



### Highlights

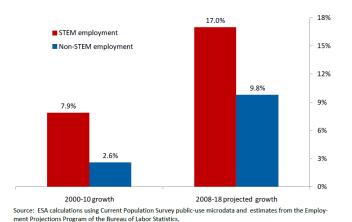
- NEW PDC Showcase | Check out our new display located by the cafeteria in PDC for more information about Ford STEAM Experience!
- Volunteer Opportunities | To learn about volunteer opportunities, visit www.volunteer.ford.com. Find us under "Ford STEM Program."
- Ford STEAM Experience | Reminder, our website has changed. Visit us at www.fordsteamexperience.com.
- STEAM on The HUB | Visit us on TheHUB@Ford.
- 2017 Hall of Fame Inductee | Congratulations to Dr. Haren Gandhi for his recent induction into the <u>National Inventor's Hall of Fame</u> for his work as an Automotive Exhaust Catalyst.
- Marcy Klevorn at Country Day | Ford CIO, Marcy Klevorn, represented the company's STEAM efforts by bringing technology to the Country Day Lower School's second-graders. Read more.

### STEM: Good Jobs Now and for the Future

By David Langdon, George McKittrick, Beethika Khan, and Mark Doms, Office of the Chief Economist

Read full article.

#### Figure 1. Recent and Projected Growth in STEM and Non-STEM Employment



### **Upcoming Events**

## FIRST Robotics District Championships

Two events to be held at Kettering University
March 3 and March 10, 2017



FIRST students at the kickoff measuring competition components.

## Take your Daughters and Sons to Work Day

Join Ford STEAM at WHQ April 27, 2017

### Global Finals, Destination Imagination

Culminating event of the 2016-2017 season May 27 – 29, 2017 Learn more.

### **STEAM Strategy**

**Corporate Alignment** | The Advisory Council aligns 2017 goals with corporate-wide STEAM activities to improve corporate reputation and create a visible Ford STEAM presence.

**Talent Pipeline Database** | To improve data management as they build a talent pipeline, the STEAM staff is working to upgrade the database.

**Global STEAM** | Stay tuned for STEAM programming news from the Ford global community as the STEAM team strengthens strategic ties with regional leads.

**Newsletter Model |** The newsletter will be released quarterly to better connect with the Ford community.

### **STEAM Business Environment**

### 6 New Companies that are Solving Education's Biggest Problems

AT&T teamed up with 6 companies to invest in technologies to improve education challenges, especially those related to STEAM. *Read full article*.

## STEM Re-entry Task Force Expands Large-Scale Effort to Increase the Number of Technical Women in the STEM Sector

The Society of Women Engineers (SWE) and iRelaunch offer internships in 2017 for professionals returning to work from a career break, partnering with global engineering companies, such as Ford, who support such an endeavor. *Read full article*.





### **Featured University Partner**

### **University of Michigan, Dearborn**

Ford and the University of Michigan, Dearborn ("UM – Dearborn") forged a partnership over 50 years ago. Today, UM –

Dearborn remains one of Ford's premier partners in supporting STEAM education, with the shared goal of fostering students' interest in the STEAM fields. *Read more*.





Above: The UM-Dearborn Formula SAE combustion team at Ford Experience Day.

Left: Ford employees participated in the 2016 Girls Are IT! STEAM JAM.

### 2017 Summer Camps

Engineering and Science Success Academy, @MSU	June 1 to August 1
ASM Materials Camp for Teachers, @MTU	June 19 – June 26
Women in Engineering, @MTU	June 18 – 23
DAPCEP Engineering Scholars Program, @MTU	June 25 – 30
Women in Computer Science, @MTU	June 25 – July 1
STEM Research Experiences for K-12 Teachers and Underrepresented Student Populations, @MSU	June 26 – August 4
Materials Science and Engineering Summer Youth Programs, @MTU	June 18 – July 29
Flint Schools Summer Day Camp, @Kettering	July 17 – 28
Junior Women in Engineering, @MTU	July 23 – 28
SEEK, Chicago	July 17 – August 4
SEEK, Detroit	July 24 – August 11

### **Featured Partner**

### **MCWT**

The Michigan Council of Women in Technology ("MCWT") Foundation is a network of women and men in Michigan with a deep passion for technology who foster that same excitement in other female students around the state. Ford has partnered with MCWT since 2005, helping the 700 members and 300 active volunteers to inspire and grow women in the field of technology. MCWT welcomes kindergarteners and retirees alike to Michigan's technology community. *Read more*.



Students at Camp Infinity, an MCWTinitiated program, being inspired by technology.



Ford volunteer at Camp Infinity, showing a student how technology is used in a vehicle.







### **Ford STEAM Experience**

### **FIRST Robotics**

## Ford to be exclusive sponsor of two FIRST Robotics District Championships

Ford will be the exclusive sponsor of two FIRST Robotics District Championships to be held at Kettering University on March 3 and March 10, 2017. Key-note speakers, Brad Simmons and Sue Leone, will address over 2,000 attendees at each event. This sponsorship was funded through the Corporate STEAM Proposal process.

