

# Everything you need to create fun, engaging and relevant STEAM lessons for high school students

Engage high school students in STEAM subjects, teach them how to use technology as a tool in a playful, hands-on learning environment, and how to apply that knowledge in the real world. A modular program including 15 hours of curriculum-aligned lessons and projects and all the materials and software you need to teach 24 students, CTC GO! - Core Module enables students to design, create, and test a series of fun, relevant experiments.

NUMBER OF STUDENTS PER KIT: Optimal for 24 students and 3 teachers per kit

**NUMBER OF LESSONS / PROJECTS**: 8 Lessons and 8 Projects

LANGUAGES: English, Spanish, Portugese, German

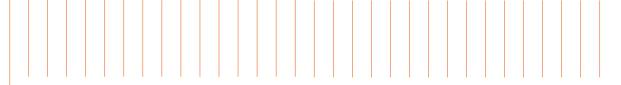
TARGET: 14 - 17 years (High School)

For more info visit: store.arduino.cc/ctc-go-core

"The student-led lessons
navigate users through wiring
their own circuits and then
programming the included
Arduino board via the Arduino
Software (IDE) to make learning
come to life on the table in
front of them"

Corinne Pachi, Technical Editor





# WHAT IS CTC GO CORE MODULE?

CTC GO! - Core Module is a getting started program including eight lessons, eight guided projects, and six self-guided projects that teach students how to use electronics and gives them an introduction to programming and coding. The lessons increase in difficulty from the very basics all the way through to learning different programming capabilities and building circuits for different sensors and actuators. During the six guided projects, students practice building structures and applying the knowledge acquired in the lessons. Once you have completed the lessons and projects, you will be ready, knowledgeable, and have the confidence to teach the six self-guided projects.



















## **KEY LEARNING**

#### **VALUES**

- Understanding the basics of electronics, reading schematics, and connecting commonly used components.
- Understanding the basics of text-based programming language, controlling components, and reading data using code.
- Creative ways of using technology, designing and developing physical computing projects.
- Working collaboratively to tackle real-world problems within given constraints and instructions.

# **PRODUCT**

# **BENEFITS**

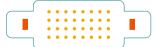
- Everything you need for high school STEAM lessons in one place.
- Easy to get started, with all the support you need included.

- Teach engaging lessons that are relevant, fun, and enable all students to thrive.
- Enhance students' problem-solving and communication skills.
- Create a playful, collaborative environment where students want to learn

## CURRICULUM

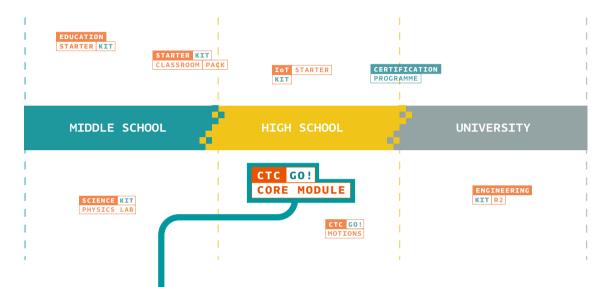
#### **ALIGNMENT**

CTC GO! - Core Module is aligned to the National Curriculum for England, which is used in international schools across the world, and the U.S.'s NGSS for STEAM subjects for students aged 14 to 17. Curriculum links are provided within the educators' software platform. Additionally, these lessons teach students important 21st-century skills such as collaboration, problem-solving, critical thinking, and communication.



## ARDUINO® EDUCATION LEARNING EVOLUTION

Our aim is to help students achieve their dream careers in STEAM. Our cross-curriculum content and open-source approach are essential tools for STEAM classes that develop with students as they progress **through middle school**, **high school**, **and university**, preparing them for a successful future.





Step by step, we champion students as they progress through their STEAM education with projects that increase in complexity to challenge them as they develop their skills.

We support students in achieving successful careers in STEAM-related fields with educational kits that are targeted to their age and ability. The technology is practical, creative, and fun. Students learn using the same products that companies around the world use in applications like rapid prototyping, AI, drone technology, and developing machine learning.

We are currently focused on translating our content into more languages and mapping it to more curricula. If you have a project that you would like to have localised for your country, please contact us with your suggestion.

For more info visit: arduino.cc/edu

