**IIT Computational Science Summer Class for High School Students**

Attention high school students interested in science, math, and computation: Learn about these topics in exciting and unconventional ways by enrolling in IIT’s new computational science course for high school students in the summer of 2013.

|  |  |
| --- | --- |
| **Benefits:**  -earn college credit that may be transferrable to any college you attend  -enhance your resume by adding academic experience at a university  -gain exposure to cutting-edge technologies through the use of IIT’s new [Pauling Computer Lab](http://iit.edu/csl/bio/announcements/pauling_computer_lab.shtml)  -work with distinguished university faculty and researchers  -explore possible college majors by delving deeply into a variety of topics |  |

Led by John Erickson, lecturer of applied mathematics, this three-week summer course, held July 22-August 9 on IIT’s Main Campus, will integrate math, physics, and chemistry, with computation as the unifying concept. You will be admitted to IIT as a non-degree student for the course, and will earn two college credits that may be transferrable to any college you choose to attend. In the course, you will participate in hands-on activities with the goal of learning "big ideas" by using computation to explore optimization and patterns in science and nature. Answer questions such as “how do Google maps work?” and “has Facebook turned six degrees of separation into five?” with engaging activities and minimal lecturing, using real-world tools, such as Mathematica, a popular computation tool used on most college campuses. Sessions will take place three days a week (Monday, Wednesday, and Friday) for three hours per session (9 a.m. to noon).

**Using computation, you will answer the following questions, among others:**

-Why do symmetric geometric forms occur in nature?

-Is there life on other worlds?

-What if Kepler had had Mathematica?

-Will the speed of computation ever make public key encryption obsolete?

-How does the cell phone appear to predict our behavior?

**Cost:** The course itself costs $1,000, but a limited number of half scholarships are available.

**Requirements:** One year of science and completion of Algebra II; strong math and science grades

**Contact:**

Matthew Bauer

*Senior Lecturer of Computer Science*

*Computer Science Director of Undergraduate Programs*

*Director of Undergraduate Academic Advising*

312.567.5148

matthew.bauer@iit.edu