

# ROBOT BAJO COSTE: ARDUINO Y 3D

C.F.I.E. MIRANDA DE EBRO  
ENERO – FEBRERO 2020



# ¿Por qué?

## BEE-BOT

INFANTIL - PRIMARIA  
COMPLEMENTOS

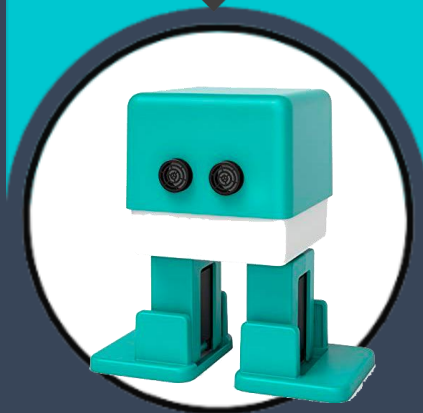
55 €



## BQ-ZOWI

INFANTIL - PRIMARIA  
COMPLEMENTOS

70 €



## LEGO

INFANTIL - PRIMARIA  
Set básico LEGO®

191 €



## ROBOTIS STEM

SECUNDARIA  
COMPLEMENTOS

289 €



## FISCHERTECHNIK

FP - BACHILLERATO  
COMPLEMENTOS

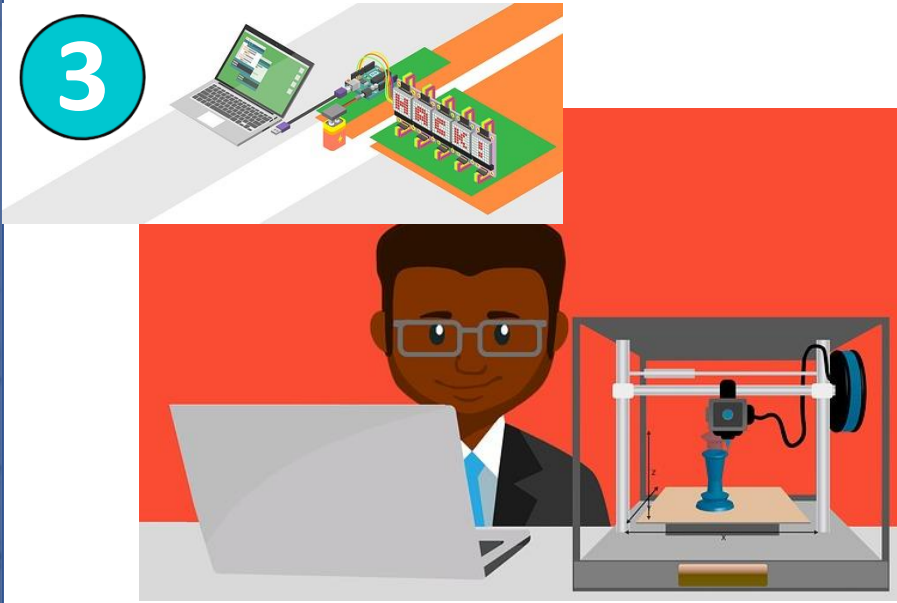
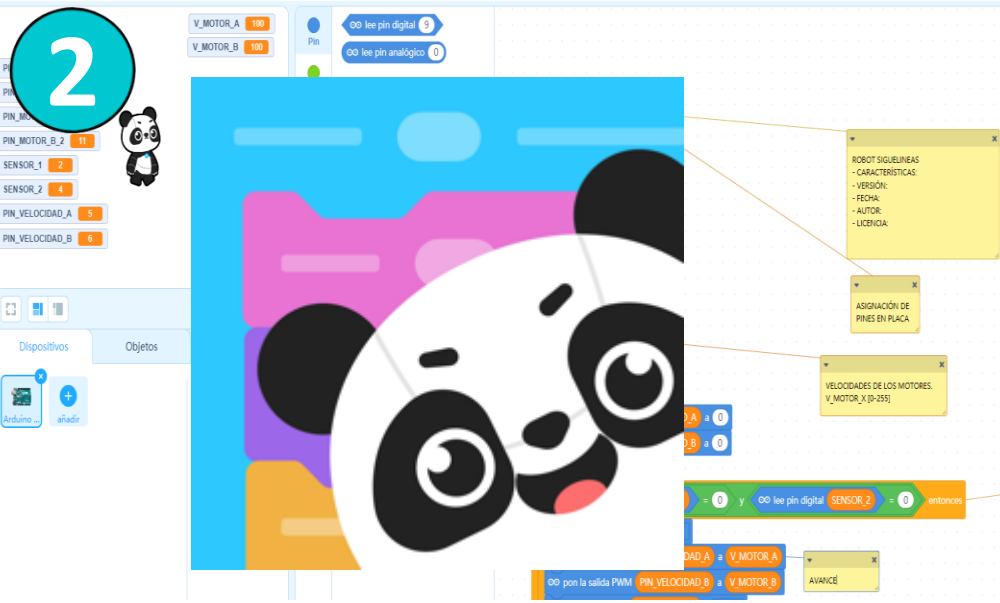
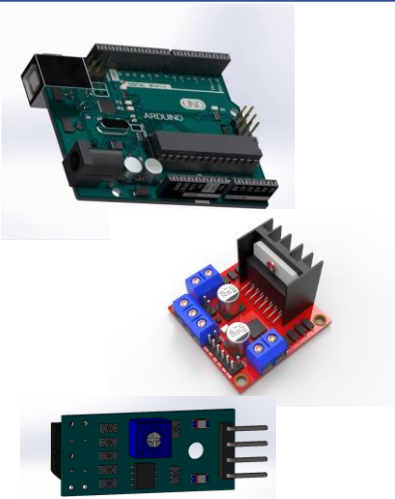
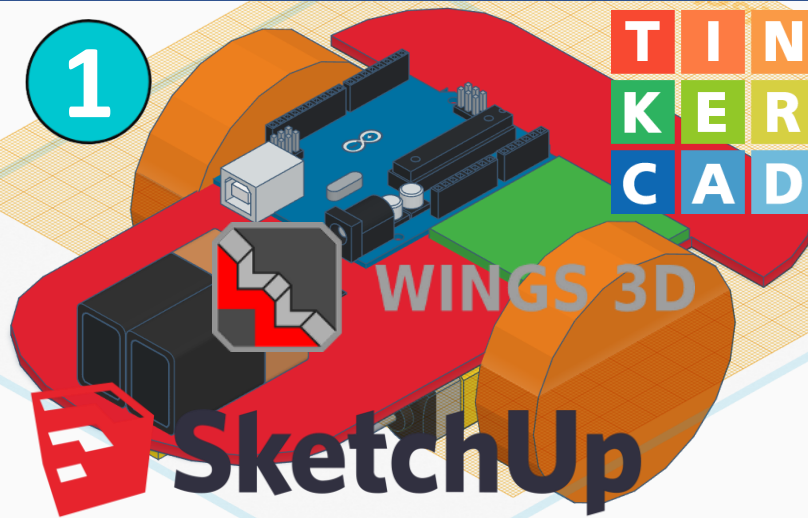
359 €



