



EDUCATIONAL ROBOTICS CATALOGUE

Teachers and Educational Institutions
2025–2026 Academic Year



**Cofinanciado por
la Unión Europea**



MINISTERIO
DE HACIENDA



Fondos Europeos

Cámara
de Comercio de España

At Digital Codesign, technological education is promoted through innovative solutions that combine electronics, programming and creativity. They design training resources, educational kits and teaching materials that facilitate practical learning in the classroom.

Their aim is to support teachers and students in adopting modern tools, fostering critical thinking, experimentation and problem-solving through real-world projects. They believe in accessible, engaging and future-focused education.



MentorBit

The MentorBit board is your command centre for teaching students how to create innovative projects. It combines a powerful electronic brain with numerous built-in sensors and actuators.

It brings any idea to life, from simple to complex projects, and is the ideal tool both for beginners and advanced users.

149,95€ (PVP)



Logic Gates Trainer

Teach the fundamentals of digital electronics in a practical way with this trainer. It brings together the key logic functions — AND, OR, NOT and XOR — on a single board. It includes switches to control the inputs and pins for connecting other components, making it easier to design and test basic circuits without needing to be an expert.

99,95€ (PVP)

PRACTICE PROJECTS



Smart Home Practice Project

Practice project for MentorBit that enables electronics and programming to be taught by simulating a smart home. It includes sensors and actuators for controlling lighting, security and other automated functions. This educational activity provides a practical, applied introduction to the real-world fundamentals of home automation.

139,95€



Lift Practice Project

Teach students how to create their own control and automation system. This practice project simulates a real lift, with a motor to move the cabin between three floors. With LEDs to indicate the position and a servomotor for a barrier, it allows you to show how to integrate components and programme complex systems with ease. Requires the Arduino-compatible Basic Kit.

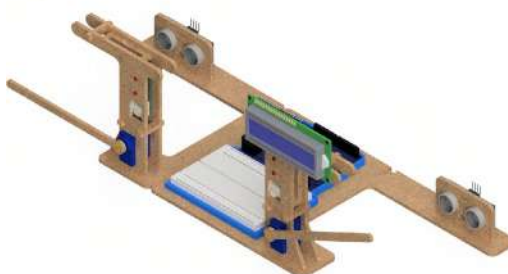
44,95€



Drawbridge Practice Project

It imitates the operation of a real drawbridge and supports the learning of control and automation systems. It offers a complete and realistic educational experience. Perfect for developing skills in programming, systems control and technical problem-solving. Requires the Arduino-compatible Basic Kit.

44,95€



Car Park Practice Project

Teach students how to create their own smart parking system. This project incorporates ultrasonic sensors, servomotors and an LCD screen to detect cars, control barriers and display information. Ideal for learning programming and the practical application of sensors and actuators. Requires the Arduino-compatible Basic Kit.

34,95 €



Safe Practice Project

Simulate a real safe while teaching control and security. It uses a servomotor for opening and closing, a potentiometer for the secret combination and an LCD screen for messages. A fun way to practise programming and integrate different components. Requires the Arduino-compatible Basic Kit.

34,95 €

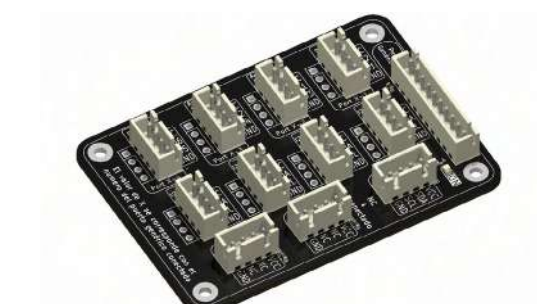
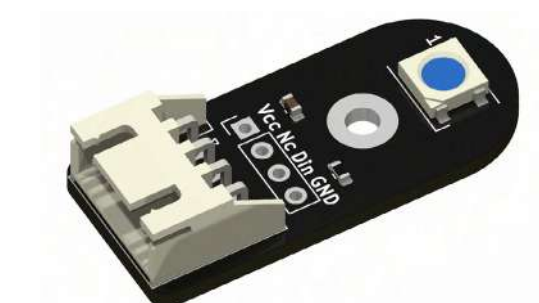


