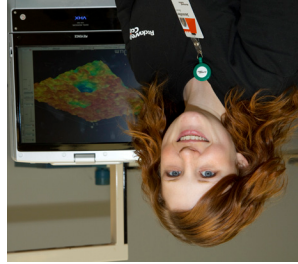


What are Real World Externships for STEM Teachers?

The Real World Externships program is aimed at providing Iowa teachers of science, mathematics and technology with opportunities to gain invaluable "real-world" experience in local industries and businesses.



Created from the requests of Iowa students wanting to know, *When am I ever going to use this in the real-world?*, the Externship program provides educators with the exposure to answer this question and improve the educational experience and career knowledge of Iowa's students.

- Provide a launch point for permanent business-school partnerships.
- Connect the Externship experience directly to classroom content and 21st Century Skills identified in the Iowa Core.
- Give students real-world career information about businesses and industries right here in Iowa
- Provide teachers with an income boost while seeing and using the latest real-world applications in a business/industry in their own community.

Apply Now for Summer 2016 Externships!
www.iowastem.gov/externships/apply

Tell Me More...

Benefits: Teacher externs earn an income boost through a stipend of \$150/day for up to 30 days and are provided an experience which utilizes the latest real-world applications specific to each extern's discipline.

Time commitment: Externships are full-time summer professional development experiences with a standard 40-hour work week for five-to-six weeks. A flexible work schedule may be negotiated between the host and extern depending on work needs and schedules.

Graduate credit: Teacher externs earn one hour of graduate credit through the University of Northern Iowa Continuing Education for their participation and completion of reflection assignments.

Expectations: 1) A minimum of 25 days at the Externship site; 2) Weekly reflection of Externship experience and classroom application via an online blog; 3) Identification of specific content and 21st Century Skills observed and how students will see the real-world application of those skills in the classroom; 4) Participation in program evaluation; and 5) A terrific work experience!

Experience: Previous business/industry experience is not required to participate. On-the-job training will be provided to prepare you for the tasks and assignments of the Externship.

Externships available: Program coordinators will match qualified applicants to area partnering host companies based on teacher interests and skills as well as business needs.



For examples of past Externship experiences please visit iowastem.gov/post-externships

What types of Real World Externships are available?

Jenna implemented a recycling program at **Sudenga Industries** to reduce waste and impact on the environment, as well as helped organize part of the moving inventory. She learned the science and skills involved in this type of manufacturing, including welding, robotics and CNC programming.

—Jenna Noble, Science Teacher



Andrew created a functional database on a SQL server to store project proposal data at **Clipper Windpower**. This required extracting data from the former document and importing data into the newly constructed database, as well as designing reports for the data.

—Andrew Boone, Math teacher



Beth assisted **Blank Park Zoo's** zookeepers with daily animal care and collaborated with zoo staff to research and create informational signs for a new African animal exhibit.

—Elizabeth Van Dyck, Science teacher



Ricardo worked with **Innovative Lighting's** Quality Control department presenting to employees machinery safety. He also worked with engineers and observed the geometry behind the optics of LED lights and performed calculations to verify manufacturer specifications.

—Ricardo Martinez, Engineering teacher





A sample of partnering businesses and industries include:



What are Teacher Externs saying about Real World Externships?

"I think that learning something new is something teachers don't get enough of in professional development. Our students have to learn new things, but if we have not traced the journey, it is easy to fall into doing what fits our needs not theirs."

– Jonnie Becker, Extern, KEMIN Industries

"The Externship called on my creativity, innovation, collaborative skills and communication skills to get the task done. That is what we need to teach; it is not what you know, it is how you put it to use."

– Gary Morris, Extern, U.S. Army Corps of Engineers

"If teachers don't get out and see how businesses actually operate, it is hard for them to convey business operations and models to their students. Also, by experiencing the latest trends and technology, I can teach as a more informed resource."

– John Kotz, Extern at John Deere Des Moines Works

The Governor's STEM Advisory Council

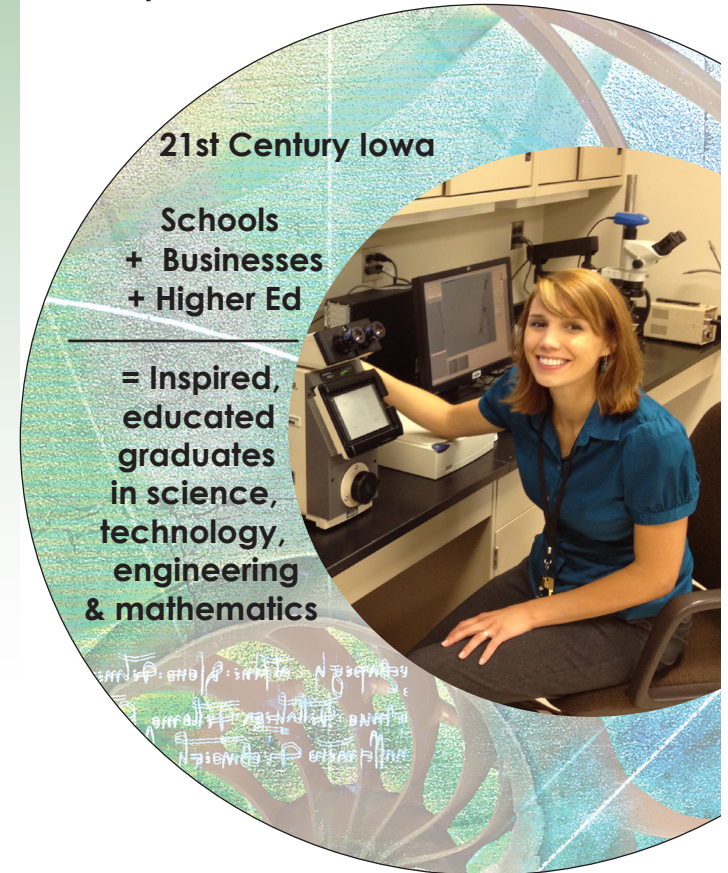
The Governor's STEM Advisory Council was created by Executive Order #74 of Governor Terry Branstad in the summer of 2011. The Council's overarching goal is to boost student interest and achievement in science, technology, engineering and mathematics (STEM) for a strong workforce pipeline in the STEM fields and a STEM-savvy citizenry of wise consumers.



www.iowaSTEM.gov

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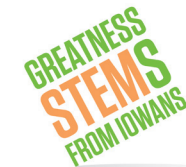
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21st Century Iowa

Schools
+ Businesses
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= Inspired, educated graduates in science, technology, engineering & mathematics



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