

STEM Applied Learning Programme

Lesson Outline

STEM Theme	Applied Health Sciences
Module	5 (Sports Science: Advance)
Total Hours	12

No.	Topic
1	VO ₂ Max measurement
2	Knowing your % body fat
3	Target Heart rate and fitness monitor
4	Tennis Sensor
5	Self myofascial release
6	EMS
7	Introduction to Arduino
8	Breadboard & Resistor
9	Input & Output Signal (Buzzer, LED, Potentiometer)
10	Touch Sensors (push button, pressure capacitive sensor)
11	Light, Sound & Heat sensor (Infrared, Ultrasonic, Temperature sensor)
12	Project: Muscle Sensor (EMG controlled prosthetic hand)

