



STI
2D



STI2D



Sciences et Technologies de
l'Industrie et du Développement
Durable

Visio du 22/01/2025 – Parents 2nd Lycée J Villar

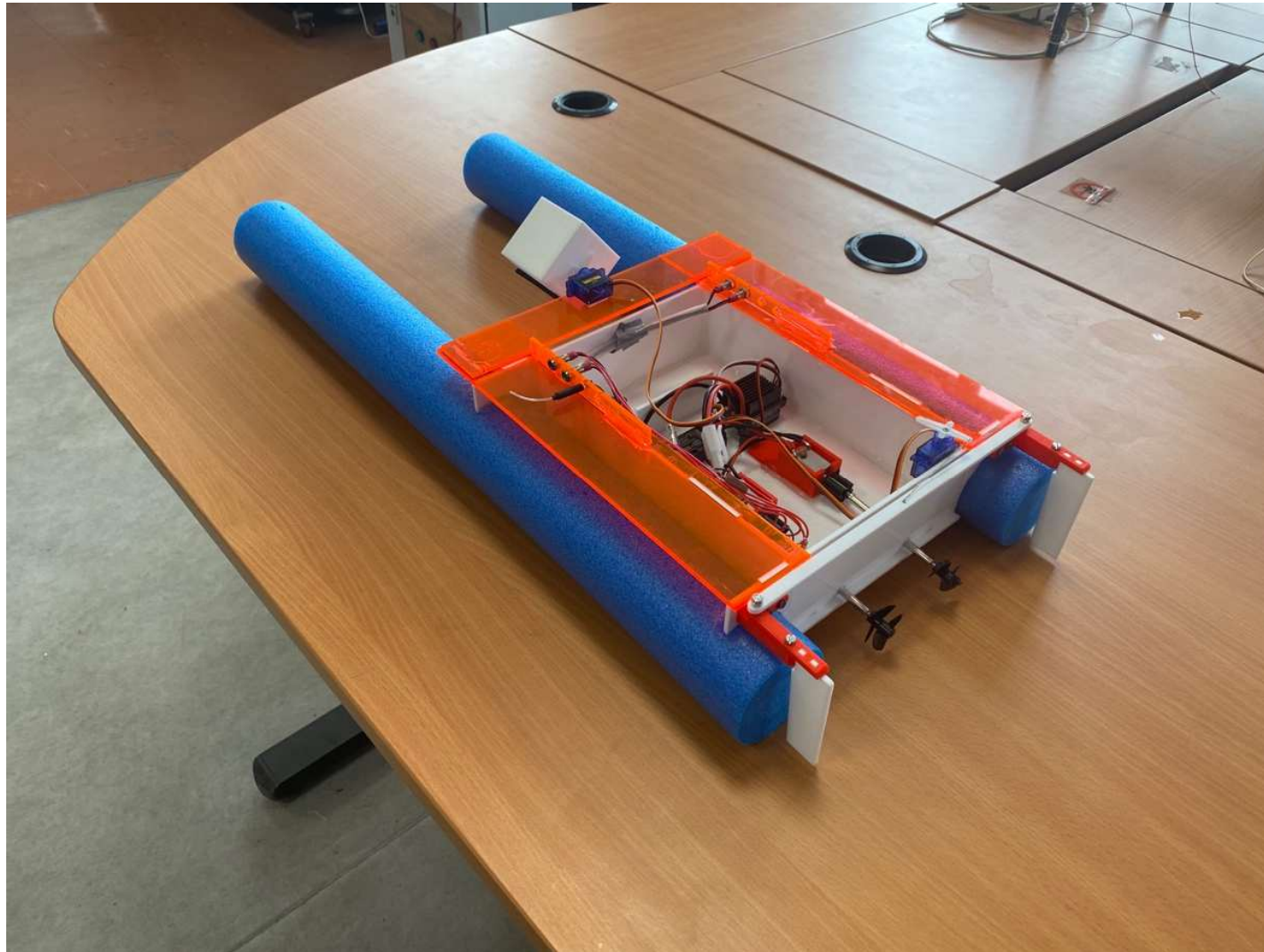
Portes ouvertes

Samedi 22 MARS 2025

À partir de 9h