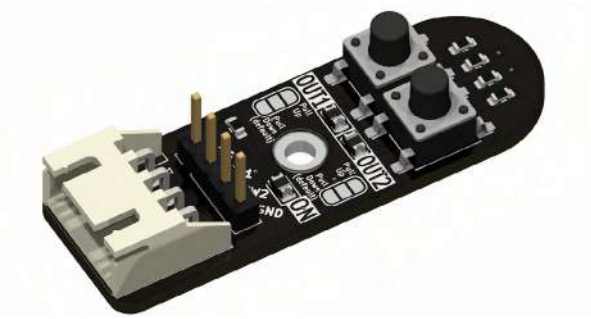
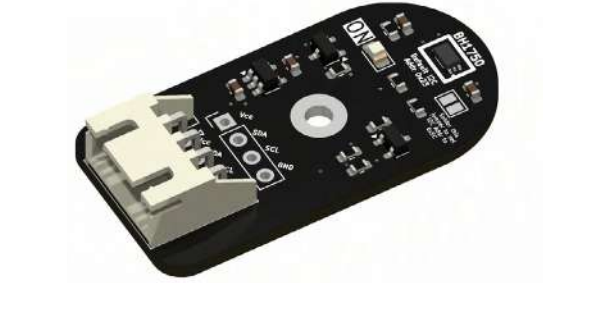
Traffic Light Junction Practice Project

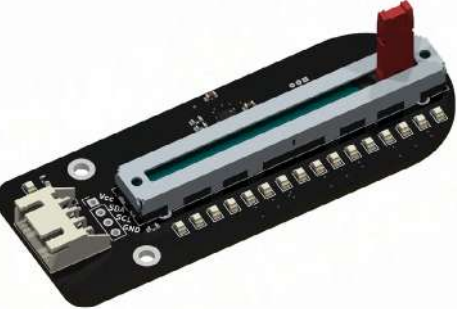
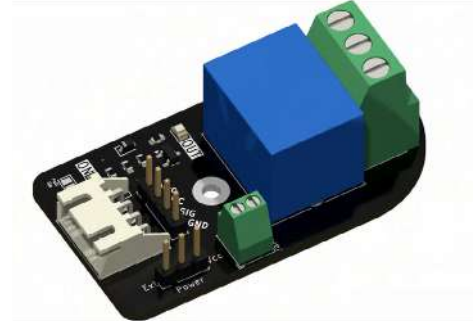
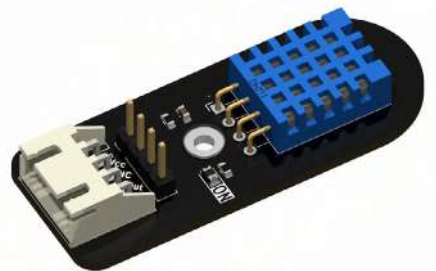
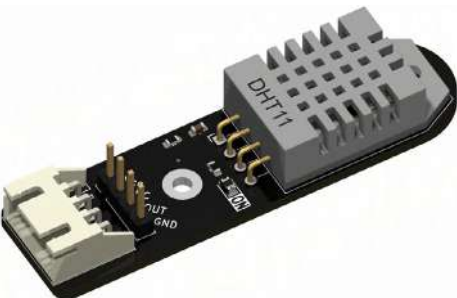
Teach students about traffic control and automation. This practice project allows a road junction to be recreated using LED modules to programme traffic light sequences. It helps students understand traffic management and the programming of automated systems. Requires the Arduino-compatible Basic Kit.

