

Technology: Introduction to Electronics & Robotics

binary number

a number in the base 2 number system.

<https://www.youtube.com/watch?v=qdFmSIFojIw>

bit

a binary digit.

<https://www.youtube.com/watch?v=qdFmSIFojIw>

byte

8 bits.

<https://www.merriam-webster.com/dictionary/byte>

C

a programming language commonly used for small computers & robots.

https://en.wikipedia.org/wiki/C_%28programming_language%29

connecting wire

completes a circuit.

electric motor

converts electrical energy to mechanical energy.

https://en.wikipedia.org/wiki/Electric_motor

electrical tape

adhesive tape made of insulating material (usually plastic)., https://en.wikipedia.org/wiki/Electrical_tape

for

used to set the conditions for repeating a loop.

https://en.wikipedia.org/wiki/For_loop

function

a set of instructions that perform a frequently needed task within a program.

<http://www.mathopenref.com/functionsprog.html>

generator

converts mechanical energy to electrical energy.

https://en.wikipedia.org/wiki/Electric_generator

hexadecimal number

a number in the base 16 number system.

<https://www.youtube.com/watch?v=LpuPe81bc2w>

if

used for conditional execution.

[https://en.wikipedia.org/wiki/Conditional_\(programming\)](https://en.wikipedia.org/wiki/Conditional_(programming))

LED

Light Emitting Diode produces light only for one direction of DC current flow.

https://en.wikipedia.org/wiki/Light-emitting_diode

light bulb

produces light for both directions of DC current flow.

https://en.wikipedia.org/wiki/Incandescent_light_bulb

momentary switch

provides a controlled interruption in a circuit for as long as its button is held down.

<https://en.wikipedia.org/wiki/Switch>

multiplicative inverse

the product of something and its multiplicative inverse is 1.

<http://www.coolmath.com/prealgebra/06-properties/09-properties-multiplicative-inverse-01>

operator

the symbolic representation of an operation.

[https://en.wikipedia.org/wiki/Operator_\(programming\)](https://en.wikipedia.org/wiki/Operator_(programming))

radian

unit of angle measurement.

<http://www.mathsisfun.com/geometry/radians.html>

reciprocal

one divided by something.

<http://www.mathsisfun.com/reciprocal.html>

relay

an electrically controlled switch.

<https://en.wikipedia.org/wiki/Relay>

resistor

produces a drop in voltage.

<https://en.wikipedia.org/wiki/Resistor>

sensor

has a predictable electrical response to some physical condition.

<https://en.wikipedia.org/wiki/Sensor>

solder

an alloy of tin and other metals (often lead) used to make semi-permanent electrical connections.

<https://en.wikipedia.org/wiki/Soldering>

solderless breadboard

a device for making temporary circuits.

<https://learn.sparkfun.com/tutorials/how-to-use-a-breadboard>

switch

provides a controlled interruption in a circuit.

<https://en.wikipedia.org/wiki/Switch>

variable

something that can change value.

[https://en.wikipedia.org/wiki/Variable_\(mathematics\)](https://en.wikipedia.org/wiki/Variable_(mathematics))

variable

the name or symbol for specific data.

[https://en.wikipedia.org/wiki/Variable_\(mathematics\)](https://en.wikipedia.org/wiki/Variable_(mathematics))

while

used to specify the condition for repeating a loop.

https://en.wikipedia.org/wiki/While_loop