectangular and T sections in bending. Shear reinforcement in beams. Short columns. Footings and retaining walls. Introduction to analysis and design of steel structural elements.

3 Credits

### Prerequisites

- Pre-Requisite: 24 Earned Hours

### One-way corequisites

- [C E 311: Structural Analysis](#)

### Cross-listed Courses

- [M E 422: Structural Design I](#)

### Instruction Type(s)

- Lecture: Lecture for C E 412

### Course Fee(s)

#### Civil Engineering 2

- \$100.00

### Subject Areas

- [Civil Engineering, General](#)
- [Structural Engineering](#)

### Related Areas

- [Civil Engineering, Other](#)
- [Geotechnical and Geoenvironmental Engineering](#)
- [Transportation and Highway Engineering](#)
- [Water Resources Engineering](#)

