



Creative Technologies in the Classroom 101, or CTC 101, is a 5 modules STEAM program, tailored for students ages 13 to 17. It is the flagship Arduino Educational Program for schools.

CTC 101 uses “project-based” learning methodology. Students are introduced to the foundations of programming, electronics, and mechanics through a series of playful, well-documented projects and easy-to-assemble experiments.

CTC 101 has been certified by the Finish Kokoa Education Standard™ that guarantees high educational value and robust pedagogical design on global learning.

More than 700 components and parts:

- **Six Arduino 101 boards:** One of the most powerful Arduino boards for Education, featuring wireless communication (Bluetooth) and an integrated IMU (Inertial Measurement Unit). They are programmable, able to read inputs (e.g., light on a sensor), and capable to control outputs (e.g., activating a motor).
- **Six Arduino Education shields:** Add-on boards that connect to the Arduino 101 and Uno boards to extend their functionality. The Education Shield is a custom-made shield designed by Arduino Education specially tailored for educational purposes to enable quick and easy learning while building projects.
- **More than 10 mini breadboards:** Used to make circuits easier to build. They can be either attached on top of the Education Shield or used separately to connect other components.
- **Set of electronic components:** Used to create interactive electronic circuits, includes resistors, potentiometers, LEDs, push buttons, capacitors, and diodes.
- **Set of plug and play modules:** Sensors and actuators with all the necessary components onboard so they can be connected to the Education shield board directly. Modules include a joystick, light and tilt sensors, and an infrared array.
- **Set of sensors and actuators:** Sensors include light, knock, touch / capacitive, and infrared. Actuators consist of standard and continuous servo motors.
- **Set of batteries:** Includes both 9V and 1.5V batteries, and 4-slot and 8-slot battery holders.
- **Media and storage:** Includes webcam, SD card, and a speaker. The Education Shield features an SD card reader and an audio connector.
- **Set of cables:** Includes all the cables needed such as USB cables, jumper wires, module cables, battery snaps, alligator cables, and single core wires.
- **MDF parts:** Laser-cut MDF parts can be used for 10 different projects.
- **Storage and sorting boxes:** Electronic components can be sorted inside boxes based on their functions and sizes. After MDF parts are removed from their frames, they can be stored in the resealable storage bags to keep them organized for later use. The sorting box with dividers can be used to organize small components.