# ARE 406 : Fundamentals of Reinforced Concrete Design

In this course, students will gain the ability to design and proportion structural concrete members including slabs, beams, and columns for strength as well as serviceability and economy.'a0'a0A practical understanding of the structural design process will be developed along with a theoretical understanding of the mechanics and behavior of reinforced concrete. Additionally, different types of reinforced concrete systems will be introduced.'a0 Students will develop a thorough understanding of the behavior and design of reinforced concrete members and systems and will be able to apply and effectively use the latest industry standard of formulas, tables, design aids, and/or computer software in the design of reinforced concrete members.'a0

**Credits** 3
**Lab Hours** 0
**Lecture Hours** 3
**Tutoring Hours** 0
**Prerequisites**
ME 203, ARE 405
**Corequisites**
none