75 €



# Objetivos



# Etapas

1

► **Diseño**

Sesión 1: 15 enero

2

► **Electrónica  
Programación**

Sesión 2: 22 enero

Sesión 3: 5 febrero

3

► **Construcción  
y testeo**

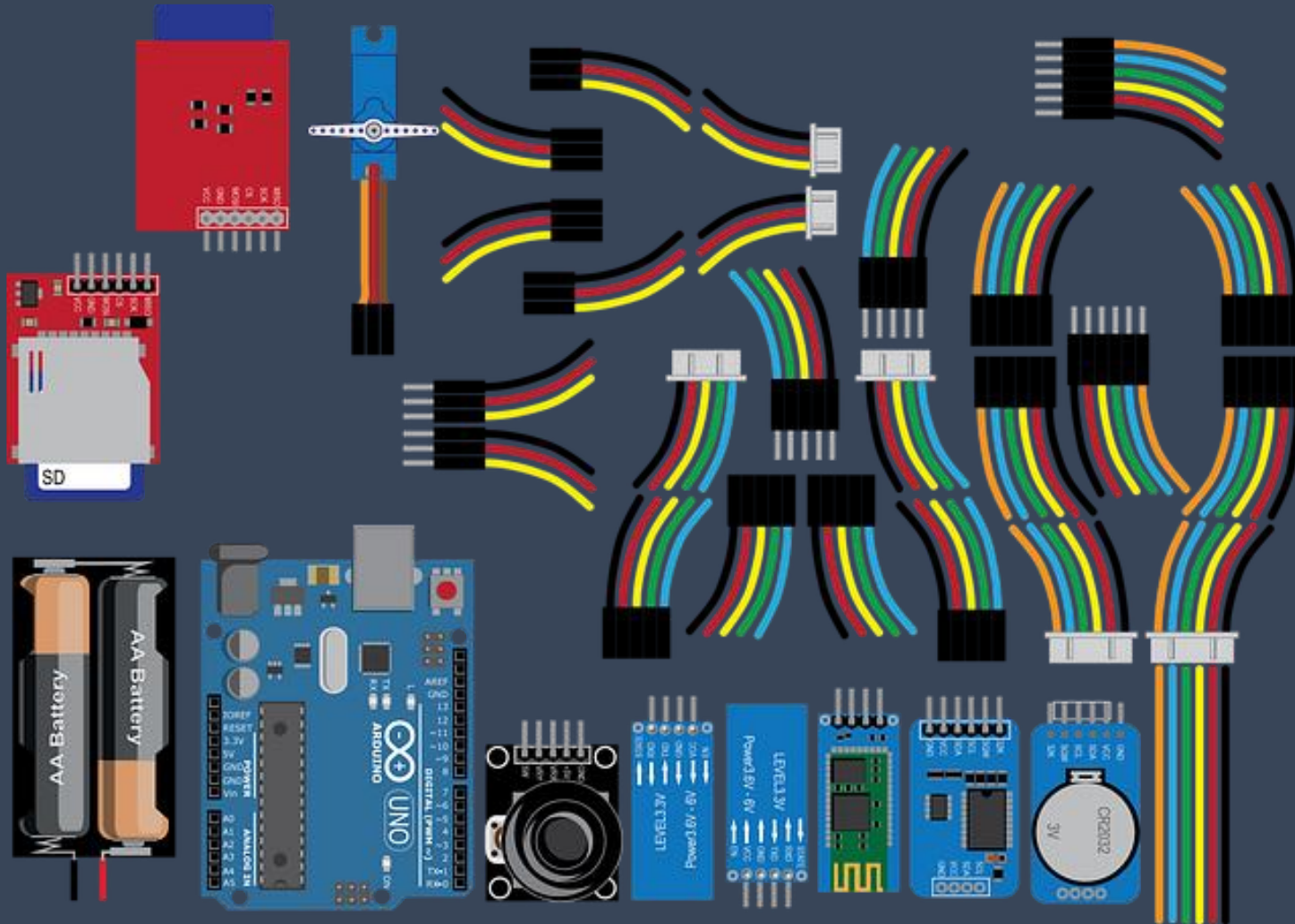
Sesión 4: 12 febrero



# 1

# Diseño

1  
SESIÓN



MATERIALES  
REUTILIZABLES



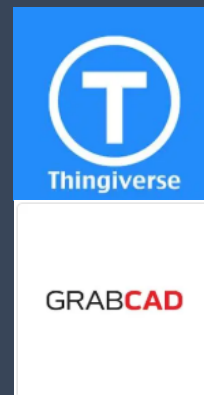
COMPONENTES  
COMPATIBLES



ESCALABLE



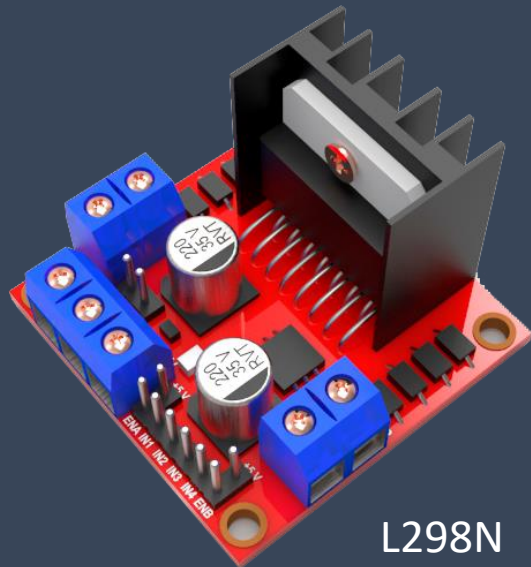
SOFTWARE	DISPOSICIÓN	BIBLIOTECAS DISEÑOS	DIFICULTAD
 AUTODESK AUTOCAD	LICENCIA	SI	ALTA
 SketchUp	LIMITADO	SI	BAJA
 WINGS 3D	ILIMITADO	SI	MEDIA
 TINKER CAD	ILIMITADO	SI	BAJA