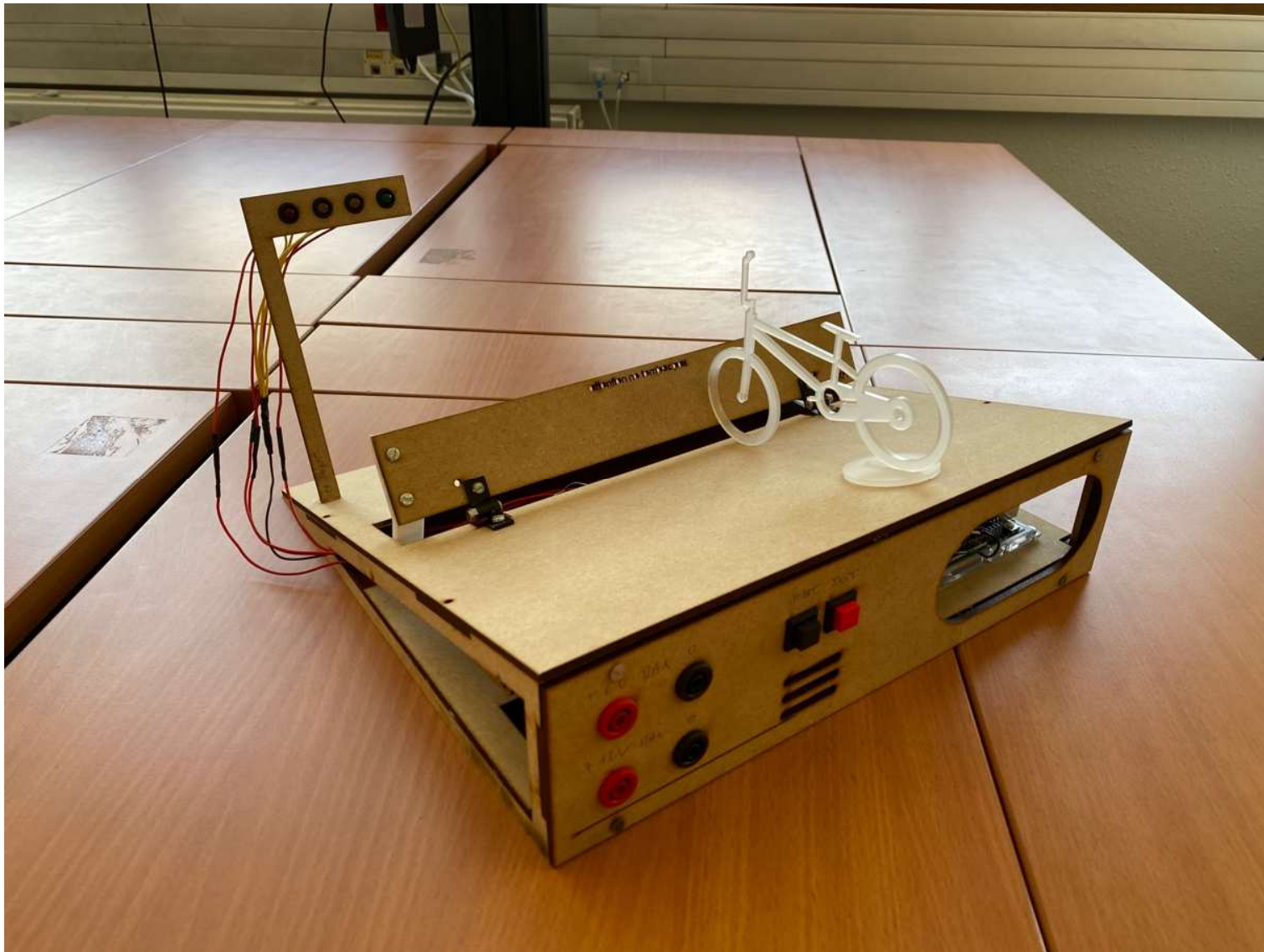


Exemples de projets 1STI



Bateau amorceur

Exemples de projets 1STI



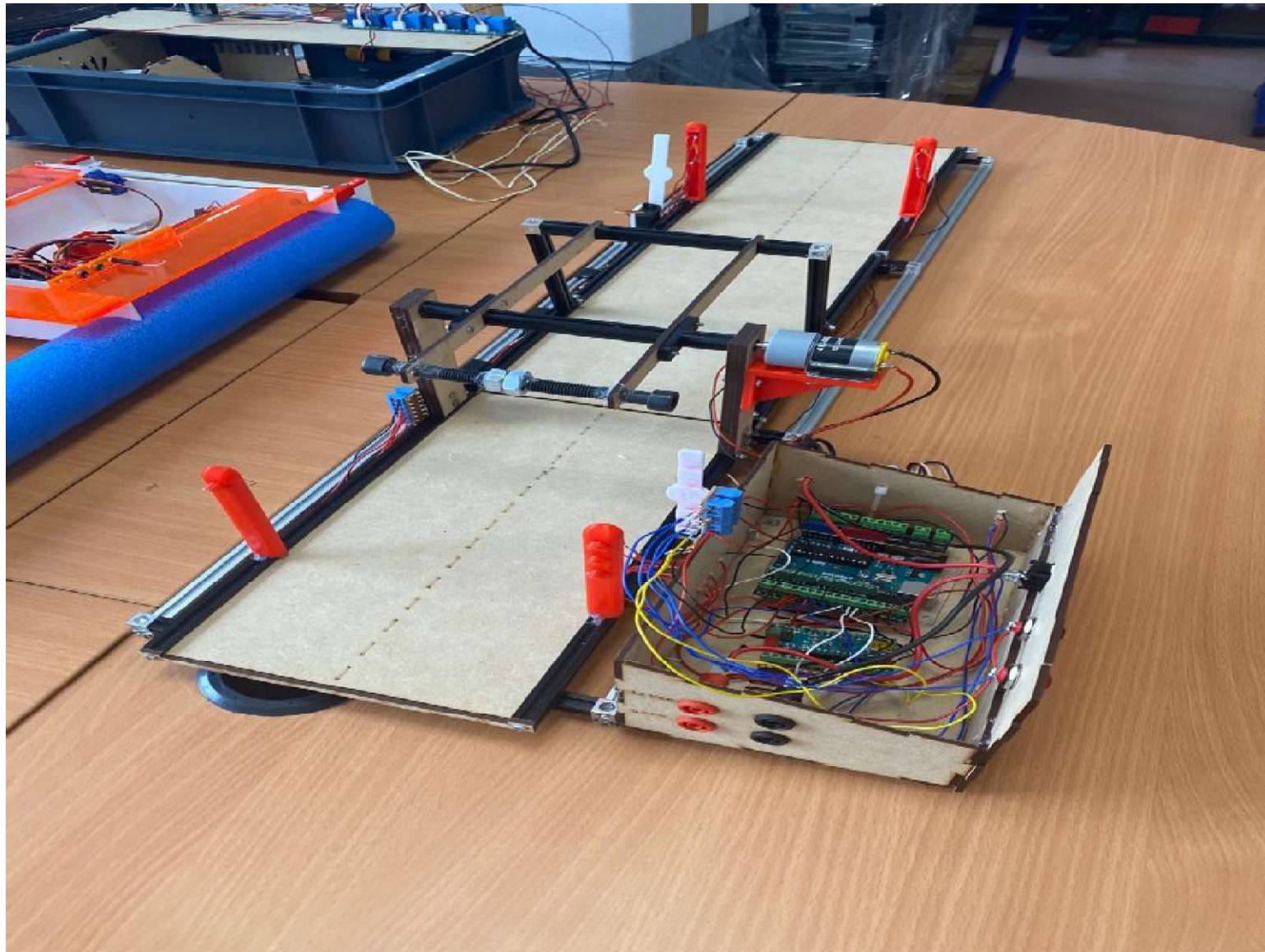
Départ BMX

Exemples de projets 1STI



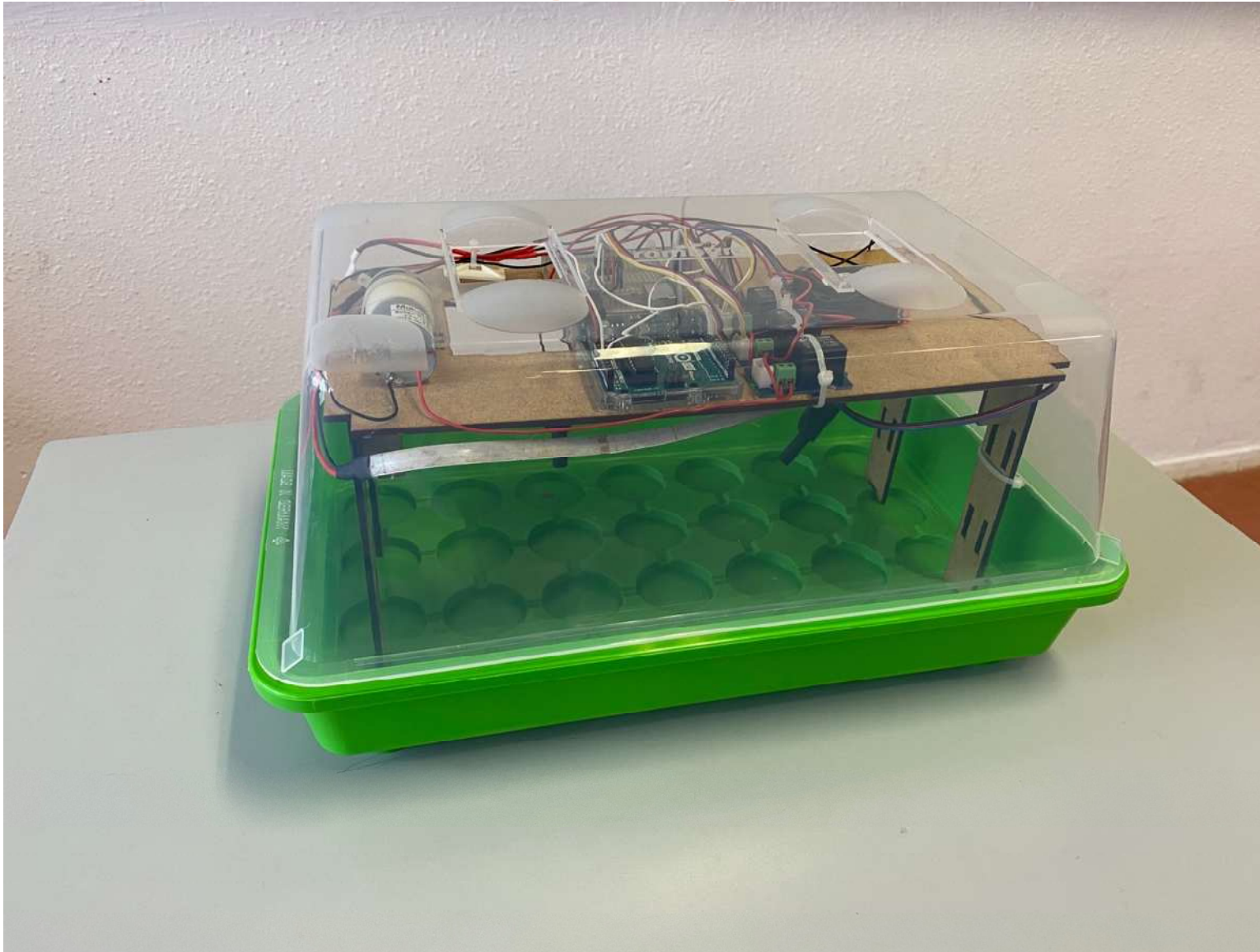
Pergola bioclimatique

