

REGISTER NOW!



# THE DATA SCIENCE LABS

## One Credit Math Laboratory Classes

Do you want to improve your understanding in your math classes? Are you interested in seeing applications of math to data science? Are you interested in coding in python and open to working with hardware? If you answer yes to these questions, then the *Data Science Labs* are for you!

### What are the different classes?

There are four different labs that each pair with a different math class:

- MA 16290 pairs with Calculus 2
- MA 26190 pairs with Calculus 3
- MA 34990 pairs with Signals & Systems
- MA 41690 pairs with Probability

### What is a math lab class like?

We meet once a week for 150 minutes to build a project using simple arduino hardware and python code. Use the first derivative test to build a pulsometer in MA 16290. Use Euclidean distance to build a color detector in MA 26190. Use Fourier Series to build a theramin in MA 34990. Or use the Monte Carlo Method to estimate pi in MA 41690!

### Why should I take the lab?

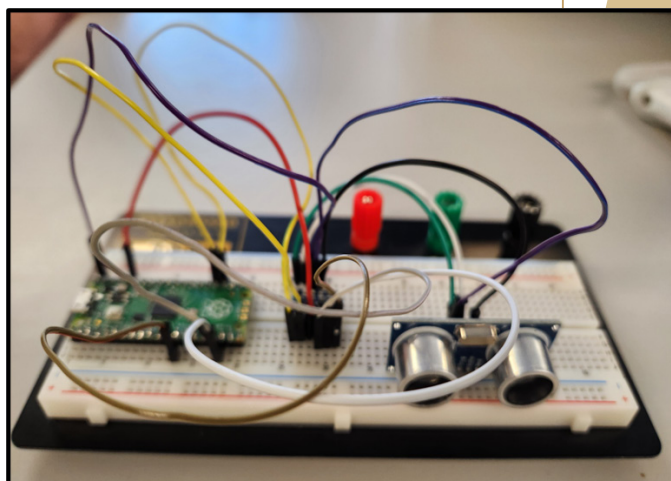
- One credit
- Meets once a week
- No homework or exams
- Weekly lab reports completed in class
- Possibility to earn honors credit

### Do I need to know how to code in python?

In MA 16290, you do not need to know how to code, we will teach you through the lab. All other labs assume you know some python. If you don't know where to start, start with MA 16290!

### What kind of projects do you build?

In MA 16290, students use an ultrasonic sensor to measure distances (image below).



Department of Mathematics

For more information see:

<https://www.math.purdue.edu/~kthood/DSLabs.html>

Still have questions? Contact Kaitlyn Hood  
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