# **EXPLORE YOUR FUTURE** DISCOVER UNEXPECTED OPPORTUNITIES

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# MICHIGAN STEM GRANT AWARDED



Students attend the Inventor's Academy in July, including six of the scholarship winners!

Ferris State University, the Charlevoix-Emmett ISD, and its industry partners would like to thank the Michigan STEM Partnership for awarding our team a Science, Technology, Engineering, and Math (STEM) grant. The grant allowed us to offer 15 full scholarships to students across the state of Michigan to attend the College of Engineering Technology summer academy of their choice. Applicants competed for the scholarships and awardees were given the option to participate in the academies as

commuters or stay overnight in the residence halls. The academies range from three to five days during which the students engage in hands-on learning, team building activities, and attend several seminars to highlight opportunities in STEM, learn more about the college application process, and gain exposure to outstanding role models. Due to the high number of applicants, we are hoping to host a special STEM event in the fall at Ferris for awardees and applicants alike. STEM jobs are expected to grow faster than average and the U.S. Department of Congress predicts

that nine out of ten of the fastest-growing jobs that require a bachelor's degree will involve math or science by 2018!





#### DID YOU KNOW?



There are tremendous opportunities in Science, Technology, Engineering, and Math careers, especially for women? Check out this short video that highlights some of the fantastic career options female students are pursuing through Ferris State University.

http://www.youtube.com/watch?v=6x9eYD5sZns&list=UUAxQZuw6gILT4ciCK949gQg%2





"Scientists and engineers are working to solve some of the most vexing challenges of our time-finding cures for diseases like cancer and malaria, tackling global warming, providing people with clean drinking water, developing renewable energy sources, and understanding the origins of the universe. Engineers design many of the things we use dailybuildings, bridges, computers, cars, wheelchairs, and X-ray machines. When women are not involved in the design of these products, needs and desires unique to women may be overlooked." (Hill, Corbett, & Rose, 2010)

From Why So Few? Women in Science, Technology, Engineering, and Mathematics

www.aauw.org/files/2013/02/Why-So-Few-Women-in-Science-Technology-Engineering-and-Mathematics.pdf

# MEET THE UNIVERSITY CAREER PROGRAMS SPECIALIST

fairs, I am responsible for sup-

Greetings! With the launch of this newsletter, it seems appropriate to outline the role of the University Career Programs Specialist as well. In this role, housed under Academic Af-



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## STEM NEWS

A recent article published by Brown University outlines the challenge of diversifying the workforce in STEM fields. The authors cite a problem they have labelled STEM "backflow and leaks." Colleges and Universities encourage underrepresented populations to pursue STEM fields as they initially enroll in higher educational institutions. However, porting students in many of our two-year, Perkins programs. My background in business management and counseling provides a foundation of knowledge and experience with helping others. Some have described me as a "matchmaker" to connect students with resources on campus as appropriate to help them succeed. I love meeting with students individually to hear about their academic goals, challenges, and dream jobs. Partnering with student organizations such as Women in Technology also has been an area of focus to facilitate professional development and networking opportunities for current Ferris students. In addition to working with current Ferris students, I enjoy community outreach activities to collaborate with educational partners and K-12 students. Most recently efforts have been focused on initiatives to encourage more young women to pursue science, technology, engineering, and math (STEM) fields. In fact, a team of us gratefully accepted a Diversity Grant to host a Mother-Daughter Technology Engineering Aptitude (TEA) workshop on November 8 for high school females and their mother or female guardian. You may visit the University Calendar or contact me to learn more. Please stop by my office anytime in Johnson Hall as I love visitors!

when comparing the percentage of minority students who enroll in college initially to those awarded undergraduate or post-graduate degrees, the percentages decline.

STEM Pipeline Problems to Aid STEM Diversity. States News *Service* 18 June 2014. *A cademic OneFile*. Web. 23 June 2014.

# STUDENT IMPACT

Did you know that Ferris' own studentbuilt structural steel teaching structure is featured as the banner on the American Institute of Steel Construction website?



Visit their website at http://www.aisc.org/content.aspx?id =638 to learn more.