Exemples de projets 1STI



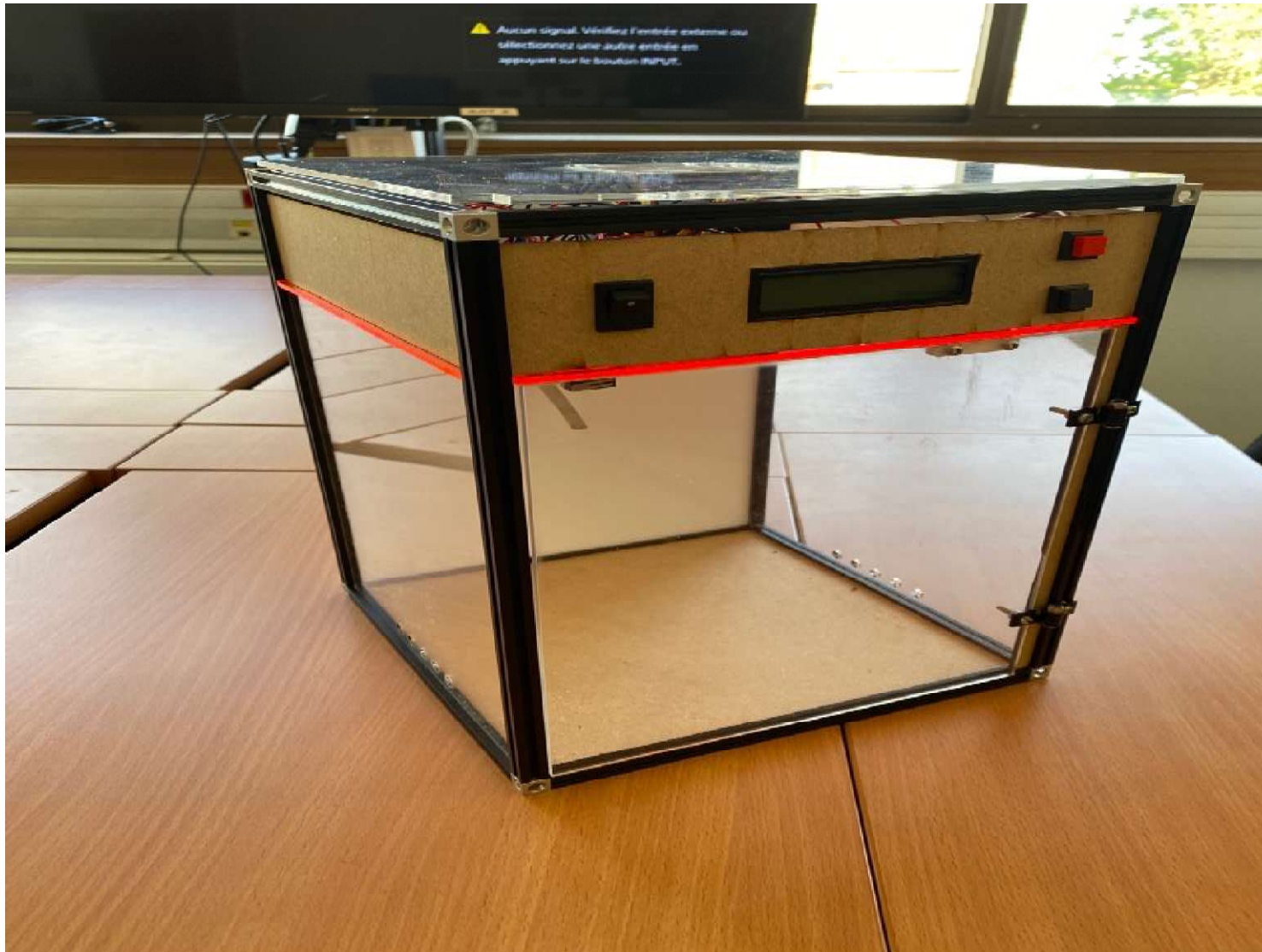
Pont mobile

Exemples de projets 1STI



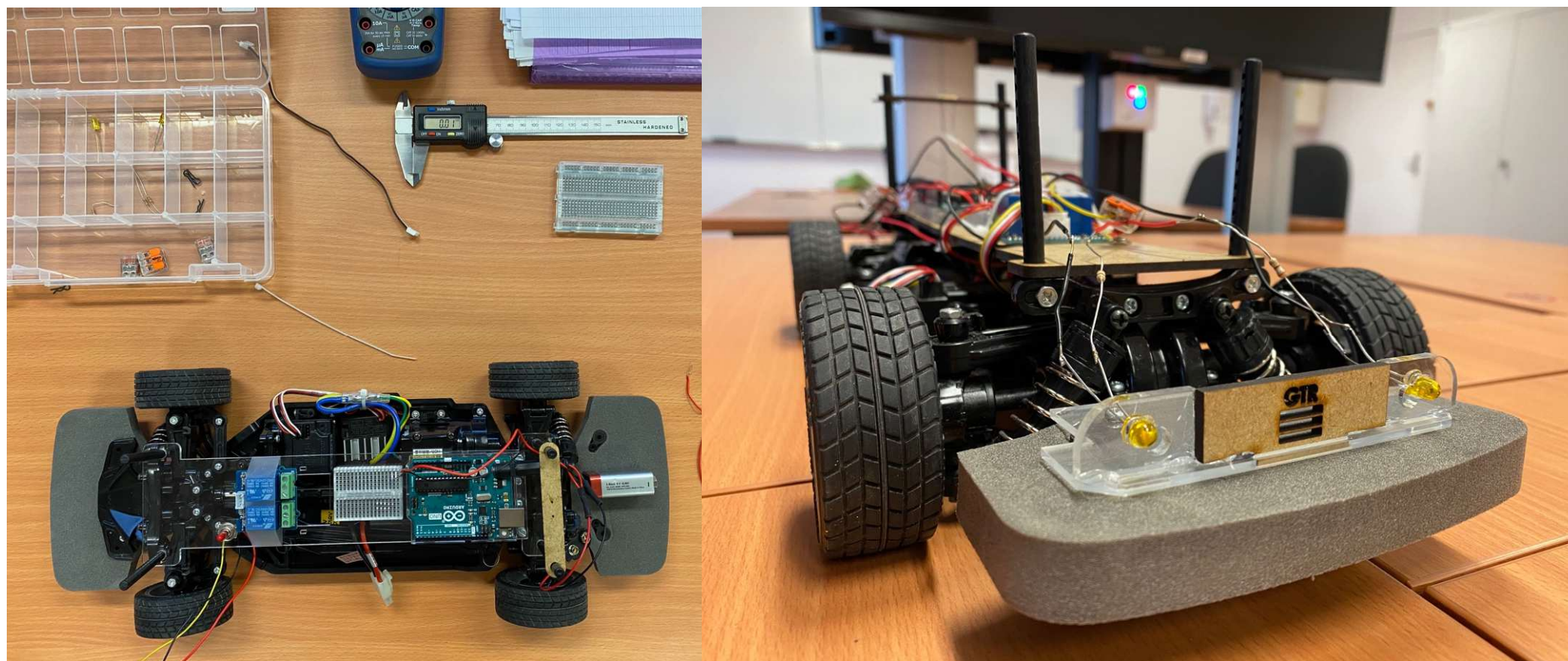
Potager d'intérieur

Exemples de projets 1STI

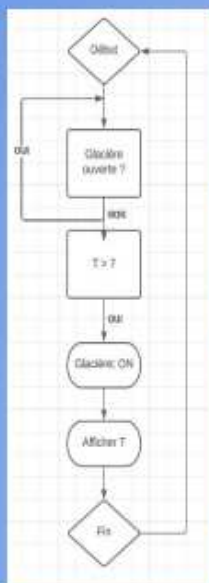


