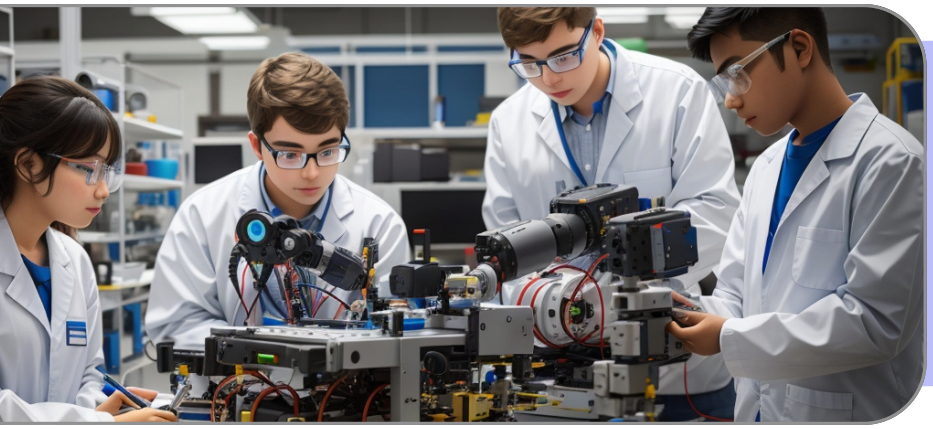
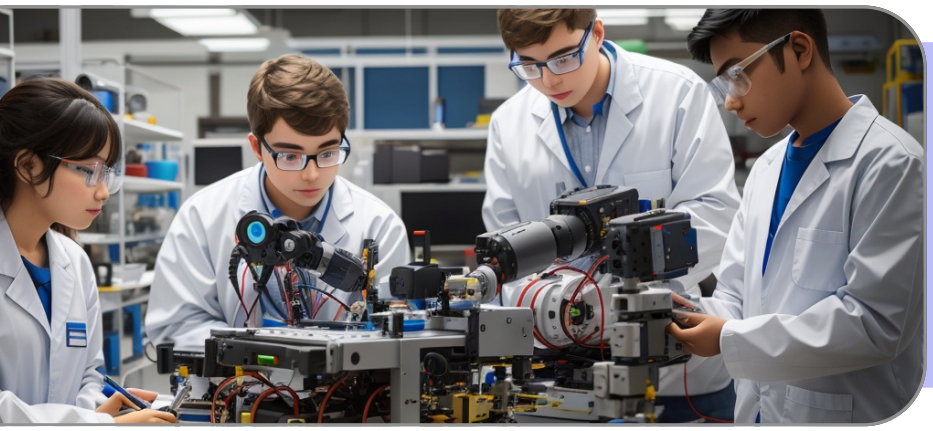


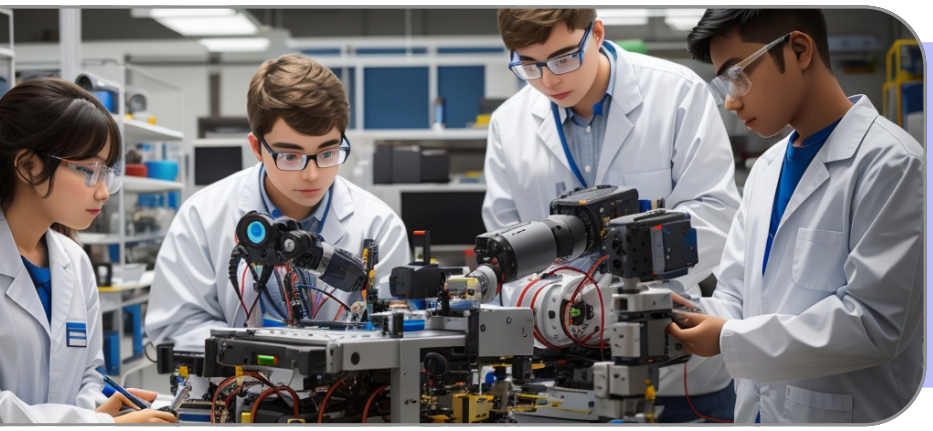
Código M.R.U.V.

```
#include <SoftwareSerial.h>

SoftwareSerial bluetooth(2, 3); // Configura los pines RX (2) y TX (3) para el módulo Bluetooth

const int ri1 = 10;
const int ri2 = 11;
const int rd1 = 5;
const int rd2 = 6;
const int si = 2;
const int sm = 7;
const int sd = 8;
int lsi = 0;
int lsm = 0;
int lsd = 0;
int r = 0;
const int vel1 = 200;

void setup() {
  pinMode(ri1, OUTPUT);
  pinMode(ri2, OUTPUT);
  pinMode(rd1, OUTPUT);
  pinMode(rd2, OUTPUT);
  pinMode(si, INPUT);
  pinMode(sm, INPUT);
  pinMode(sd, INPUT);

  // Inicializa la comunicación serial con el módulo Bluetooth
  bluetooth.begin(9600);
}
```



