

# EE 491 Weekly Report    **DEC15-17**    **Week 17 (9/15/15-9/21/15)**

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**Advisors: Dr. Ravi Hadimani and Neelam Prahbu**                      **Client: Iowa State University**

**Members (roles): Marion Okoth (Team Leader), Elizabeth Clarkin (Website) and Matthew Mulloy (Weekly Reports)**

**Project Title: Magnetic Sensor Design.**

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## Weekly Summary

The main goals this week was begin our individual assignments and report progress. Also, we started ADS (Advanced Design Systems) evaluation.

## Meeting notes:

9/21    [Group Meeting with Advisors](#)

**Duration:** 60 min                      **Members Present:** All

### Purpose and Goals:

This week's goal was to review current semester progress and discuss current and future uses of optional programs

- Weekly updates and communication
  - HFSS and ADS
  - Project plan and Design document update before week 9
- Matthew
  - COMSOL magnetic field
  - Relative permeability for 4 materials
  - Current setup simulation with materials
  - Optimal design simulation with materials
- Marion
  - SS70 material development
  - ISU ferrite epoxy measurements
  - MatLab simulation research
    - Antenna
    - No noise amp
    - Frequency
  - ADS
    - Current use
    - Future with program
  - Eagle use for circuit board

- Elizabeth
  - Software continuation
  - ADS software
  - Impedance matching
  - Broadband

## Pending issues

1. Semester documents
2. Semester goals

## Individual Contributions (this week)

Matthew Mulloy: Attended the meeting, COMSOL simulation, weekly report (5 hrs.)

Elizabeth Clarkin: Attended the meeting, research broadband impedance matching, ADS (3 hrs.)

Marion Okoth: Attended meeting, Broadband impedance network simulation, ADS(3 hrs.)

## Total contributions this semester

Matthew Mulloy (13 hrs.)

Elizabeth Clarkin (12 hrs.)

Marion Okoth (11.5 xhrs.)

## Total contributions for the project

Matthew Mulloy (120.5 hrs.)

Elizabeth Clarkin (143 hrs.)

Marion Okoth (102 hrs.)