

April 18, 2008

[The following letter was sent to all students admitted to the Mathematics and Science Education Department.]

Welcome to IIT; I am pleased to learn of your acceptance. As you prepare for university enrollment, I want to introduce you to the Department of Mathematics and Science Education (MSED). Since science, mathematics and technology are the engines of the nation's economy, Illinois Institute of Technology believes that educating a new generation of science and math teachers is one of this country's priorities.

According to a federal estimate, 2.2 million new teachers will be needed over the next ten years at the primary and secondary levels to replace retiring teachers and to accommodate growing student enrollments. Illinois, alone, will need 86,000 new teachers.

The Department of Mathematics and Science Education has developed a math/science education minor that prepares students for a teaching certificate at the secondary level while you receive a Bachelor of Science degree in applied mathematics, biology, chemistry, physics, computer science, or an engineering discipline. Our perspective to developing good teachers is "to teach a drop, you must know a gallon." That is, a math or science teacher must have thorough knowledge of subject matter. IIT's teaching program is discipline-based. You will learn how to teach effectively because your teacher education curriculum will focus on mathematics or science. No generic education courses are offered. All MSED classes are specific to the teaching and learning of math and science and all of our faculty are former mathematics or science teachers.

A standard secondary certificate will allow you to teach grades 6-12. Certificates are issued to graduates with a bachelor's degree who have successfully completed 24 credit-hours of math/science education courses and teaching certification examinations. MSED has a 100% certification examination pass rate, as well as a 100% teaching placement rate for our graduates.

Our faculty is known, both nationally and internationally, for math and science education research. As a result, we are constantly called upon to assist school communities. MSED is involved in several evaluation projects that directly involve the teaching and learning of science. Currently, we are working with the Young People's Project (YPP), an evolution of the Algebra Project, whose goal is to build demand for math literacy. The YPP is a nationwide program to improve early learning of algebra among students who are not reached by existing instructional methods. We are also working with Chicago Public Schools on the multi-year High School Transformation project. In this project, we are working with almost 20 high school science departments to improve curriculum, teaching practices and student achievement. Finally, IIT and Perspectives Charter Schools will be opening a Math and Science Academy in the fall (2008). All of these initiatives will provide our students with more opportunities for "in-school" practice and the opportunity to complete your professional internship in a model school setting.

If you cannot immediately decide on an education minor, math and science undergraduates are strongly encouraged to eventually pursue graduate studies. MSED has developed an accelerated course of study that allows students to achieve a combined teaching certificate and a master's degree after receiving a bachelor's degree. This course of study requires just 45 credit-hours, instead of the 54 credit-hours that would be required if certification and a master's degree were pursued separately. There are countless opportunities for graduates in the field of mathematics and science education.

Earning your undergraduate degree is demanding. IIT offers you an exceptional learning environment to assist you with achieving your goals. As you move toward a career after graduation from IIT, the Department of Mathematics and Science Education can provide you with a solid foundation to significantly increase your career options.

If you have questions about the Department of Mathematics and Science Education or your future as an educator, I welcome your phone call or email. More information can be found on our departmental Web site: msed.iit.edu/. We look forward to seeing you on campus in August.

Sincerely,

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