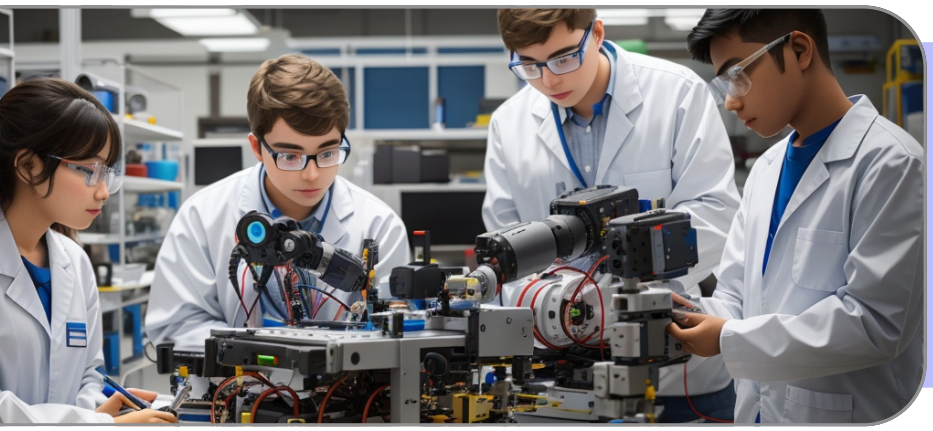
Código M.R.U.V.

```
oid moverAuto(int distanciaDeseada, int duracionMovimiento) {
int numVueltas = distanciaDeseada / 20.3; // Ajusta la circunferencia de la rueda

for (int i = 0; i < numVueltas; i++) {
analogWrite(ri1, 0);
analogWrite(ri2, 0);
analogWrite(rd1, 0);
analogWrite(rd2, 0);

delay(duracionMovimiento);

analogWrite(ri1, 0);
analogWrite(ri2, 0);
analogWrite(rd1, 0);
analogWrite(rd2, 0);
}
}

void loop() {
lsi = digitalRead(si);
lsm = digitalRead(sm);
lsd = digitalRead(sd);

if (lsi == 1 && lsm == 1 && lsd == 1) {
analogWrite(ri1, 0);
analogWrite(ri2, 0);
analogWrite(rd1, 0);
analogWrite(rd2, 0);
}
```



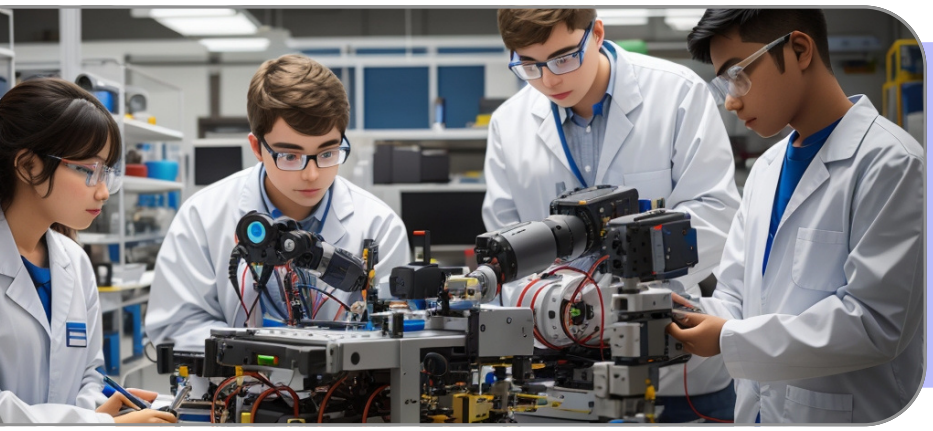
Código M.R.U.V.

```
if (lsi == 1 && lsm == 1 && lsd == 0) {
analogWrite(ri1, 0);
analogWrite(ri2, vel1);
analogWrite(rd1, vel1);
analogWrite(rd2, 0);
}

if (lsi == 1 && lsm == 0 && lsd == 1) {
analogWrite(ri1, 0);
analogWrite(ri2, 0);
analogWrite(rd1, 0);
analogWrite(rd2, 0);
}

if (lsi == 1 && lsm == 0 && lsd == 0) {
analogWrite(ri1, 0);
analogWrite(ri2, 0);
analogWrite(rd1, vel1);
analogWrite(rd2, 0);
r = 1;
}

if (lsi == 0 && lsm == 1 && lsd == 1) {
analogWrite(ri1, vel1);
analogWrite(ri2, 0);
analogWrite(rd1, 0);
analogWrite(rd2, vel1);
}
```



Código M.R.U.V.

```
 if (lsi == 0 && lsm == 1 && lsd == 0) {
analogWrite(ri1, vel1);
analogWrite(ri2, 0);
analogWrite(rd1, vel1);
analogWrite(rd2, 0);
}

if (lsi == 0 && lsm == 0 && lsd == 1) {
analogWrite(ri1, vel1);
analogWrite(ri2, 0);
analogWrite(rd1, 0);
analogWrite(rd2, 0);
r = 2;
}

if (lsi == 0 && lsm == 0 && lsd == 0 && r == 1) {
analogWrite(ri1, 0);
analogWrite(ri2, 0);
analogWrite(rd1, vel1);
analogWrite(rd2, 0);
}

if (lsi == 0 && lsm == 0 && lsd == 0 && r == 2) {
analogWrite(ri1, vel1);
analogWrite(ri2, 0);
analogWrite(rd1, 0);
analogWrite(rd2, 0);
}
```



Código M.R.U.V.

```
// Control de movimiento a través de Bluetooth
if (bluetooth.available() > 0) {
char command = bluetooth.read();

switch (command) {
case '1':
moverAuto(20, 1000); // Mueve el auto 20 cm a velocidad normal
break;
case '2':
moverAuto(30, 1000); // Mueve el auto 30 cm más lento (duración más larga)
break;
case '3':
moverAuto(35, 1000); // Mueve el auto 35 cm a velocidad normal
break;
case '4':
moverAuto(40, 1000); // Mueve el auto 40 cm más rápido (duración más corta)
break;
}
}
}


}
```