

Our **STEAM** section is a category of complete educational software and hardware equipment which aim to cover theoretical and practical areas concerning all science subjects using modern digital technology integrated with didactic and Interactive applications and to teach Computer Programming to young students within STEAM educational curriculum.

The increased emphasis on quality in **Science, Technology, Engineering, Arts and Mathematics (STEAM)** education can only be met with available and affordable professional development for STEAM educational platforms. **Polytech** is introducing such platforms for laboratories starting from elementary school up until high school offering a set of applications in different science fields and didactic applications.



Polytech STEAM products address curriculum or project choices in schools to improve competitiveness in technology science and skill development. In reality, **all secondary level educational products of Polytech are STEAM oriented** including theoretical content, real life challenging knowledge, digital platform and interactivity and are all offered in a unique integrated hardware and software platform. They are also fully integrated in a classroom management and evaluation platform which interconnects the teacher and the student.

This section represents only a sample of the available laboratory configurations. For each specific sector, **Polytech can offer specialized laboratory equipment** which can also be configured based on the **customer specific needs**. In case of customer interest for a specific laboratory in this level of education, Polytech is ready to provide a solution which fully meets any customer's needs.

Our laboratories are composed of a set of didactic tools, software applications, equipment, instructor and student documentation, experiments and quizzes, simulations (wherever applicable) in order to provide a turn-key solution to the educational institutions worldwide.



**e** classroom POLYTECH didactic applications are offered with a complete **Classroom Management System** and built in **Student Response application** giving the teacher a vast library of tools to interact and evaluate the performance of the students and the progress, create various interactive scenarios, evaluate instantly using any type of statistics and grading scenarios. Do not spend any money for Interactive applications, clickers, quiz builders, classroom and student management application. It comes **for free**, built in our didactic applications!

# BT 11A

## Scientific Measurements

A universal testing platform for **digital experiments** and Digital measurements used in science and engineering.

BT 11A is a small size integrated apparatus combining a data acquisition system and devices which students can use to perform various experiments applied in all sciences. The system allows the performance of experimental measurements using at least 15 different types of sensors.

BT 11A is compact, modular, light and versatile apparatus useful to any science classroom and in any level of education from elementary school to high school.

It introduces the students to measurement techniques using the most modern methods provided today by sensors, data loggers and computer Data analysis software.

- BT11A is **MODULAR...**

Meaning that the same platform can be used for a variety of experiments by adding the different experimental modules, boards, sensors etc.

- BT11A is **VERSATILE...**

Meaning that the modules can be used in various ways to implement experiments in various areas.

BT11A, due to the above features, is the most **COMPACT** digital lab offered in the market by which the student can process more than 100 science experiments.



### Sensors for BT 11A

Voltage

Pressure

Temperature

Force

Relative Humidity

Sound

Current

pH

Photogate

CO<sub>2</sub>

O<sub>2</sub>

ECG

Respiration (Spiro)

Magnetic Field

Motion

## BT11A Didactic application

The BT11A interconnects the Teacher with the Students in a **uniform platform**.

- Theory Introduction per science Topic with interfaces to any Student Response System or Interactive board
- Theory quizzes
- Lab Simulation for the Topic, Virtual measurement Simulations
- Data acquisition applications
- A step-by-step procedure for student experiments activities and student quizzes jointly in BT11A provide the most modern platform in Science teaching.

All instructions and Documentation is included in the BT11A application making BT11A one complete **CAI - Computer Assisted Instruction** - environment for the student, having all the required information available Online.