

# Finite Element Methods

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## 1

The primary learning objective is to learn and understand the mathematics and physics that are the foundation for finite element method. Then to program an implementation of the method.

## 2

My responsibilities are to read the textbook (The Mathematics Theory of Finite Element Methods), then be able to understand and communicate the information in a presentation. Using the information that I have gained to program an implementation of a finite element method, and be able to demonstrate the programs use.

## 3

I will meet and discuss the project with my faculty sponsor weekly, and feedback will be provided on those regular meetings. My performance will be evaluated by my understanding of the mathematics, and the quality of the program that I develop.

## 4

I will demonstrate what I have learned in both a verbal presentation, and in the final product of the code. The final code will be due near the end of the independent study.

## 5

We have arranged to meet weekly on Thursday morning, then we are also able to communicate over emails.