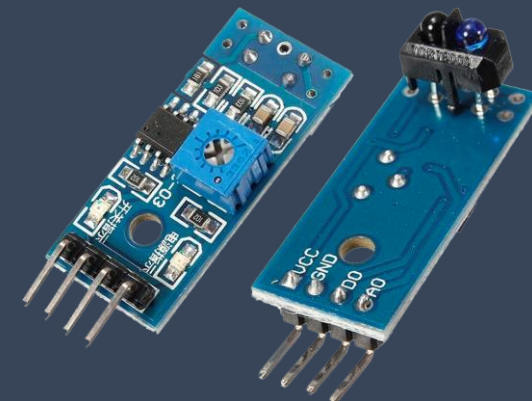
# 1

# Diseño

T I N  
K E R  
C A D



L298N



Módulos TCRT5000

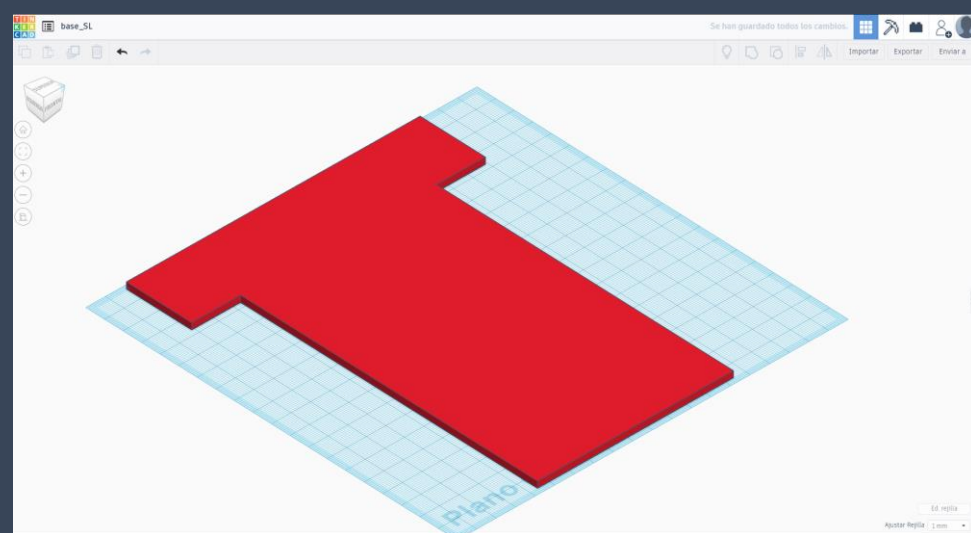
