

Website URL:
www.aces.edu/4hi



Alabama 4-H - 4Hinnovators Program
Program Logo

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4-H INNOVATORS

BE AN INNOVATOR. JOIN THE TEAM!

YOUNG PEOPLE ARE CURIOUS. They ask a lot of questions! That's why they are natural scientists. 4-Hinnovators is an inquiry based, hands-on science and engineering curriculum that builds on a child's sense of curiosity.

4-Hi uses a team of super minds who specialize in helping young people improve critical thinking skills, challenging them to solve real-world problems using engineering design practices. 4-Hi has an active blend of digital, hands-on, and print experiences designed for your students between the ages of 9 and 18 years old.

The 4-Hinnovator curriculum is divided into four comic book issues. Each issue has two chapters: the Common Experience and the Inquiry Experience.

- **The Common Experience** is teacher-led. It ensures that youth share and can communicate an understanding of a concept before they move on to the Inquiry Experience.
- **The Inquiry Experience** allows teams of youth to build on the previous chapter by planning and imagining a solution to an engineering problem. They create a tool or process to try to solve the problem. They test their prototype design and ask questions about what they have done. They improve their design and seek better ways for their designs to work. They test it again and share what they have learned.

Our goal is for young people to engage in rich, hands-on activities that will propel their curiosity into a world of science, technology, and possibilities.

Assemble your recruits. Complete your missions. Launch your team of 4-Hinnovators into their future.

FLIES HIGH! GOES FAST!

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Attention, Educators!

Meet your new best friend, D.I.L.A. She is a Digital Interface for Logistics and Archives. Her job is to train you—the trainer. She is your guide through the 4-Hinnovator experience. Where you find D.I.L.A., you will find tips, tricks, and important information that will help you

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4-Hi Promotional Website

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MEET THE TEAM!

Meet Bio, Edge, Pi (Pi), and Willy. They are the 4-H Innovators team—the embodiment of the 4-H ideal. All have abilities associated with Science, Technology, Engineering, and Math. These characters are designed to appeal to young people and to promote teamwork and the value of collective strengths. They are edgy and cool and represent youth who may not have been traditionally associated with STEM. Most importantly, they are serious models for serious inquiry learning, and they see themselves as people who are learners—open to new ideas and new approaches of you can “Just Prove It”

WILLY
William Moto
4-Hi Code Name: **WILLY**

Willy likes speed and has a talent for building things and creating tools. As a power wheelchair racer, he knows a lot about energy and aerodynamics. Willy asks questions, asks more questions, and solves problems.

EDGE
Eve Hart
4-Hi Code Name: **EDGE**

Edge is drawn to technology and strives to help people. The budding medical engineer has a lot of ideas and knows how to research, test, and adjust her ideas to come up with solutions.

BIO
Russell Rayne
4-Hi Code Name: **BIO**

Bio understands how to calculate risks and grifter data. His natural affinity for plants and the environment makes him a good agricultural engineer. He loves to learn and wants to help improve people's lives and help them use science to better their communities.

PI
Indigo Tres
4-Hi Code Name: **PI (Pi)**

Pi finds comfort in numbers and logic. Pi has a lot of questions and is always moving. She loves a challenge and her talent for solving complex problems help her maintain an aerial view for solutions.

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BE AN INNOVATOR. JOIN THE TEAM!

WELL-CRAFTED TEACHING RESOURCES MAKE STUDENT ENGAGEMENT EASY!

We're glad you're here to learn more about the 4-H Innovators curriculum, and we hope that you'll add it to your educational toolbox. Each 4-Hi lesson focuses on two engineering practices:

1. Developing prototypes
2. Building models

We want to help you prepare your young people for their future. It's through the facilities of 4-H hands-on learning that your students will have the opportunity to apply statistics, solve problems, and undertake experimentation that comes naturally to people.

Below, you'll find a brief synopsis of each 4-Hi course that is available to you for free through our Canvas delivery system.

