

May 7, 2008

[The following letter was sent to all students admitted to the Department of Applied Mathematics.]

Welcome to IIT and to the Department of Applied Mathematics!

As you prepare for university, let me tell you what you may expect when you arrive at IIT in the fall. Our department is full of students and professors who enjoy learning new mathematical ideas and applying them to solve problems in other disciplines. Here are some highlights of what we do. More information can be found on our departmental Web site, <http://www.iit.edu/cs/am/>.

Our applied mathematics curriculum is built upon a foundation of calculus, differential equations, and discrete mathematics. If you have AP credit, you may already have a head start. On top of this, you will take advanced courses in four areas of applied mathematics: applied analysis, computational mathematics, discrete applied mathematics, and stochastics. These will help make you a well-rounded applied mathematician, while still affording you the opportunity to specialize in other areas that interest you.

In your first semester, you will take MATH 100 Introduction to the Profession. This course shows you how mathematicians formulate and solve problems. One or more professors give an overview of each area of applied mathematics. By the end of the first semester, you should know quite a few of our faculty members.

If you are interested in a particular application area of mathematics, then you will be encouraged to pursue a minor in a related area or to pursue a double major. Our curriculum is flexible enough for you to do so. If you would like to teach mathematics at the high school level, our joint program with the Mathematics and Science Education Department would help you earn your teaching credentials.

Check out the Math Club, a group of students from various majors who meet regularly over pizza to solve challenging math problems, play math games and listen to guest speakers. Math Club teams have taken honors in statewide and regional mathematics competitions.

Our department's mission includes research, which is not limited to studies performed by professors and graduate students. Quite a few applied mathematics undergraduates pursue independent research under the guidance of a professor for credit. There are also scholarship opportunities that enable undergraduates to pursue research during the summer, at IIT or elsewhere in the US and overseas. In our enclosed newsletter, you can read about some of the work our students have been doing, such as organizing their own IPRO course in collaboration with Chicago Public Schools, participating in summer research programs and presenting the results of their work at research conferences.

Earning your degree at IIT is a challenge. You will be learning concepts that are more sophisticated and developing your abstract reasoning and critical thinking skills. You will become the person primarily responsible for your own learning. As you move towards graduation from IIT, you will assume the responsibility of asking the right questions, as well as of providing the right answers. Our department will provide you the environment to make this transformation. Our classes are small in size, which makes our professors accessible, and our faculty cares about helping you learn. A number of resources are available outside the classroom to help as well, such as our library, computer laboratories and the Academic Resource Center.

If you have questions about your life as an IIT applied mathematics major, I would welcome your phone call or email. If possible, I hope that you have or will visit our campus and drop by to say hello. See you this fall!

Sincerely,

Gregory Fasshauer
Associate Chair
Department of Applied Mathematics