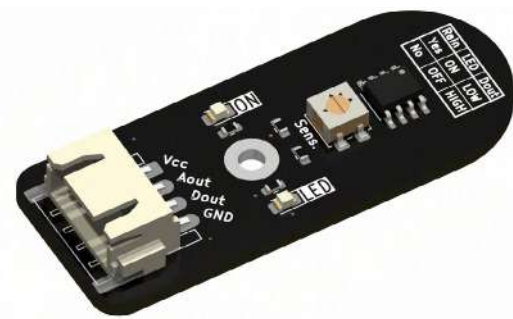
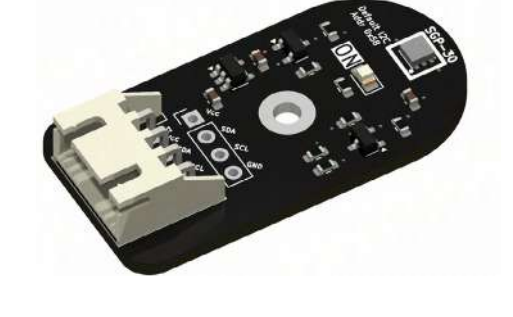
32,95 €

MODULES

Product	Description	Price (PVP)
	Kit of 12 Modules for MentorBit	This kit includes a selection of electronic sensors and actuators optimised for the MentorBit board. It makes it easier to explore signals, inputs and outputs, and enables the development of practical educational projects in robotics, automation and DIY electronics with Arduino and similar microcontrollers. 109,95€
	Input and Output Expander for MentorBit	This expander allows you to connect many more sensors and accessories to your MentorBit board, ideal for projects that are ready to grow. It adds new digital, analogue and power ports, as well as several JST connectors for I2C modules. With it, your project gains more functions, more possibilities and much more creativity. 13,95€
	RGB Module	Create impressive lighting effects with our RGB LED module. It allows you to choose and adjust colour and brightness using a simple digital signal. Compatible with MentorBit and most microcontrollers, its simple and precise control is ideal for adding customised lighting touches to your educational and creative projects. 9,95€
	Leds module	Add lights to your projects with ease. This module includes three LEDs that can be controlled independently via the I2C protocol. Compatible with MentorBit, it is perfect for automation or educational projects where you need to switch light indicators on and off easily and precisely. 10,95€
	Push-button Matrix Module	Ideal for projects that require multiple inputs, such as keyboards or control interfaces. This 16-button matrix module allows you to interact with and control your creations. Compatible with MentorBit and most microcontrollers, it offers a simple way to add multiple digital inputs using just a couple of wires. 19,95€
	Accelerometer Module	Measures movement, vibration and tilt across the three axes (X, Y, Z). This sensor communicates with MentorBit and other microcontrollers, making it easy to use. It is perfect for robotics projects, fall detection or any system that needs to measure changes in position. 11,95€

Product	Description	Price (PVP)
	The most direct solution for adding inputs to your project. This module includes two independent buttons, each with its own digital output. You can easily configure them to work however you need. Compatible with MentorBit, it is perfect for adding simple, direct controls to any project.	8,95€
	Add sound effects or acoustic alerts to your projects. This passive buzzer plays tones when it receives a signal from your MentorBit. It is also compatible with other microcontrollers. You only need one control pin to generate different melodies or alert sounds.	9,95€
	Detect ambient light very easily. This module uses a light sensor and a comparator that allows you to set a threshold. It provides an analogue output for measuring light and a digital output to indicate whether there is enough light or not. Ideal for automating lighting or creating basic alarms. Compatible with MentorBit and other microcontrollers.	10,95€
	Measure the light in your surroundings accurately with this module, which sends brightness data (lux) to your microcontroller. Compatible with MentorBit and most microcontrollers, it is perfect for smart home projects that adjust lighting automatically or for measuring environmental conditions.	10,95€
	Manually control values in your electronics practice projects. This module includes a convenient wheel for adjusting a value and sending it to your MentorBit or other microcontrollers. It also features an LED that can be switched on from the microcontroller. Ideal for calibrating systems or for interactive games.	9,95€
	Control the value of a signal with this module. Simply turn the potentiometer and read the adjusted analogue value. It includes an LED that you can control digitally. It is a simple and practical option for learning about signal control and handling basic electronic components. Compatible with MentorBit and other microcontrollers.	9,95€