Salle blanche portable

Exemples de projets 1STI



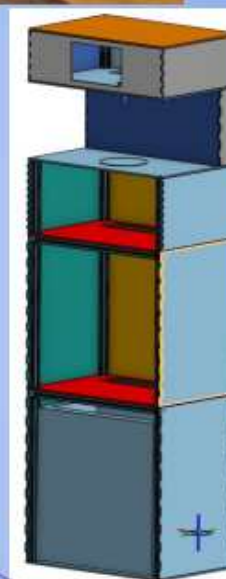
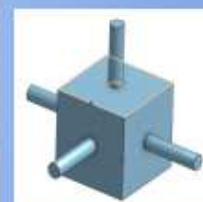
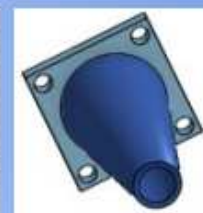
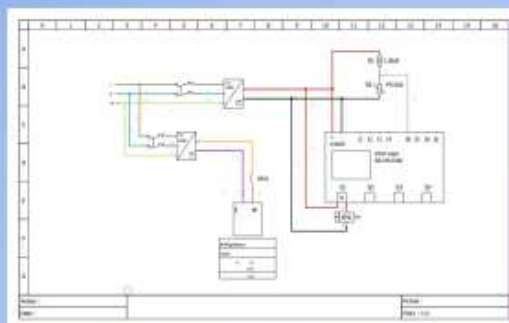
Voiture radiocommandée