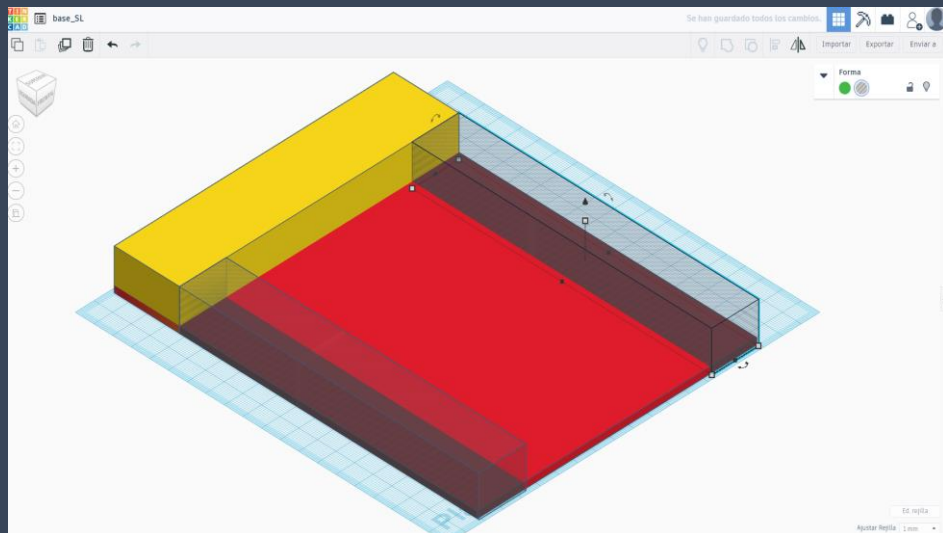
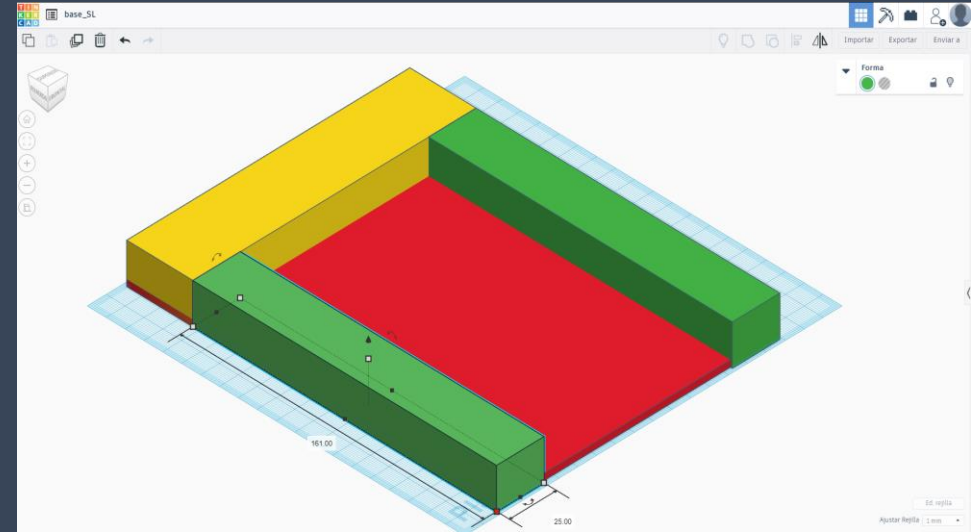
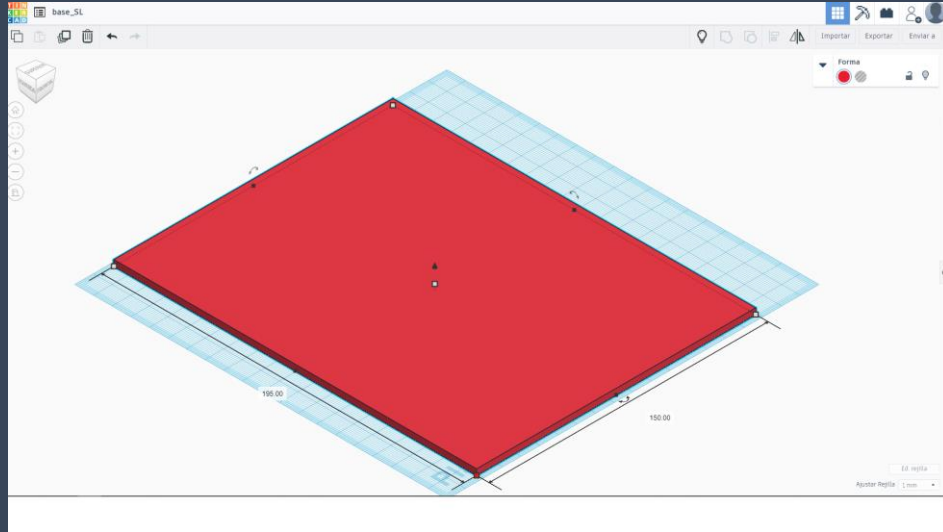
# 1