#### LAUGHABLE



## Resources

Ferris students have access to a multitude of resources to support success.

For a list of some of the resources available, visit http://www.ferris.edu/ HTMLS/academics/center/resources/ge neral/StudentSupport.htm.

Students also are encouraged to check out additional resources and opportunities to get involved through the Center for Leadership, Activities, and Career Services at http://www.ferris.edu/ HTMLS/administration/studentaffairs/ CLACS/homepage.htm.



Labor/Insight Jobs (Burning Glass Technology) is a licensed software tool that reports data based on job postings. If you have questions about the data or would like additional reports, please contact 231-591-3549. The reports used to generate the information above were run in July, 2014 and used the O\*NET Family of 'Architecture and Engineering' jobs for the job posting definition. Additional reports can be run to share information about other job families as requested. Various reports will be shared in future newsletters.

30,000

60,000

8+ years of experience

90,000

120,000

5 to 8 years of experience

150,000

0

State	Job Postings
California	3,100,241
Texas	1,766,290
New York	1,314,923
Florida	1,230,246
Illinois	1,217,989
Massachusetts	831,533
Ohio	817,199
Michigan	792,733
Pennsylvania	792,536
Georgia	707,629

2 to 5 years of experience

180,000

210,000

This table represents the top 10 states for Architecture and Engineering job openings in the past year (July 1, 2013—June 30, 2013). Michigan came in eighth highest!

270,000

240,000

Less than 2 years of experience



# FERRIS GRADS AT WORK

Your Name: Mallorie Edwards

Job Title: CAD Designer

**Degree awarded from Ferris**: Associate in Applied Science CAD Drafting and Tool Design Technology

Graduation year: 2014

Name of Employer: Clark Technology Systems www.clarkts.com

How would you describe your current position? As a CAD Designer, I design fluid routing systems for pump packages, steam turbine packages, and compressor packages, as well as cooling systems and industrial rafts. First I start by designing a Piping and Instrumental Diagram of the system's component layout. Then I design the route for the piping and model it all using 3D CAD software. Once all designs are approved, I work with welders, fabricators, and machinists to manufacture and assemble the finished system.

How has your education supported you in your job thus far? My CAD software knowledge has been most beneficial. You must always consider if your design is safe, cost efficient, manufactureable, and quality. Having the hands-on experience at Ferris makes me more comfortable when working in the shop. I can recognize the tools and machines, how they are used, and what I have available to me when designing.

How was the job search process? I was extremely impressed with the job search process. No matter where I moved to there were many opportunities. Before I graduated I had already completed two phone interviews. Then the day after I graduated I moved to Pennsylvania. In the first three days of being in Pennsylvania, I had two more interviews. On the third day, I got a job offer!



Mallorie Edwards '14

What do you see as your biggest challenge? Remembering all the components used in the systems, but I know in time this knowledge will come. My goal is to become a Project Engineer. I see that in my future, and I know if I keep at it, I will get there.

What advice would you give to current CET students?

Set a goal, and do it!

#### SAVE THE DATE

09.08.14 - Women in the College of Engineering Welcome

10.13.14 - Women in the College of Engineering Mixer

11.08.14 - Mother/Daughter TEA Event

Please check the College of Engineering Technology's website for the most up to date information. www.ferris.edu/HTMLS/colleges/technolo/homepage.htm

## VIDEO FEATURE

Verizon has launched a powerful video related to the new Inspire Her Mind campaign. In just over one minute, this video reminds us of the importance of positive influence!

http://youtu.be/XP3cyRRAfX0

## IN CLOSING...

Thank you for taking the time to read our newsletter! Over the course of the next year, we plan to share newsletters on a quarterly basis. If you have an idea or comment, we would love to hear from you! You may share your comments with Leigha Compson at compsol@ferris.edu or by phone at 231-591-3549.





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"Having had the handson experience at Ferris makes me more comfortable when working in the shop. I can recognize the tools and machines, how they are used, and what I have available to me when designing."

Mallorie Edwards, CAD Designer, Clark Technology Systems Ferris Grad 2014