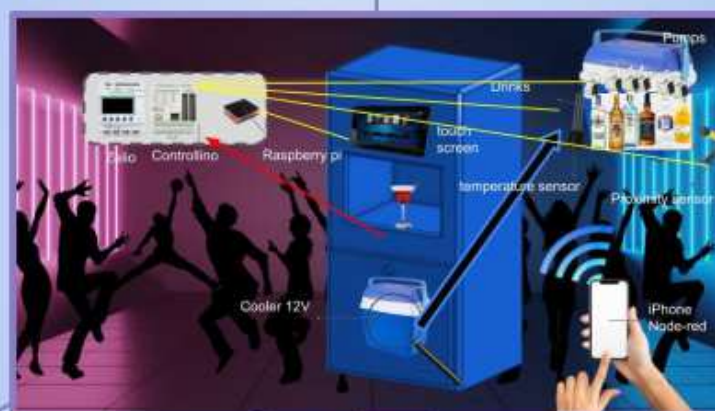
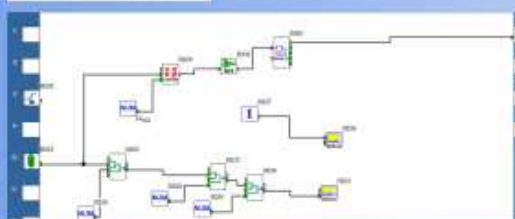
Temp (°C)	R (Ω)
30	1120
25	1100
24	1096
23	1092
22	1088
20	1080
19	1076
18	1072
0	1000

E.E

	Min	Seuil	Max
Temp (°C)	0	10,0	30
R2 (Ω)	1000	1040	1120
R1min (Ω)			1568
Choix R1	2800		
Vs	6,32	6,50	6,86
N	159	164	173



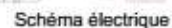
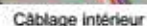
I.T.E.C



S.I.N

Machine à cocktails

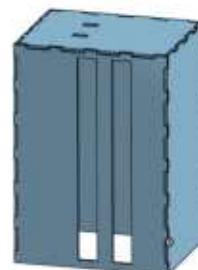
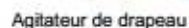
[illegible]



