introduction to VCarve Pro Software & CNC (Computer Numerical Control) Machine

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Prerequisite: This is an introductory class to Vectric VCarve Pro software and the Camaster CNC machine. The software used runs with Windows 10. You need to have a good background in Windows file management. This means that you should be able to create folders in file explorer and save files into folders. You should also be able to place points on a graph using x and y coordinates. There is a good amount of complex information presented in class.

Enrollment: Limited to four per class, with a minimum of two.

Schedule: 2 sessions of 4 hours each. See club calendar for dates and times.

Student Preparation Prior to Class:

Student should go to <u>https://www.vectric.com/</u> and download <u>V carve</u> <u>Pro Trial version.</u> V carve Pro is the software used by SCW Wood Club.

The trial version allows unlimited use of the design side of the software.

Watch and understand tutorial videos.

https://www.youtube.com/watch?v=3hDQyd6x3x8

https://www.youtube.com/watch?v=qnOmsJZMiTg

There are many more videos that are available and helpful. Watching

these two are just a start to learning the software and machine.

Description: This is a 2-session class - which are NOT done on successive days.

A flash drive is provided in class.

Wood for two class projects is provided in class.

Session 1: Students will be given directions on how to set up and use their flash drive and how to make a sign and a game board using the software tools in VCarve Pro. The wood provided in class will be used for session 2. The projects will cover many of the basic functions of CAD (computer aided design).

At the end of session 1 students will have created the sign and game board design, created toolpaths, and saved all information on their flash drive. The student will also be given the code that links their trial software to the wood clubs fully functional software. Contact information and instruction will be provided for scheduling session 2.

Session 2: Scheduling will be done by appointment with one-on-one instruction. The purpose of session 2 is to learn the machine side of the process.

The main items covered will be:

Machine start up, initialization, and warm up.

How to attach wood to machine bed including use of spoil board and clamps.

Familiarization and operation of wincnc.

Machine shutdown and clean up.

Bits to cut out the sign and game board will be loaned by the club.

Wood and bits for any additional projects are the students responsibility.

A limited number of bits are available in the lumber room for purchase. Bits may also be purchased from other outside sources.

Note: Although this class introduces the student to the software and hardware for the club's CNC machine, this course alone is NOT sufficient to allow unrestricted use of the CNC Stinger I machine. Reservations are required to reserve time on the CNC machines. The instructor will determine when the student will be placed on the list of users that can make reservations.

Fee: \$30: - See above description for material and tools included. Any items not mentioned are the student's responsibility.

Sign Up: Introduction to CNC