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ILLINOIS INSTITUTE OF TECHNOLOGY

**Mathematics and Science Education Department (MSED)
Mathematics and Science Teaching Certification Program for IIT Undergraduates**

Q: What are the program requirements?

A: IIT undergraduates can earn an Illinois teaching certificate in addition to their major through IIT's Mathematics and Science Education Department (MSED) with 24 credit hours of education courses. Of these, 18 can be in place of some electives, and six are a one-semester professional internship in a classroom. The final requirement is the completion of your bachelor's degree.

Q: What certificate do I earn?

A: Completers earn Illinois State Certification in Secondary Mathematics (grades 6-12) or Secondary Science: Biology, Chemistry, or Physics (grades 6-12).

Q: Who is eligible?

A: All IIT undergraduates are eligible provided they have or plan to take the necessary mathematics and science background content. More details can be found at our department website <http://msed.iit.edu/>.

Q: When and where are classes offered?

A: Classes are offered at IIT's Main Campus. Most classes are offered in the evenings and during the summer.

Q: Why should I consider a teaching career?

A: Do you remember when you first got excited about science? Or mathematics? Good teachers share that. They bring fun, awe, and amazement to the classroom or informal educational settings – changing lives. MSED's program shows you how to do that. Teachers who earn their certificate with our program offer schools not only their exceptionally rigorous IIT education in math or science but also exceptional knowledge of the *teaching* of math or science for grades 6-12.

This program is designed for people who care about education, especially mathematics and science education, and want to make a difference. There is a great need for better mathematics and science education in the United States. U.S. 15-year-olds placed 19th in mathematics and 14th in science in a recent international survey, at a time when we need expertise in these subjects more than ever to solve problems of energy, the environment, development, and more. We need people who are educated in math and science *and* math and science *education* to help turn this around.

Q: What is unique about the MSED at IIT?

A: MSED is globally recognized as a leader in mathematics and science education research as well as a leader in students' and teachers' understanding of nature of science and mathematics, scientific inquiry, and other areas. Our faculty publish and present all over the world, including Sweden, Germany, Hong Kong, China, South Africa, and more. All faculty members have previous experience as middle and/or high school science or mathematics teachers. The program includes innovative components such as teaching in informal settings like museums, aquariums, and zoos.

Q: Where do graduates of the program teach?

A: This program has a track record for producing highly successful mathematics and science teachers. To date, 100 percent of our program completers have passed their Illinois State Board of Education knowledge of teaching test on their first try, and all are employed. Our graduates are currently teaching in many top schools in the Chicagoland area as well as in other areas and states.

Q: How long does it take to complete the program?

A: It depends on the requirements of the student's major and his or her pace. Students must have the required number of content-area hours in addition to completing the MSED education courses. Student teaching requires all-day participation in a school for a full semester and other courses should not be taken during this semester. Each student is provided one-on-one, personalized advising in order to chart out a program schedule that best fits his or her needs.

Q: What are some clues that I might make a good teacher?

A: You value the education process. You're interested in how other peoples' brains work and you like to draw that out. You enjoy tutoring and explaining ideas about math or science with other students. You like kids. You'd like to serve, not just work. You'd like to know that, at the end of the day, you've made a difference in someone's life.

Q: Is the certificate good in other states?

A: It depends on the state and reciprocity agreements. But at most you may need to take a course or two and/or pass the new state's tests. The MSED program prepares students to pass other states' tests. Some of our graduates are now teaching in California and Washington, for example.

Q: What kind of salary does a mathematics or science teacher make in Illinois?

A: It varies widely by district. For example, the average teacher salary for one Chicago High school in 2008 was \$74,839, according to the Illinois State Board of Education. Starting salaries are approximately \$40,000.

Q: What kind of job networking/connections can the program help me with/is there any kind of placement system?

A: There are a number of resources available to graduates to find out about possible teaching opportunities including the IIT Career Management Center, statewide teacher job fairs, and MSED faculty contacts. The MSED Director of Teacher Education also works closely with students to provide them with contacts and job openings.