Crouzet Touch +
Boîtier de commande



Table consommation électrique



Raphaël Buhler - Julien Plonka - Ronan Niel - Sacha Damaux - Léo Canat
TST1.2



Tests capteur intensité et tension sur voiture

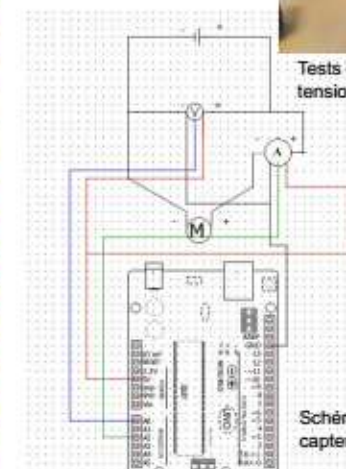


Schéma électrique capteurs

Exemples de projets TSTI

Partie SIN



DHT22



Air Quality Sensor



CO2 Sensor



Capteur de Présence



Servomoteur

```

#include "AirQuality.h"
#include "DHT.h"
#include "Servo.h"
#include "GPP30.h"

DHT dht(B, DHT22);

AirQuality airQualitySensor;
Servo motorServo;
GPP30 gpp;

int current_quality = -1;
int Capteur_entree = 0;
int Capteur_sortie = 4;
int n = 0;

void setup() {
  Serial.begin(9600);
  dht.begin();
  gpp.begin();
  airQualitySensor.begin();
  motorServo.attach(10);
  pinMode(Capteur_entree, INPUT);
  pinMode(Capteur_sortie, INPUT);
}

void loop() {
  Serial.println("Salut n°3");
  humidity();
  temperature();
  qualityAir();
  temperature();
  presence();
  //delay(1000);
}

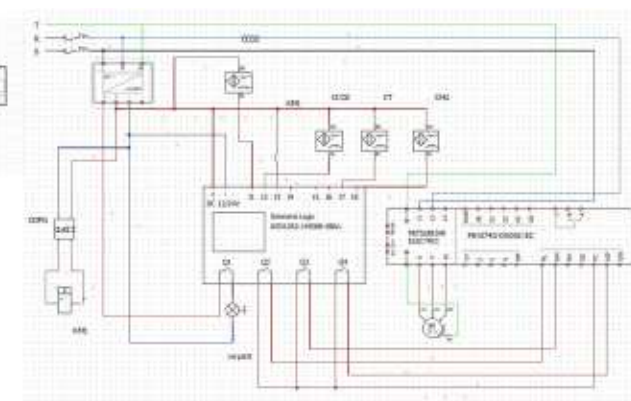
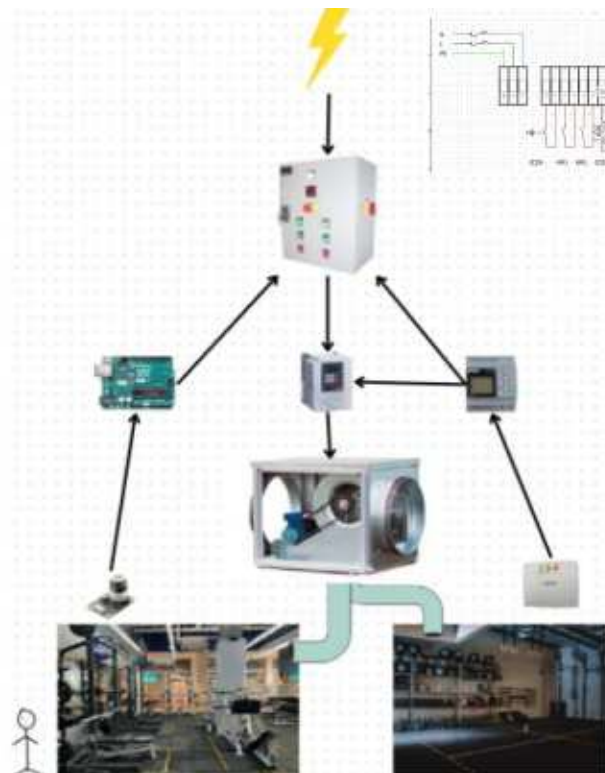
void temperature() {
  float t = dht.readTemperature();
  Serial.print("T:");
  Serial.print(t);
  Serial.println();
}

void humidity() {
  float h = dht.readHumidity();
  Serial.print("H:");
  Serial.print(h);
  Serial.println();
}

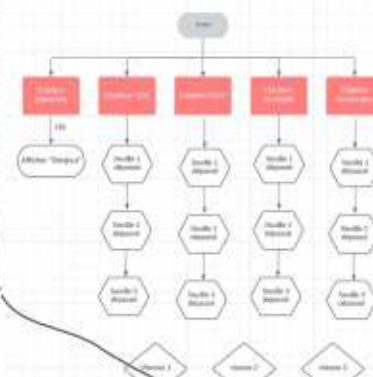
void qualityAir() {
  gpp.measure(true);
  float co2 = gpp.getCO2();
  Serial.print("CO2:");
  Serial.print(co2);
  Serial.println();
}

void presence() {
  if (digitalRead(Capteur_entree) == HIGH) {
    Serial.println("Détection de présence dans la salle");
    motorServo.write(90);
    Serial.println("Moteur allumé");
    delay(1000);
  } else {
    Serial.println("Absence de présence dans la salle");
    motorServo.write(0);
    Serial.println("Moteur éteint");
    delay(1000);
  }
}

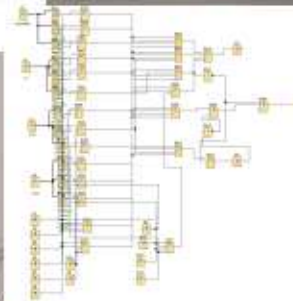
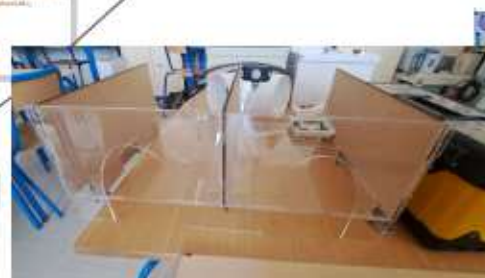
```



