

# Introduction to ShopBot-based CNC woodworking at TechShop Durham

## Create a Birdhouse

- \* Have you ever wanted to cut a circle or an arch without creating a jig?
- \*Are you interested in making really accurate cuts, again and again?
- \*Have you been wondering about how computer-numerically-controlled (CNC) woodworking works?

### Come to the project-based training at TechShop Durham

We'll use the creation of a custom birdhouse to:

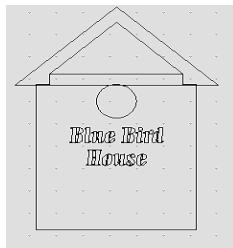
- Introduce PartWorks CAD/CAM software
- Introduce the ShopBot CNC router

The "Adult" class will spend more time with the CAD/CAM software, and cut out all the parts during the class. Motivated kids 12 – 17 are welcome to sign up for this class, but they must have a parent or guardian on site during the class.



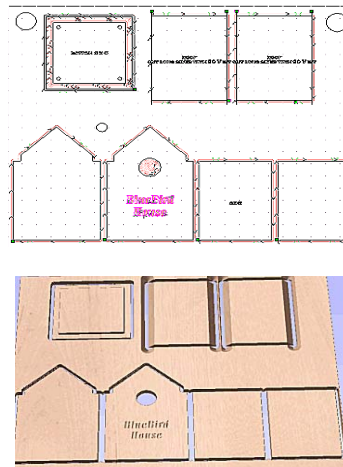
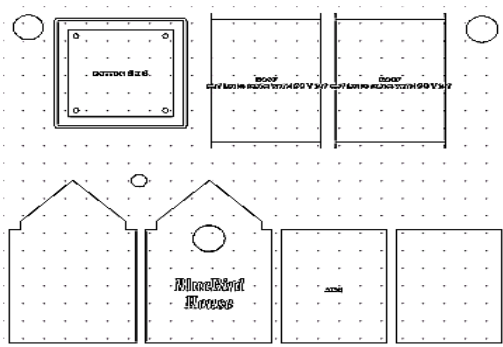
Here's how it works:

1) Use PartWorks software to draw your ideas on the computer  
(Computer-Aided Design)



2) Use PartWorks software to tell the computer how to cut out the designs  
(Computer-Aided Machining)

- Engrave lettering to personalize your project
- Cut circles and curves
- Create slots and pockets
- Cut out the parts the size you drew them



Use ShopBot Control software to prep the ShopBot for cutting, and Cut out the parts  
Along the way, we'll discuss **Hold down, Router Bits, Safety**

At the end of the class, you'll go home with a birdhouse, and the basic knowledge to run the ShopBot to create your own projects.

**Duration:** 4 hours

**Class Limit:** 3

**Cost:** Instruction: \$120 Material: \$10

The ShopBot SBU is not included in the Bird House project class, but you can add it for an extra half hour and \$15.

For this training, TechShop Durham will provide bits and material for cutting.