













2022 National Engineers Week

Boeing invites you to participate in National Engineers Week! Founded by the National Society of Professional Engineers in 1951, Engineers Week (February 20–26, 2022) is dedicated to ensuring a diverse and well-educated future engineering workforce by increasing understanding of and interest in engineering and technology careers.

Boeing has a new free, five-part Flight Path video series. You're welcome to use episode one for E-Week, or use all five in the series! Each standards-aligned lesson builds on the previous section and includes an educator/volunteer guide, a short concept video, and a hands-on 45-minute activity designed to excite and engage students.

Here are resources to launch your Engineers Week with episode one!

- Companion Educator Guide: Learn more about guiding students through the three different phases of each episode: an opening activity that introduces concepts, the video, and the associated hands-on activity.
- Episode 1 Video: Concept & Design: Explore how the concepting and design phase kicks off the creation of a Boeing aircraft. See how Boeing's employees are solution seekers in this important phase to ensure the project is set up for success. Length: 6 minutes.
- Episode 1 Hands-On Activity: Students will be challenged to design an airplane with minimal drag. They will research the concept of drag to understand its effect on flight and collaborate to create innovative 2D airplane designs.

Every week can be Engineers Week! Check out the additional videos and hands-on activities in the FUTURE U Flight Path video series. Meet diverse, highly skilled Boeing employees harnessing their collective passions and acumen to develop the greatest aircraft in the world. Each new episode and activity underlines another phase of Boeing's process: manufacturing, flight testing, fabrication, and service and support.

More FUTURE U Fun: FUTURE U is a partnership between Boeing and Discovery Education that aims to inspire the next generation of aerospace innovators by providing free standards-aligned, STEM-focused educational resources for middle and high school teachers and students.



LEARN MORE: www.BoeingFUTUREU.com



















FUTURE U is a partnership between Boeing and Discovery Education that aims to inspire the next generation of aerospace innovators by providing free standardsaligned, STEM-focused educational resources for middle and high school teachers and students. Viewers can engage with virtual field trips, 360 extended reality videos, and hands-on design challenges to learn about aerospace engineering, electrical engineering, artificial intelligence, and more. Content continues to be added, so please check back regularly!

Innovating the Future Virtual Field Trip

Head to Johnson Space Center in Houston, Texas to meet Boeing employees who are preparing to write the next chapter of space history with the launch of the CST-100 Starliner spacecraft and the deployment of the Space Launch System (SLS). Length: 6 segments totaling 28 minutes

ecoAction Virtual Field Trip

Dive into Boeing's cutting-edge research on sustainable solutions! Students will tour Seattle and discover the ways STEM professionals develop and test innovative aviation technologies, re-imagine biofuels, restore waterways, and radically improve energy usage. Length: 6 segments totaling 28 minutes

Testing the Limits Virtual Field Trip

Explore how test and evaluation engineers test the limits of aerospace to ensure quality, reliability, safety, and performance. Students will learn about Structural Testing, Wind Testing, Environmental Testing, Electromagnetic Testing, and Non-Destructive Testing. Length: 6 segments totaling 27 minutes

Online Lesson Plans

Use hands-on, standards-aligned STEM lessons to guide students as they explore key concepts in aerospace and engineering. Students can explore activities related to space, environment, and aviation careers. Contemplate moon tourism, create and test a self-propelling model boat, design your own helicopter, and more! Length: each activity is designed for three 45-60 minute class periods Designed for grades 6-8

Lessons can be adapted for completion by a single student

For additional hands-on STEM activities created in partnership with Discovery Education and industry, visit **STEM Careers Coalition**.



LEARN MORE: www.BoeingFUTUREU.com