### Ford sponsored FIRST Robotics kickoff event at the MEZ

The Michigan Engineering Zone was home to the 2017 First Robotics Kick-off Event courtesy of Ford, where Detroit students gathered enthusiastically for the nationwide release of the challenge and rules of this year's games.



Students experimented with the competition components for the first time.

### Ford & Girl Scouts Race on NBC's TODAY

The Ford Girls' Fast Track Races program had a very memorable race in February, racing live on NBC's TODAY Show. Four Girl Scouts from the participating Councils (Detroit, NJ, Miami, Dallas) traveled to New York to take part in a once-in-a-lifetime opportunity: racing their pine cars on the Plaza. Besides racing live on TV, the Girl Scouts met Matt Lauer as well as NASCAR superstar and new Ford driver, Danica Patrick. Matt & Danica hosted the showcase providing more information on why to engage with STEAM. Each girl received a surprise take home award: \$5,000 to put towards their pursuit of STEAM education. Looking forward to what these Scouts have in store for their future in STEAM education! Click here to watch the segment.

Kettering University celebrated Ford Day on campus on October 24, 2016.



### **University Partner Programs**

# Michigan Technologica University

## Women in Computer Science summer camp application

The Women in Computer Science program at MTU invites high school girls with a strong interest in computing to apply to the summer camp held on campus June 26, 2016 to July 2, 2017. Applications are due April 10, 2017.

## Ford grants Kettering \$32,000 to create summer camp for Flint students

The Ford grant will enable 20 Flint students to learn about model electric vehicles during the summer of 2017. *Read more*.

**Kettering University** 







### **Asia Pacific**

### **Blue Oval Scholarships**

Ford will sponsor 12 scholarships for the 2017 year, four each in India, Australia, and China.



Dave Schoch (left) and Desi Ujkashevic (right) with scholarship awardees.

### **FIRST Robotics**

Ford sponsors two FIRST Robotics Competition teams each in Australia and China, where Ford employees are actively involved in mentorship roles.

### **University Vehicle Programs: Formula SAE**

**Australia** | Ford is a major sponsor of the Society of Automotive Engineers ("SAE") vehicle program in Australia.

**China** | Ford sponsors a Southeast University student team.

India | Ford sponsors two teams' participation in BAJA, an inter-collegiate event that challenged students to design, manufacture, market, and race an all-terrain vehicle.



### China

## Innovation Workshops: Design Thinking

Ford employees participate in STEAM Education and Innovation workshops for over 60 teachers, with the help of the Henry Ford Learning Institute.

### Women in Engineering

Ford REC female engineers and guest speakers lead workshops and discussions to inspire young female students to find the fun in STEAM fields (below).



### **Australia**

### **Math Camp**

Twenty talented mathematics students and two Mathematical Association of Victoria ("MAV") teachers visited Ford product development as part of the inaugural Victorian Mathematics Teacher's Association Math Camp. The tenth graders participated in a tour of FIVELAB and a CAE presentation explaining the engineering applications of mathematics.

### **Northern Bay College**

Ford employees work closely with Northern Bay College to expose students of all ages to STEAM activities through career talks and mentoring.

### India

#### Robo Siksha Kendra

Robo Siksha Kentra is a robotics lab facility in an underprivileged school in



Chennai capable of training 800 students per year in science. The India STEM Foundation trained 40 Ford volunteers in robotics to teach students and teachers about robotics. Each year, two teams are selected to participate in the National Level Robotics competition.

### **Mobile MakerSpace Workshop**

The proposal for the 2017 Innovation and Design Challenge seeks to expand Mobile MakerSpace Workshops in underprivileged areas.







### **Europe**

### Germany

### Looking for the Global Compass

The Seventh Student Symposium, titled "Looking for the Global Compass," took place February 2017. Approximately 120 students from various schools in the Aachen-Jülich-Cologne region learned about mobility and energy. Ford supported the event with presentations about E-Mobility and the Dual Education Program, Do2.



Angela Morley and Laura Carneige-Brown at the Scholar Reception.

### **United Kingdom**

The 2017 University of Bath Scholar Reception was held on February 9th at the historic Roman Baths. Angela Morley, Supervisor of University Research Projects at Dunton, met with Ford Blue Oval Scholar, Laura Carneige-Brown, who is studying for a Masters in Engineering with Advanced Innovation and Design.

### **Cologne Children and Juniors University**

For the first time, Cologne Children's University opened its doors to school classes with a physics seminar held February 15, 2017. Over 300 children attended. The Ford Fund partners with the Cologne Children's University to provide engaging workshops for



children, introducing over 3,500 young students to STEM topics on everything from "sound and light" to "technology of the future."



### **Meet the Corporate STEAM Team**



Prashant Javkar
Strategy and Programs
Manager



STEAM Coordinator



Jerry Calandre
STEAM Technology Lead



Poonam Narotam
STEAM Specialist