

## *Math-Stat Labs*

### Abstract

In order to bring Undergraduate Research Experience in Mathematics to its students, the Department of Mathematics has established a mathematics laboratory “*Math-Stat Labs*” starting fall 2019. The *Labs* would introduce SIUC students to mathematically explore, think out of the box, beyond the typical classroom instructions of given syllabi. They will further discover applications of material learnt, unify different concepts and participate in hands-on activities with or without computers.

The *Labs* will give students experience acting (effectively as consultants) in a role very similar to the one in which they could reasonably hope to be hired on graduation. Analytics work like this is a major employment area for our majors, and we're equipping them to be competitive applicants for internships and jobs, since they will be able to present evidence of completing projects like the ones to which they hope to be assigned. Students in science/engineering will gain experience to analyze their experimental data.

The existence of these labs in the Department of Mathematics may help in boosting math enrollment at SIUC. It is an attractive feature that students may work in *Labs* starting as a freshman. Often we see that many quantitatively-oriented students shift their interest from mathematics to engineering thinking that the former is probably too abstract. The presence of these *Labs* will give those students more options in choosing their majors. While in the *Labs*, they can play fearlessly with their imagination under the guidance of a mentor increasing their confidence in quantitative model building.