# Diseño

T I N  
K E R  
C A D



# PLATAFORMA - BASE





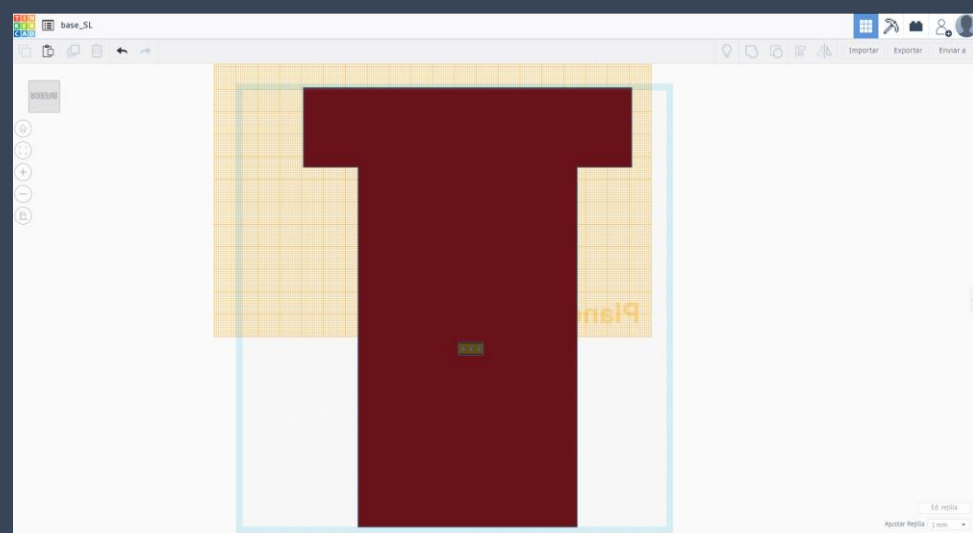
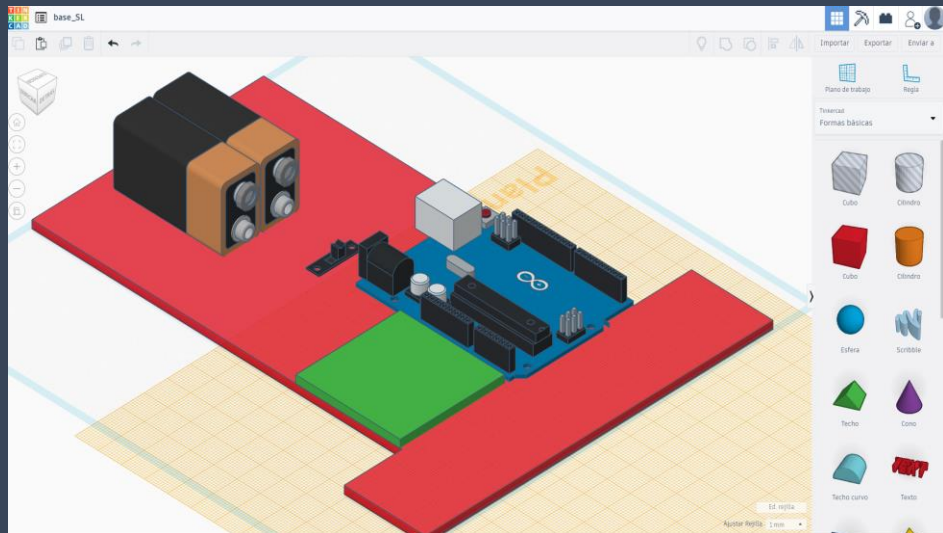
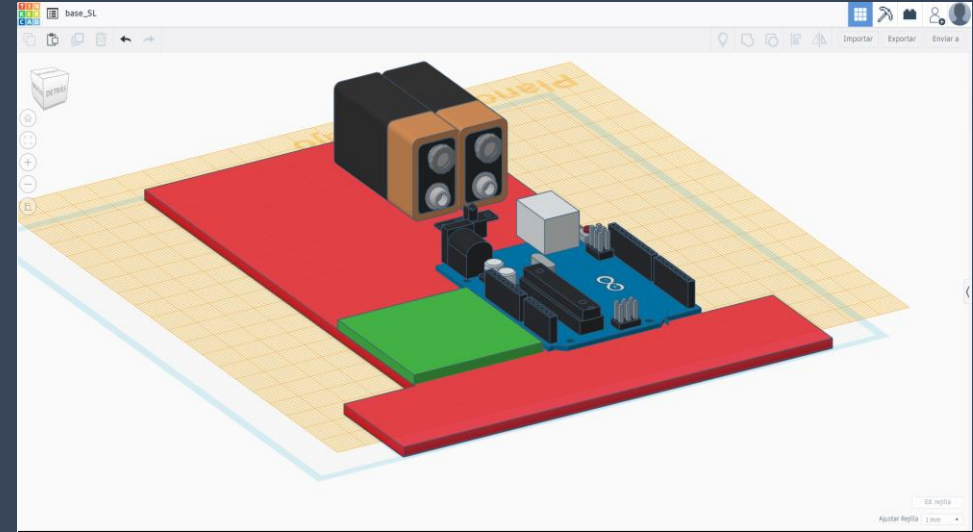
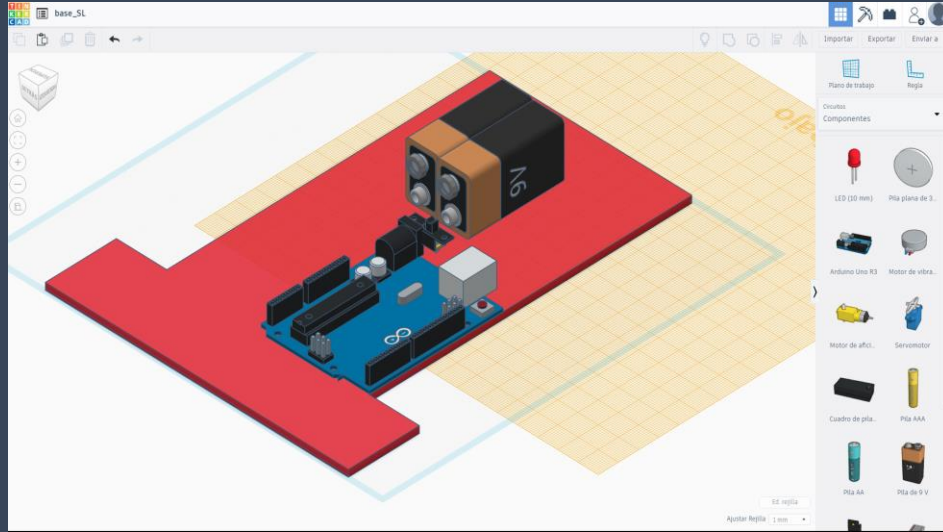
# 1