Product	Description	Price (PVP)
	Linear Potentiometer Module Control your projects by sliding the potentiometer. This module communicates with your MentorBit and other microcontrollers via the I2C protocol, and includes several configurable LEDs for visual feedback. Ideal for learning how to control signals, read exact positions and use visual indicators in an advanced way.	14,95€
	1-Channel Relay Module Control high-power external devices with a simple control signal. This 1-channel relay allows you to switch lights or motors on and off. Compatible with MentorBit and most microcontrollers, it is ideal for smart home projects and basic electrical systems in a safe way.	10,95€
	2-Channel Relay Module Control two high-power devices independently with this dual relay module. It allows you to manage two circuits with higher voltage or current using separate signals. Compatible with MentorBit, it is ideal for projects that require control of multiple external systems, such as lights or dual motors.	11,95€
	DHT-11 Module A simple and reliable sensor for measuring ambient temperature and humidity. It connects to your microcontroller using a single digital pin to send direct readings. Compatible with MentorBit, it is perfect for basic environmental monitoring and simple automation projects.	10,95€
	DHT-22 Module Module with a DHT-22 sensor capable of measuring temperature and relative humidity with greater accuracy than basic models. It communicates with an external microcontroller via a digital pin. Compatible with MentorBit and most microcontrollers, it is ideal for projects that require more accurate and stable environmental measurements.	14,95€
	BMP280 Module Measure temperature, atmospheric pressure and altitude with a single module. It uses digital communication to send data to your microcontroller. Compatible with MentorBit and most microcontrollers, it is perfect for meteorology, drone or altimeter projects.	18,95€

Product	Description	Price (PVP)
	Detect the presence of water with this module. It provides an analogue output for measuring moisture level and a digital output with an adjustable threshold. It is ideal for creating alert systems or basic automation, such as closing windows automatically.	11,95€
	Add motion detection to your projects with ease. This PIR sensor detects the presence of people or animals and sends a digital signal. Compatible with MentorBit, it is perfect for security projects, automatic light switching or alarm systems that activate when activity is detected.	12,95€
	Measure the distance to any object with millimetre-level precision. This laser module uses the I2C protocol and is easy to integrate into any project. Compatible with MentorBit, it is ideal for robotics, drones and advanced obstacle detection systems.	15,95€
	Detect nearby objects using infrared light. The module emits and receives the signal, sending a digital alert when something gets in the way. Compatible with MentorBit, it is perfect for obstacle detection projects, passage counters or simple automation systems.	9,95€
	Monitor air quality by detecting specific gases with this MQ sensor. It provides an analogue output that allows you to read the gas level. Compatible with MentorBit and most microcontrollers, it is ideal for environmental monitoring and basic indoor safety.	11,95€
	Ensure air quality in your spaces. This sensor module measures volatile organic compounds (VOCs) and equivalent carbon dioxide (eCO2). It provides reliable environmental data and is compatible with MentorBit, making it an essential tool for automation and air quality monitoring projects.	16,95€

Product	Description	Price (PVP)
	Encoder Module with LEDs	Control and measure rotation with precision. This rotary encoder allows you to detect position and direction. Its integrated LEDs and multiple operating modes make it highly versatile. Compatible with MentorBit, it is ideal for menu control and interactive adjustments in educational projects. 16,95€

EDUCATIONAL KITS



Arduino UNO-Compatible Kit

The ideal starting point for a journey into the world of electronics and robotics. This starter kit includes the essential components and an Arduino UNO-compatible board. It allows you to assemble and programme your first circuits easily, while learning step by step with an accessible, open platform.

59,95€



Escornabot Kit

A fun robotics kit for getting started in the world of programming. Based on Arduino, it includes the key components needed to build a programmable robot with buttons. It teaches students how to create movement sequences, developing computational thinking in a playful and educational way.

49,95€



More about us at:

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