



DIVISION OF MATHEMATICS  
AND COMPUTER SCIENCE

Welcome to the Clarkson University STEP Program, also called the IMPETUS for Career Success. IMPETUS stands for *Integrated Mathematics and Physics for Entry to Undergraduate STEM (Science, Technology, Engineering, Mathematics)*.

This is an after school and summer program sponsored by Clarkson University. It is designed to provide enrichment activities and support you academically in Math and Science. The goal of this program is to help you realize your potential for college and the possibilities of an exciting career!

During the school year, the afterschool program has four main components:

- **Integrated Clarkson Experience (ICE):** A **new program** just for busy high school students! Sophomore will be connected with a Clarkson student mentor who will become a friend, a tutor, and a resource as you go through the college selection and application process. There will be special events and informal meeting times. You and your mentor set the schedule.
- **Promoting YOUR success:** Our goal is to help you get to college! You can stay connected with the Clarkson team through our Online Collaborative Learning Environment. You will have your own account and can log in from anyway to connect with your ICE mentor and participate in IMPETUS activities. Your teacher/coach will help you with this.
- **Clarkson Campus Visits:** One of the highlights of the program is the campus visits. Once each month, you will travel to the Clarkson for special activities or to meet with your ICE mentor. You will join about 100 other students from all over St. Lawrence County who are also participating in this program and make friends from other schools.
- **Clarkson Discovery Challenge:** IMPETUS high school students will work in teams to propose solutions to real-world issues with the help from Clarkson faculty and students. Put your creative problem solving skills to work and show off your innovation at the end-of-the-year showcase with a chance to win a Kindle and present your project at the State STEP Conference in Albany in March. Participation in this exciting event looks GREAT on a resume and college application so let's jump in!
- **Roller Coaster Design Competition:** You will work as a team with your friends to build a model roller coaster using everyday items guided by your engineering workbook. You will be supported by your teacher/coach at weekly meetings. A Clarkson mentor will help during monthly visits. In April, there is a competition to see which team has created the roller coaster with the longest ride and most creativity.

There is also a special IMPETUS **Problem of the Week** Competition. You will have a few opportunities to **win an iPod Touch**. Of course, "You gotta be in it to win it!" so get involved!



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Sophomores, juniors, and seniors—you can participate in the Moody’s Mega Math Challenge! This is an opportunity to work on a real-world problem and offer a solution based on research and brainstorming in a team. The prizes are huge—over \$100,000 are offered in college scholarships. More information can be found here: <http://m3challenge.siam.org/> Clarkson University also has other enrichment opportunities for you to participate in, such as Science Olympiad and Project Challenge. Talk to your guidance counselor or Science teacher about these.

Each month you will get an IMPETUS newsletter . Take it home and share it with your family. The newsletter will tell you all about up-and-coming events and opportunities to get involved. *We would also like to hear from you—so if you would like to write a column or contribute to the newsletter, just let us know!*

In the summer, you can attend a one week day camp on the Clarkson University campus. The theme of the camp is “Roller Coaster Challenge.” Teams of students design their own rides and test them out in a simulator. Then, they have a chance to ride real coasters and meet with a roller coaster engineer during a trip to Six Flags Great Escape in Lake George. The camp ends with special presentations for families and an awards ceremony.

For more information visit our website: <http://web2.clarkson.edu/projects/impetus/>

Join us on Facebook! It’s a great way to stay connected to the friends you’ll make during the Summer Camp and afterschool activities. Find us at <http://www.facebook.com/impetusprogram>

I hope you will enjoy all the IMPETUS events and fun!

Yours truly,

Kathleen Fowler, Ph.D.