# Diseño

T I N  
K E R  
C A D



CARA SUPERIOR



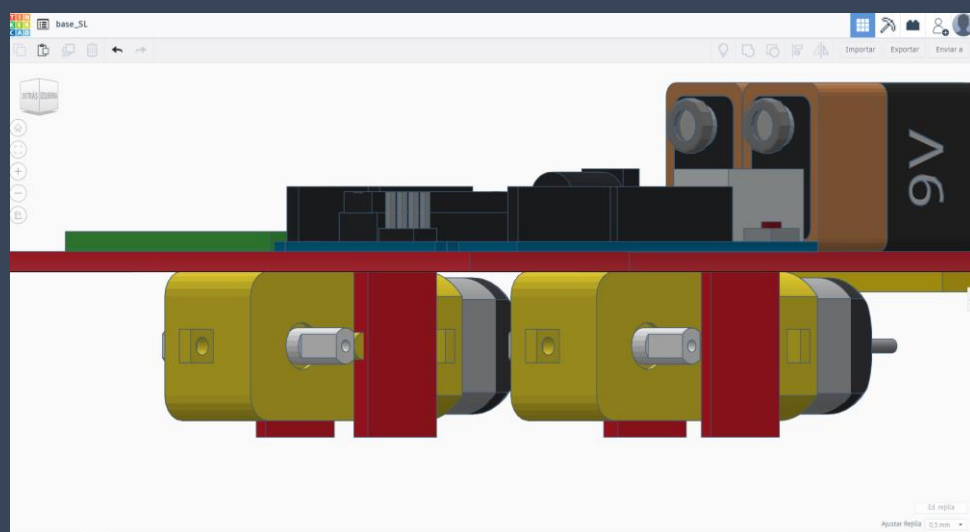
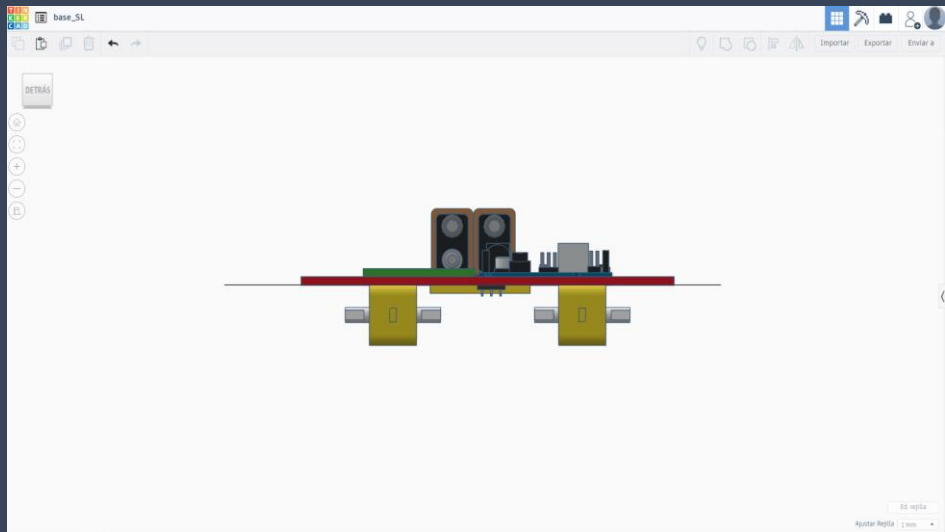
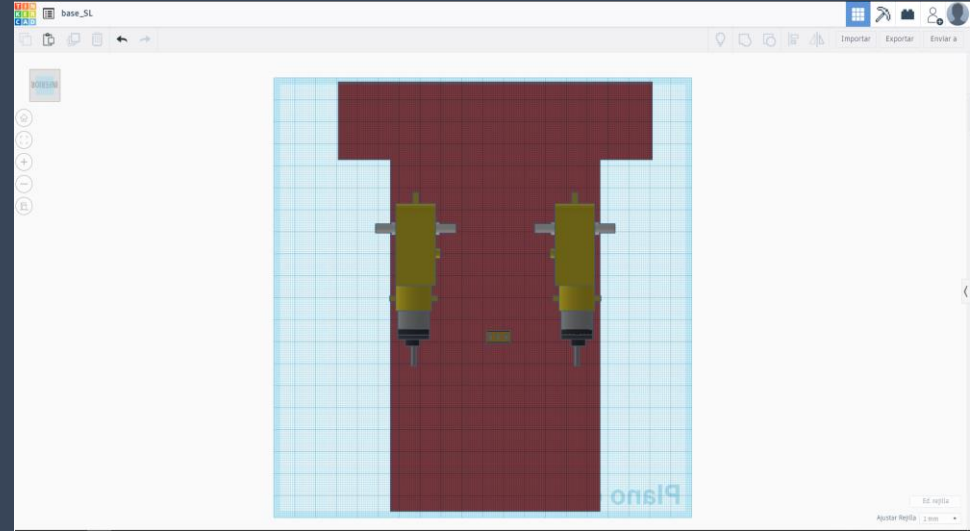
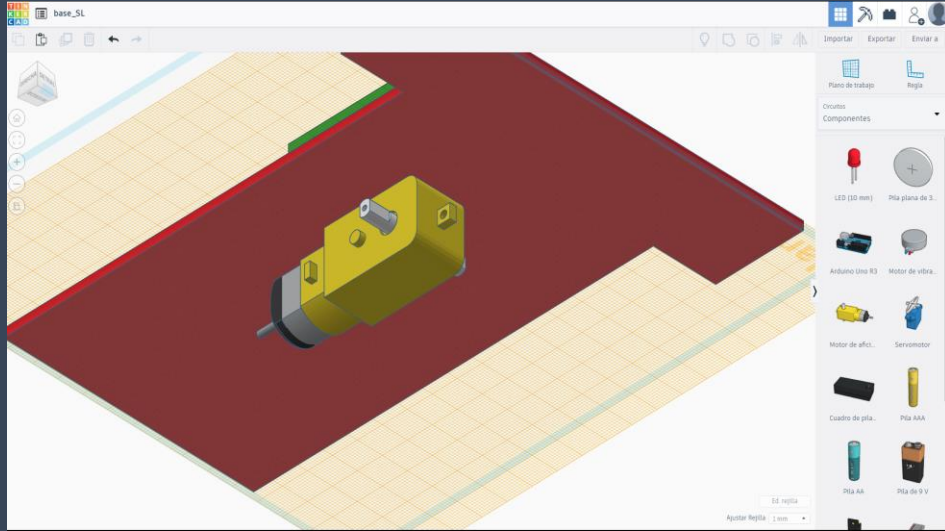
# 1

