

## **KIDDIENGINEER™**

Unleash your inner inventor!



People spend more than eight hours a day with technological devices, yet most of us don't know how they work, or how to make our own. For all the interactivity of these devices, we are limited to passive consumption.

#### Our technology choices:

We have chosen educational toys that allow for expression in multiple ways, from learning at the computer to taking the device away and playing games they have created. They can even communicate with other devices or build and operate toys they have assembled and designed. They support many different learning aspects including music. These products cover coding, robotics, engineering and more and your child gets to keep them.





## **STREAM PROGRAM**



SCIENCE TECHNOLOGY ROBOTICS ENGINEERING

RING ARTS

STREAM is an educational approach to learning that uses Science, Technology, Robotics, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking. The end results are students who take thoughtful risks, engage in experiential learning, persist in problem-solving, embrace collaboration, and work through the creative process.



The kiddiengineer program starts with Grade 4 learners and goes up to high school.

What differentiates our club is that each child will take home their own hardware with each module, receive a micro:bit in the coding module to keep, an electronics kit for robotics so they can further their learning and play at home.

Each module runs over a term, so they learn 3 or 4 different aspects of STREAM a year, depending on school.

Kiddiengineer costs R1,600.00 per module.

## REGISTER HERE: http://bit.do/kid2022reg1

(or scan this QR Code with your phones camera)



# GRADE 4 TO 10 PROGRAM OUTLINE

### Module 1a & b - Coding

These modules are all about coding and bringing coding into the real world. Not only do the students learn and have fun through coding and building games, but they learn to apply this to real world situations and make their coding come to life. They will walk away with their own micro:bit so they can keep learning after classes are finished.

### Module 2a - Robotics

In this module students get hands-on experience of learning the design of, building and programing simple robots found in everyday objects and devices. This greatly boosts students' teamwork and problemsolving abilities, while helping them to learn how abstract concepts of mathematics, engineering and computing actually work in practice. Students get to keep their own electronics starter kit, comprising of a breadboard, LED's, motors and servo's and more but the micro:bit is needed to code these robots.

### Module 3a - Engineering

This module is an introduction to engineering concepts and terminology, you will have the opportunity to build inventions and build a wooden toys. It will be enhanced by using your micro:bit and inventors kits. Thereafter you will be able to create your own inventions to help solve some of our worldly problems.

### Module 4a - Arcade

Design your own retro arcade games from the bottom up, design your own characters (sprites) scenes and learn to code the back end of these games that you can play instantly.