City of Tomorrow Challenge

Ford and Destination Imagination are thrilled to bring you a challenge that's great for the whole family. So get all the brains in your household together and come up with the best mobility solution! By entering, you'll have a chance to win a Ford STEAM Experience-themed trip for the family and awesome scholarship prizes for your child.

The City of Tomorrow™ Challenge

It's an exciting time to be an engineer! From self-driving cars to moving sidewalks to smart cities that help you move more efficiently, innovation is everywhere. And it's all being done with the environment in mind.

Engineers at Ford are working on developing an array of smart mobility solutions that will positively affect the cities of tomorrow and the people who live in them.

In this challenge, your child will have the opportunity to design their own solution to help make future cities more accessible and efficient. Follow and complete the four steps below to enter.

STEP 1

Research City of Tomorrow

Visit fordsteamexperience.com/city-of-tomorrow-challenge to see how Ford envisions how we could better navigate cities in the future.

STEP 2

Explore Different Ford Engineer Profiles

To be a Ford engineer of the future, your child will need to learn some basic skills that they can apply to their future projects. Explore the exciting roles that Ford engineers fill in the areas of Science, Technology, Engineering, Arts and Mathematics. Each inspiring profile is based on an engineer at Ford, and shows how different activities, interests and hobbies can also help make your child the best engineer they can be!

Once you have reviewed all the inspiring profiles with your child, help them select a Ford STEAM category and come up with their own smart mobility idea for which they will develop a prototype.

SCIENCE

Name
Pete

Role at Ford
Director, Sustainability, Environmental and Safety Engineering, Certification Programs

Role Description
An avid camper and backpacker, Pete is able to use his love of the outdoors to drive his work each day. Pete and his team make sure that Ford vehicles are safe and efficient. He is currently working to certify that Ford trucks meet all safety and environmental requirements. Pete's favorite part about being a Ford engineer is that he is able to learn something new each day through business trips across the globe, and collaboration with other teams at Ford. Pete's favorite subject in school was art, and he is able to use his creative instincts to solve just about any engineering problem that may arise. Pete has a bachelor's degree in electrical engineering.

Potential Smart Mobility Project for the City of Tomorrow
Based on Pete's skillset and position at Ford, for the City of Tomorrow he might work on developing an eco-conscious public transportation vehicle.

TECHNOLOGY

Name
Edward

Role at Ford
Ford Global Safety Belt Technical Specialist and Core Supervisor

Role Description
Edward loves cars, and was an avid toy car collector growing up. In his role as a Ford engineer, Edward is able to work on all kinds of cars. In fact, he gets to go INSIDE the cars he works on. He and his team develop the safety belts that are built into all Ford vehicles. Edward especially enjoys being an innovator, as he continually helps develop new safety belt technologies to help ensure that passengers remain safe. Edward's favorite subject in school was drafting, and he uses this to improve safety belt designs and their individual parts using computer-aided design software. Edward has a bachelor's degree in mechanical engineering.

Potential Smart Mobility Project for the City of Tomorrow
Based on Edward's skillset and position at Ford, he might work on developing a new safety system for an automated vehicle.

ENGINEERING

Name
Gregory

Role at Ford
Supervisor, Design Engineering

Role Description
Gregory's favorite subject in school was chemistry. He loves finding ways to integrate chemistry, physics and mathematics into a project. Gregory and his team design the elements inside a car, like seating, steering and climate control. Gregory's favorite part of his job is being able to take an idea from design to fully realized inside a vehicle. Gregory is currently working on electronic shifters on the steering column that will be used in electric vehicles. Gregory played team sports growing up, and finds that the collaboration and perseverance skills he learned are some of the most important ones he uses as a Ford engineer. He has a bachelor's degree in chemical engineering.

Potential Smart Mobility Project for the City of Tomorrow
Based on Gregory's skillset and position at Ford, for the City of Tomorrow he might work on developing an automated steering system.

ARTS

Name
Jeanette

Role at Ford
Color and Materials Designer

Role Description
Jeanette has always enjoyed the art world and, as a child, she loved collecting colorful lunchboxes. With her eye for vibrant colors, functional design and a deep understanding of how things work together to make useful products, Jeanette's passion shines through in her work at Ford. She and her team research the roles and meanings of color in nature and in culture, then she integrates those colors in thoughtful ways into all of Ford's smart mobility products and designs. Jeanette is currently working on the interior design of a Ford sedan. Her favorite subject in school was 3-D design, because it allowed her to work in multiple artistic mediums while pulling in her engineering interests. She has a bachelor's degree in architecture.

Potential Smart Mobility Project for the City of Tomorrow
Based on Jeanette's skillset and position at Ford, for the City of Tomorrow she might work on developing the visual design of an e-bike.

MATHEMATICS

Name
Karen

Role at Ford
Technical Leader, Core Safety

Role Description
Karen's favorite subject in school was geometry. She found it interesting to see how shapes, angles and measurements could be woven together to create something new and interesting. Karen uses her love of geometry as she and her team design, create and test airbags for Ford vehicles. She is currently working on a new system that will be able to tell if an accident is occurring and when the airbag should deploy, so that the passengers are protected. Karen enjoys woodworking in her spare time. Through this activity, she is able to exercise mathematical precision, creativity and perseverance. She uses these skills daily in her role at Ford. Karen has a bachelor's degree in mechanical engineering.

Potential Smart Mobility Project for the City of Tomorrow
Based on Karen's skillset and position at Ford, for the City of Tomorrow she might work on developing a crash safety system for drones.

STEP 3

Create Your Smart Mobility Prototype

Before engineers spend too much time and resources developing a new product, they must develop a model or scale version of the solution to ensure that it can work properly and achieve the desired effect. Using household items, guide your child in building a prototype or model of their proposed smart mobility solution. The prototype does not have to function exactly as planned, but it should represent the concept that your child is trying to create.

STEP 4

Share Your Smart Mobility Solution

Once an engineer has developed a concept or prototype, the next step is sharing it with others to get feedback to help improve it. Have your child give their smart mobility solution a name, and then take a photo of it to submit online.

Important: Make sure that the name of your prototype is displayed somewhere in the photo.