# Diseño

T I N  
K E R  
C A D



CARA INFERIOR



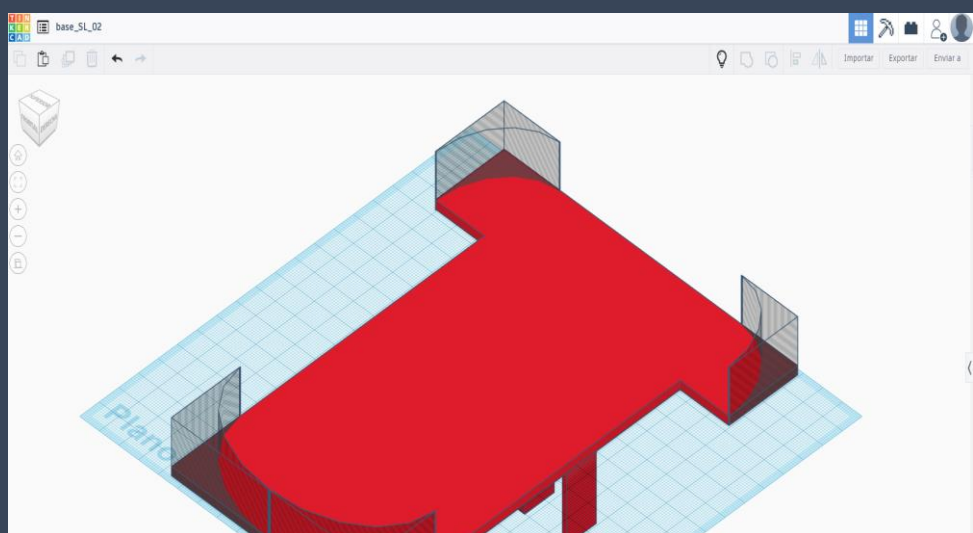
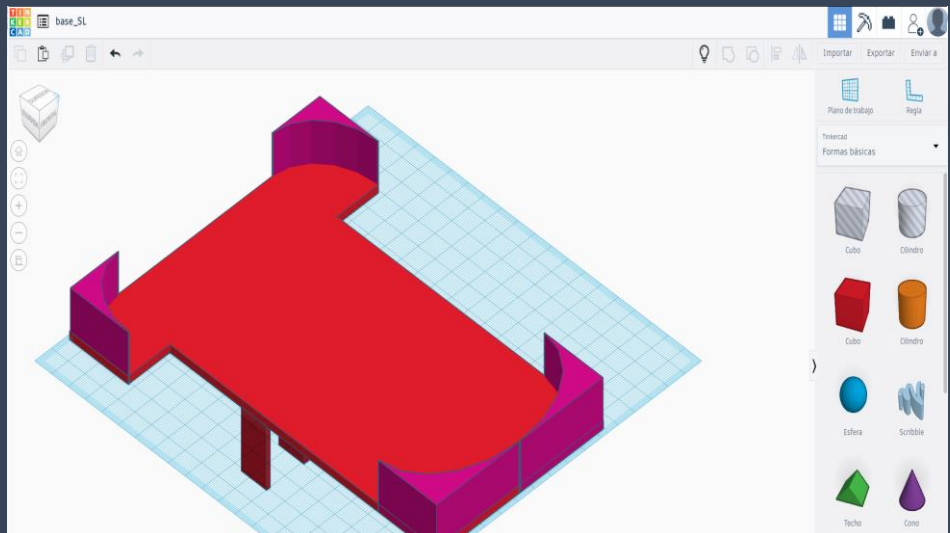
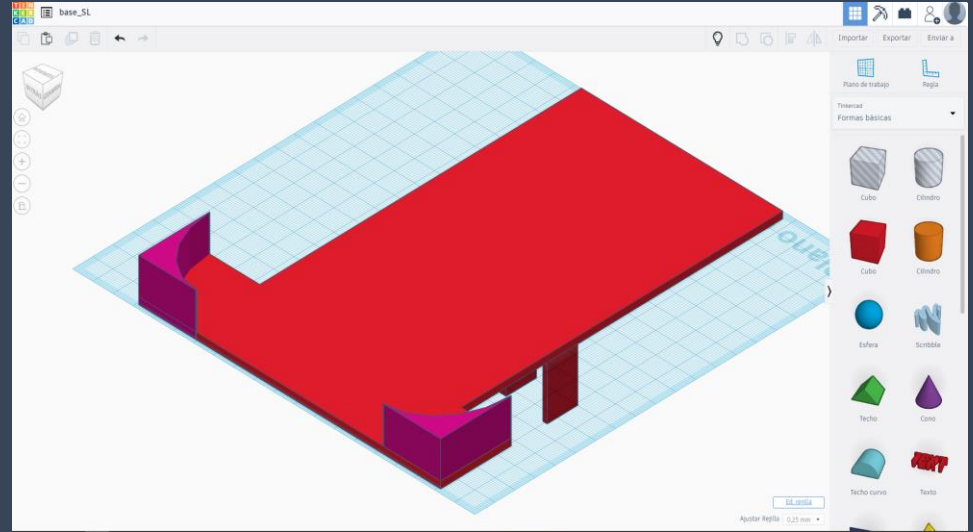
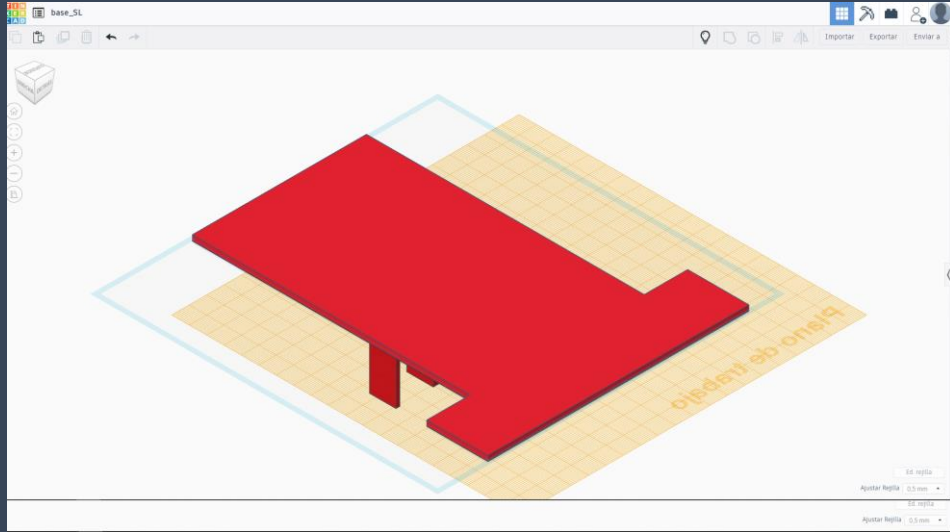
# 1