Partie EE :



Partie ITEC:

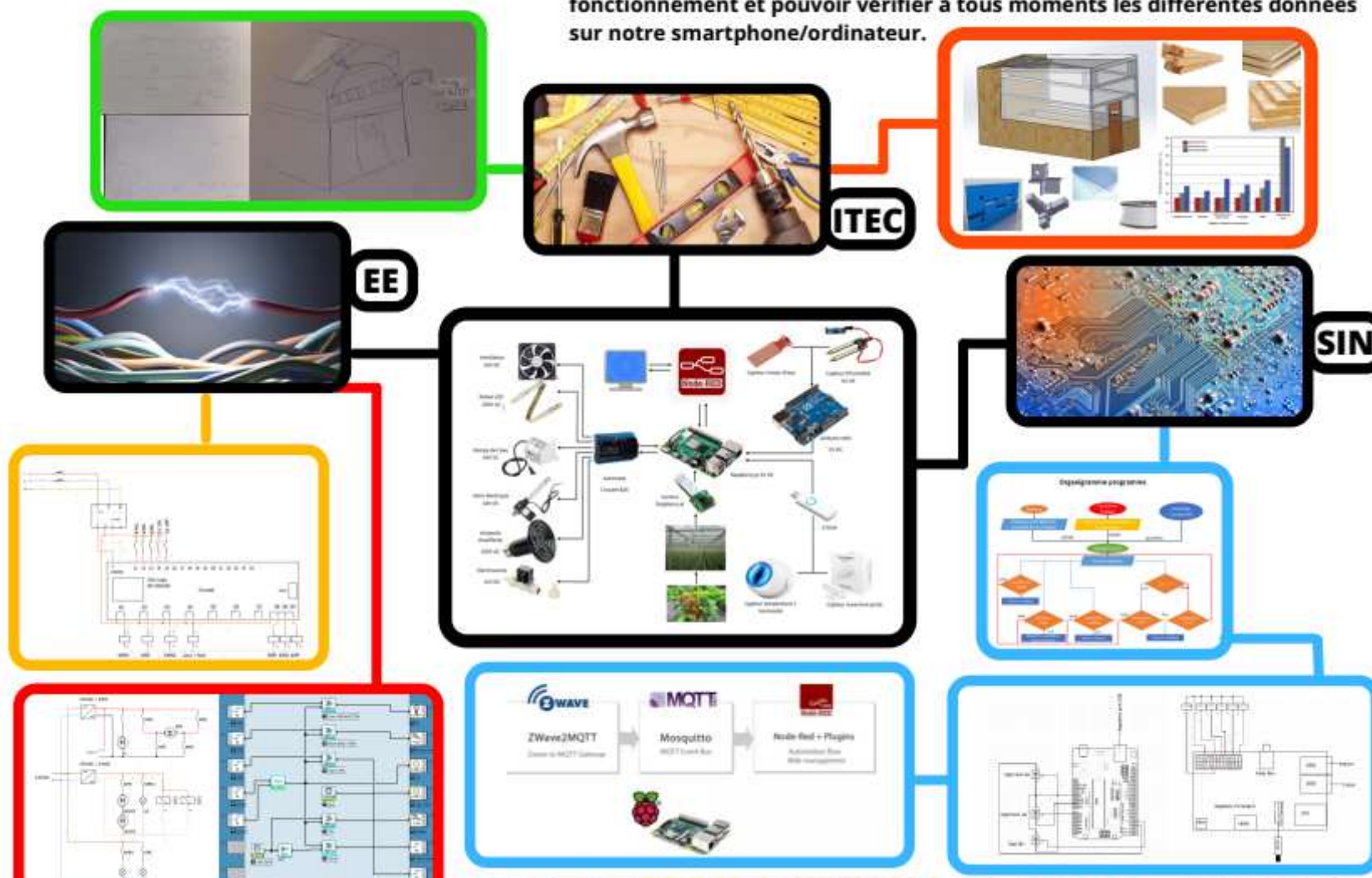


Exemples de projets TSTI

Ferme urbaine

Problématique :

Nous devons fabriquer une ferme urbaine autonome dans son fonctionnement et pouvoir vérifier à tous moments les différentes données sur notre smartphone/ordinateur.



Portes ouvertes

Samedi 22 MARS 2025

À partir de 9h

