HamiltonBuhl® Build-It-Yourself Arduino LED SmartFarm™ Grow Light

steam/stem kit

GLT-DIY, GLT-DIY3, GLT-DIY5

Teach the basics of Agriculture and Technology with the HamiltonBuhl® Arduino LED SmartFarm™ Grow Light System for Middle and High School Students.

This innovative DIY Arduino based LED SmartFarm™ is the perfect way to introduce students to the basics of agriculture and technology. With this system, students can grow their own food in the classroom, year-round, regardless of climate or weather conditions.

The system is easy to use and maintain, and comes with all the necessary components, including:

- Wooden Frame
- Arduino UNO board
- LED grow lights
- Sensors (humidity, temperature, soil-moisture)
- Breadboard
- LCD display
- Photoresistor
- Lesson plan

Students can follow the included instructions to assemble the system and then start planting their seeds.

Once the system is up and running, students will be guided to program the system using Arduino language (C, C++). Then using their computer, they can monitor and control the growing environment. They can adjust the light intensity, temperature, humidity, and watering schedule to create optimal conditions for their plants.
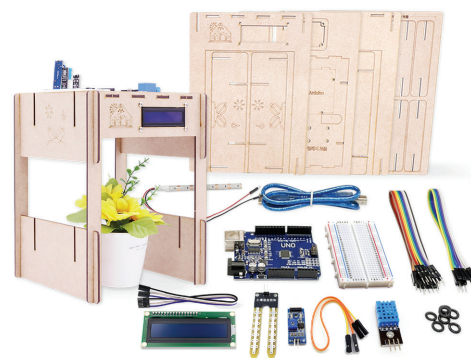
This build-it-yourself Arduino LED SmartFarm™ is a great way to get students excited about learning science, technology, engineering, and math (STEM). It also teaches them important life skills, such as responsibility and problem-solving.

The SmartFarm™ is also a great way to get students involved in the school community. Students can grow their own food for the school cafeteria or donate their produce to a local food bank. The smart farm can also be used to teach students about the importance of healthy eating and nutrition.

The GLT-DIY Kit provides all you need to make one complete SmartFarm™.

Also available in:
Packs of 3 (GLT-DIY3)
Packs of 5 (GLT-DIY5)

What are some benefits of using the this SmartFarm™ in the classroom?

- Engages students in STEM learning
- Teaches students about agriculture, technology, and engineering
- Introduces students to the concept of sustainable agriculture
- Provides students with a hands-on learning experience

Product: 1.61 lbs., 10.1" x 7.7" x 7.7"
Warranty: 90 days

Free In-Depth Lesson Plans!