# Diseño

T I N  
K E R  
C A D



DETALLES



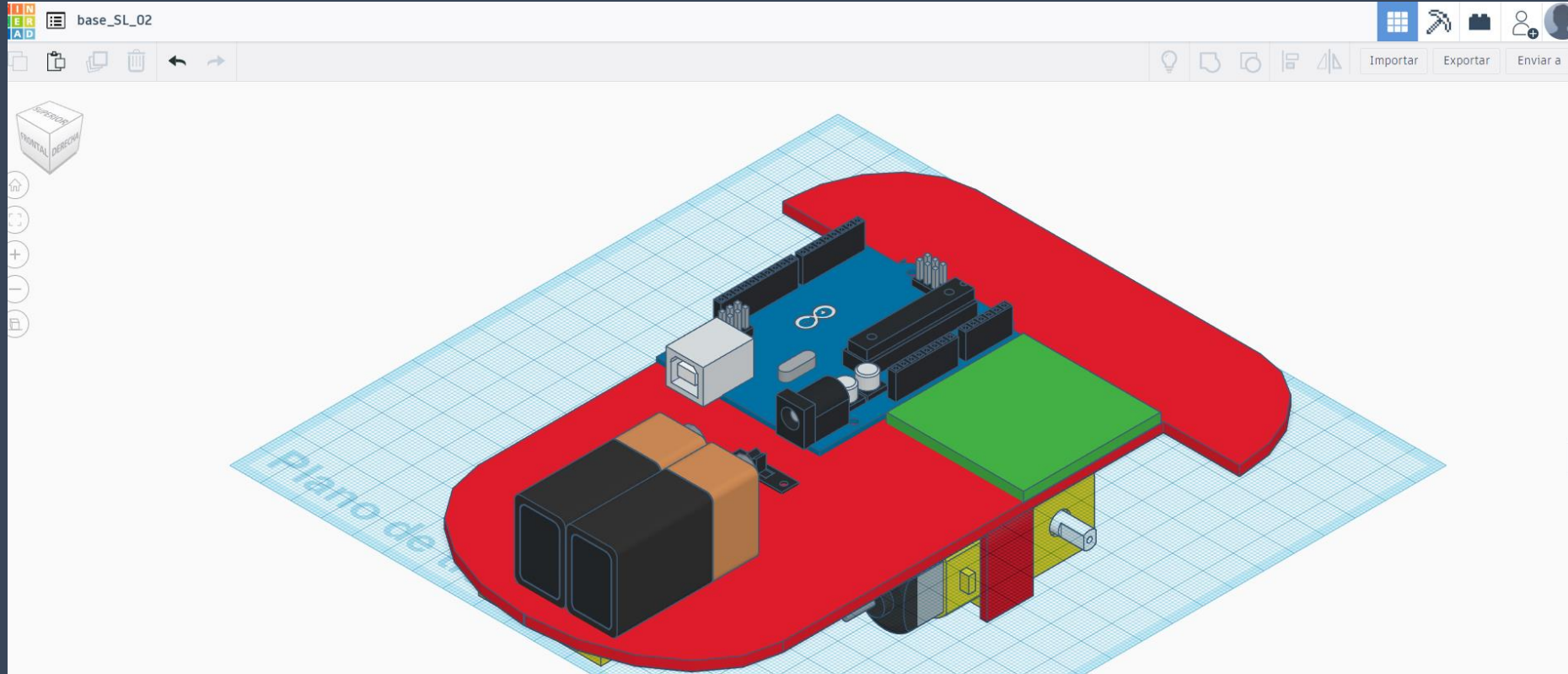
# 1

# Diseño

T I N  
K E R  
C A D



DETALLES



# 1

# Diseño

T I N  
K E R  
C A D



# IMPRESIÓN 3D

