

## **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**

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

