

Endeavor STEM Career Exploration

Eighty percent of the nation's of the fastest-growing careers require skills from one or more STEM fields. In fact, science and engineering job opportunities are expected to grow at double the rate of jobs in other industries.

Our nation's global competitiveness hinges on our ability to create the first fully STEM-literate generation and empower students with the knowledge they need to pursue career opportunities that may have once seemed out-of-reach. One key indicator determining high school graduates' pursuit of a STEM degree is their interest entering high school.

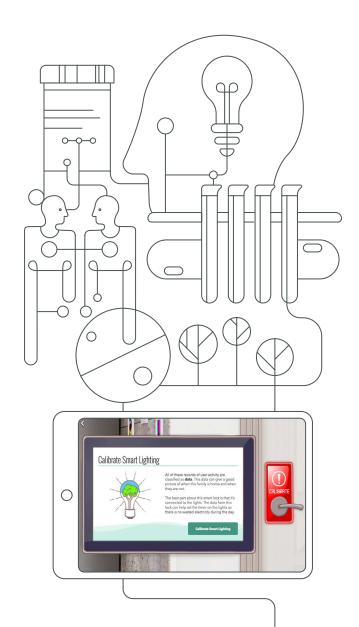
Endeavor – STEM Career Exploration is a first-of-its-kind interactive program designed for middle school students where the ground for STEM literacy and career exploration is most fertile. Learners engage with interactive content that reinforces key STEM skills while exploring exciting STEM careers that await.

Course Highlights

- O Interactive activities that reinforce critical STEM topics
- O Insight into student skills, interests, and aptitudes, and how they might connect to exciting STEM careers
- Scaffolded hints and just-in-time instruction that provide targeted feedback to learners in need
- Personalized takeaway with student interests, skills, aptitudes, and relevant careers

Course Topic Areas:

- O The Careers Powering STEM Industries
- O Big Data and the Internet of Things
- Future of Manufacturing and Design
- O The Algorithms Behind Recommendations



Recommended Grade Level: 6-9

Total Time: 1.5-2hours

Subject Fit: Career Technical Education

Standards Alignment: Common Career Technical Core (CCTC), Common Core State Standards Practices (CCSS), Next Generation Science Standards Practices (NGSS) Course Flow——



Lesson 1About Me Quiz



Lesson 2
Designing the
Ultimate Prototype



Lesson 3
Connecting the
Home of the Future



Lesson 4
Building the
Perfect Playlist



Lesson 5
My Field Guide

The STEM workforce is expected to include **8.65 million** workers by 2018.

Science and engineering career opportunities are **expected to grow at double the rate of growth** (20%) of the overall workforce.

One key indicator determining high school graduates' interest in STEM is **learner interest entering high school**.

Learning Activity Highlights

The Future of Manufacturing - Sophisticated manufacturing technologies are shaping the way we design and build new products. In this activity, learners will explore the design process and topics in material science as they design and "3D print" a custom sneaker. Through experimenting with different material options and calibrating printer settings, learners will gain critical exposure to the topics and careers that are defining the future of manufacturing.

Perfect Playlist - While predictive algorithms play an increasingly important role in online behavior and daily decision-making, learners are often unaware of the impact their behavior has on what they see online. In this open-ended activity, learners act as "Head of Curation", exploring collaborative and content-based filtering techniques to build the perfect musical playlist.

For more information about bringing this program to your school or district, visit everfi.com/k-12