4-Hi Goes Fast Lessons:

- Meat and Gravel:** 4-H Innovators learn the importance of design when creating aerodynamic cars. Your 4-H Innovators' challenge is to build a prototype that is aerodynamic so it will go fast and energy efficient so it will go far.
- Real World:** The science and engineering of energy is critical when designing cars. An automobile will not move without energy and that will help with their challenge of constructing a car that will travel 5 feet the fastest.
- Made to Order:** Your 4-H Innovators design and simulate the assembly line process to speed up car manufacturing. In this 4-Hi challenge, your youth will create a design process that allows a car manufacturer to make as many cars as possible in 3 minutes.
- Get a Grip:** Engineers work to ensure that our tires and shoes are made from materials that last well, are designed to reduce the risk of injury, and make our foot or road journeys comfortable and pleasant. In this 4-Hi challenge, innovators will design the treads to reduce accidents during rainy weather.

Click the button to open a new browser window.

ENROLL NOW

4-Hi Feels Great Lessons:

- Keep it Clean:** Imagine how much water we use. When you consider everything water is used for—from washing fire trucks to brushing teeth—it averages out to about 150 gallons of water for each person every day! A challenging problem for engineers is developing systems to remove the things from water that make people sick. In this challenge, your 4-H Innovators will design and build a filtration system to deliver the cleanest water possible.
- Fix It:** Medical schools train doctors and staff, but they also do research. That means staff are investigating new ways to treat illnesses and developing new tools to treat us. In this 4-Hi challenge, young people will design and build a surgical instrument that performs a procedure.

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Nothing is more exciting than watching young minds at work. 4-H Innovators provides a jump start to the creative process by providing classroom instructors and educators with hands-on teaching tools designed specifically for classroom instruction.

Utilizing statistics, enhancing problem-solving skills, and developing team-based experimentation are just a few of the processes the 4-Hi curriculum promotes.

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Meet your new best friend, D.I.L.A. She is a Digital Interface for Logistics and Archives. Her job is to train you—the trainer. She is your guide through the 4-H Innovator experience. Where you find D.I.L.A., you will find tips, tricks, and important information that will help you provide the best possible science and engineering experience for your own group of 4-H Innovators.

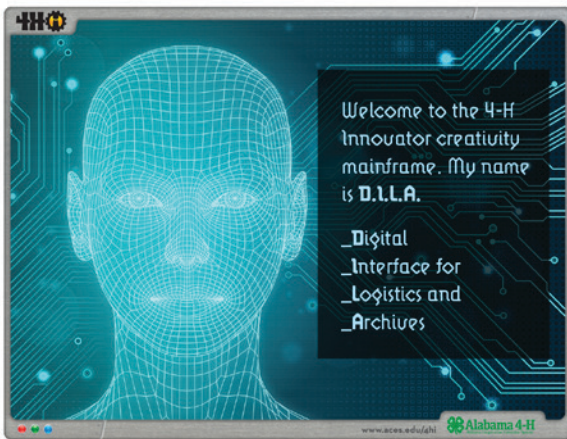
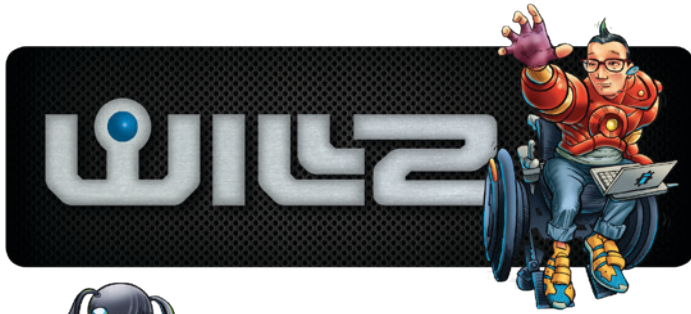
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4-Hi Promotional Website Sample Pages



4-Hi Promotional Website
Brand Graphics & Animated Header