

# Engr 590: Finite Element Analysis I

## [School of Engineering](#)

Introduction to the finite element method; formulation of linear BVP arising in engineering analysis; solution of model problems in 1D and 2D; shape functions and numerical integration; element formulations; applications in solid and fluid mechanics.

3 Credits

### Prerequisites

- [Math 353: Elementary Differential Equations](#)
- Prerequisite: Junior standing (60 hr).
- Prerequisite: Math 353 or graduate standing

### Instruction Type(s)

- Lecture: Lecture for Engr 590
- Lecture: Web based lecture for Engr 590

### Subject Areas

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

