

EE 5900 I: Special Topics in Signal Processing

CyMath Learn-n-Teach Math for AI in Engineering/Computing

Instructor: Prof Namrata Vaswani, Time: arranged

Workday Signup – will need to request instructor permission

The goal of this course is to help ISU engineering, cs, math, stat and other MI-STEM graduate students improve their teaching and (research) communication skills while also helping a K-12 student improve their math skills. It is also relevant to undergraduates considering K-12 math or physics teaching. Course students will

- Tutor K-12 students in math 9-10 times (or more) for an hour each via CyMath - see flyer at <https://cymath.iastate.edu/>
- Give one dept talk/seminar in the semester on either their own research or something else. Submit a short half-page reflection on the experience will be due at the end of semester.
- Have the option to meet 4 times a semester for 15-20 mins with Dr Vaswani to discuss courses or research.

Details: Many time, venue and grade-level options available for tutoring including Zoom. Before starting you get to observe a session or two, and also receive on the job friendly suggestions. CyMath uses a math learning apps – ALEKS and Khan Academy so prep is not needed. In giving the seminar, students will apply the teaching/communication skills learned while tutoring to their own presentation.

2-credit option: Also do a term paper on a math or mathematical STEM or math education topic.