

# GREENFIELD MISSIONARY BAPTIST CHURCH

Science, Technology, Engineering, Arts and Mathematic (STEAM)

## Training Center

Program Training provided by, CITTTS.



### GMBC-STC STEAM Program Training Plan

Training Program Name: **Introduction to Robotics Technology**

Course # **GMBC-STC 5005**

Program Area of Focus: **Introduction to 3D Printing using the Ender S1 Pro 3D Printer**

#### Program Training Objectives:

This course has been designed for anyone interested in 3D design and learning how to use 3D modeling software. You don't need any previous knowledge or experience to benefit from this course. It will be particularly useful to Architects, Designers, Engineers, or anyone studying in these fields. Students will learn how to use the Rhino software to create your 3D models, but you'll also gain basic design skills to help bring your imagination to life. Students will build their basic design skills by looking at line, shape, form, and space, before creating and editing 2D line forms that you'll transform into patterned mandalas and 3D tile wall designs.

Program Training Hours:

Instructions:

**2 hours**

Practical Exercise:

**15 hours**

#### Program Training Platforms:

In-person training, Virtual classroom training (WebEx or Zoom)

#### Program Materials / Equipment List:

Ender-3 S1 Pro 3D Printer (\$459.00)

3D Printer Filament Bundle (4pack \$432.12)

#### Program Training References:

Rhino Software Company

Program Risk Assessment: **LOW**

There is no risk for this training program for students in grades 6<sup>th</sup> to 12<sup>th</sup>.

#### Summary of Task / Action:

Students will learn several methods on how write programs for 3D Printing.

#### Training Program Validation Requirements:

After training, STEAM HUBs Students will design and write the program to print their creation in 3D. Student will have their 3D creation evaluated expert subject matter on 3D Printing.