

Ford Sponsored Camps at TechShop 2016

Free 5 day STEM/STEAM camps 9:30am-3:30pm (after care available for fee)

June 20-24	Arduino Robotics
July 25-29	Raspberry Pi Girls Only
August 1-5	Arduino Robotics
August 8-12	Design & Build Girls Only

(See camp descriptions below)

This collaboration between Ford Motor Company and TechShop will increase student's excitement and exposure to CNC technologies, problem solving, and analogue tools introduced with hands-on activities and Ford presentations regarding STEM/STEAM careers.

The TechShop camp experience is defined by the depth and hands on engagement. The social exchange with peers from various schools allows for social experiences of learning, bonding, and play. The depth of learning and natural sense of joy generated by the complex camp experience will encourage students to feel a greater degree of confidence, curiosity, and familiarity with STEAM topics when they return to school. This new found confidence combined with the student's enthusiasm to share their camp activity and accomplishments will lead to peer-to-peer mentorship, expanded learning beyond camp and an increased "cool factor" of STEM/STEAM topics and future job prospects.

Camp Descriptions

June 20-24 Arduino Robotics

Are you ready to start programming your own robot and take control of your robotic world? In this five-day TechShop Arduino camp, you will learn how to design, build, and program your own microcontroller. This introduction to the all-powerful Arduino board includes a week's worth of training on inputs, outputs, and programming. You will use your Arduino boards to make a multitude of different projects throughout the week, culminating in your very own bot that you get to take home with you at the end of camp.

This class is for kids ages 8–17. This is a 5-day camp beginning on Monday at 9:30AM and continuing on through Friday at 3:30PM.

July 25-29 Raspberry Pi Girls Only

This five-day camp introduces girls to the basics of programming and coding. You will learn how to operate the Raspberry Pi2, use essential components, and become familiar with coding programs such as Scratch, Sonic Pi, and Minecraft Pi. After a week of challenging projects, you may take your Pi home to continue experimenting with them.

This five-day camp is for GIRL CODERS ages 8–17 only. Camp runs from Monday through Friday, 9:30AM–3:30PM.

August 1-5 Arduino Robotics

Are you ready to start programming your own robot and take control of your robotic world? In this five-day TechShop Arduino camp, you will learn how to design, build, and program your own microcontroller. This introduction to the all-powerful Arduino board includes a week's worth of training on inputs, outputs, and programming. You will use your Arduino boards to make a multitude of different projects throughout the week, culminating in your very own bot that you get to take home with you at the end of camp.

This class is for kids ages 8–17. This is a 5-day camp beginning on Monday at 9:30AM and continuing on through Friday at 3:30PM.

August 8-12 Design & Build Girls Only

This five-day Design and Build camp will introduce you to software, and rapid prototyping equipment, and it will provide you a chance to bring your creation to life using TechShop's laser cutters and 3D printers. You will begin by learning and refining your CAD (computer aided design) skills in Autodesk and CoreIDRAW before building your project on our Epilog laser cutters, Mojo 3D printer, and the Form +1 3D printer.

This five-day camp is for kids ages 8–17 and runs from Monday through Friday, 9:30AM– 3:30PM.Campers who take and successfully pass this course will be certified to use the laser cutters, Form +1, and Mojo 3D printers at TechShop.

Program Details

What is the duration of the program?

Each Ford Design Challenge Camp experience spans a five-day period from 9:30am-3:30pm.

Cost to participant?

The full camp fee is sponsored by Ford Motor Company at a market value of \$887.00, there is no cost to the participant. A waitlist will be compiled and those not present by 10am on the first day of camp will forfeit their place. After care hours comes with a fee.

After Care fees: \$150.00 for 5 days

This add-on gives your young maker the chance to hang out at TechShop starting as early as 8:30AM and ending as late as 6:00PM! This package must be purchased with an enrollment in one of our Summer of Creation camps. A Maker Sessions package must be purchased for each youth enrolled in extended care.

Eligibility to participate

1) Camper must be ages 8-17

2) All required waivers from Ford and TechShop must be filled out in advance, or on first day of camp in person by legal guardian. Campers not present or with full waiver paper work by 10am on the first day of camp will forfeit their seat to a wait-listed camper. Campers without waivers are not allowed to be left on the premises.

3) Closed toed shoes must be worn

- 4) After care package must be purchased for early drop off or late pick up
- 5) 2 siblings per family may participate
- 6) Students may participate in one Ford camp week per summer
- 7) Registration is first-come-first –served
- 8) Campers from 2016 can participate in one week of 2016 camp

Food

- 1) Bring a refillable water bottle
- 2) Lunch is provided

3) Special dietary needs must be announced on the waivers to the TechShop staff. Some catering accommodations can be made, but campers with highly specialized diets must bring lunch. Lunch delivery ordering is not encouraged and the front desk will not manage this process. 16 and 17 year olds may leave campus for lunch at their own risk and also must observe the camp policies and time limitations or they will be excused. Vending machines are on site, but campers must bring their own small change.

Location of the program

800 Republic Drive, Allen Park, Michigan 48201

To register Call or email TechShop front desk staff <u>Info.dt@techshop.ws</u> 313-583-3831