

Introduction to CNC class—Welcome!

Hello! The CNC Leadership Team is delighted you are considering enrolling in the Introduction to CNC class.

We are totally committed to having you succeed in your journey of discovery and skill building. To achieve that goal, the structure of our class is somewhat unique:

- Rather than a series of shorter duration classes, the Introductory class is one eight (8) hour session. While it is a long day, we find it is a more efficient way to learn.
- The class size is only 6 students to ensure everyone receives adequate instruction and will have access to the CNC machines in class to cut your design.
- Further, each student will be supported by a mentor. All of your activities, on your laptop or on the CNC machine will be under their watchful eye and assistance provided as needed. Your questions will be answered at the “teachable moment”!
- The curriculum begins with an introduction to the CNC machine and the overall process for creating work on it. The design and toolpath creation work done on your laptop is self-paced and highly scripted and is supported by your mentor. With the completion of your design the “code” to cut it will be transferred to the CNC machine where you will receive instruction in its safe use. You will leave the class having created the design and cut your project!

There's a lot to learn to effectively use a CNC machine. There is foundational knowledge that provides context and necessary background as well as skill development in the use of design and operations software, and operation of the CNC machine itself. The intro class will provide you with the knowledge and skills to complete a simple project. The CNC team is also committed to providing project-oriented classes in the future for those that have these basic skills. Additionally, numerous resources are available for self-instruction, and these resources will open up the world of CNC to the curious and self-guided.

You may be wondering if you've got the "right stuff" for CNC. We think it's worthwhile for you to spend some time considering that notion and we can help you make that call.

First, you should read this attached document [Vectric Introduction to CNC](#). It was created by Vectric, the company whose software, VCarve Pro, forms the basis for the class. The document has helped guide the creation of the curriculum for the class. You may find the first reading to be overwhelming: so many concepts, so much jargon to learn. Relax: we will spend virtually the entire class explaining the contents and building the skills described within. If, however, you

come away feeling as if you'd rather go to the dentist than spend a day learning this stuff, you may not be right for CNC.

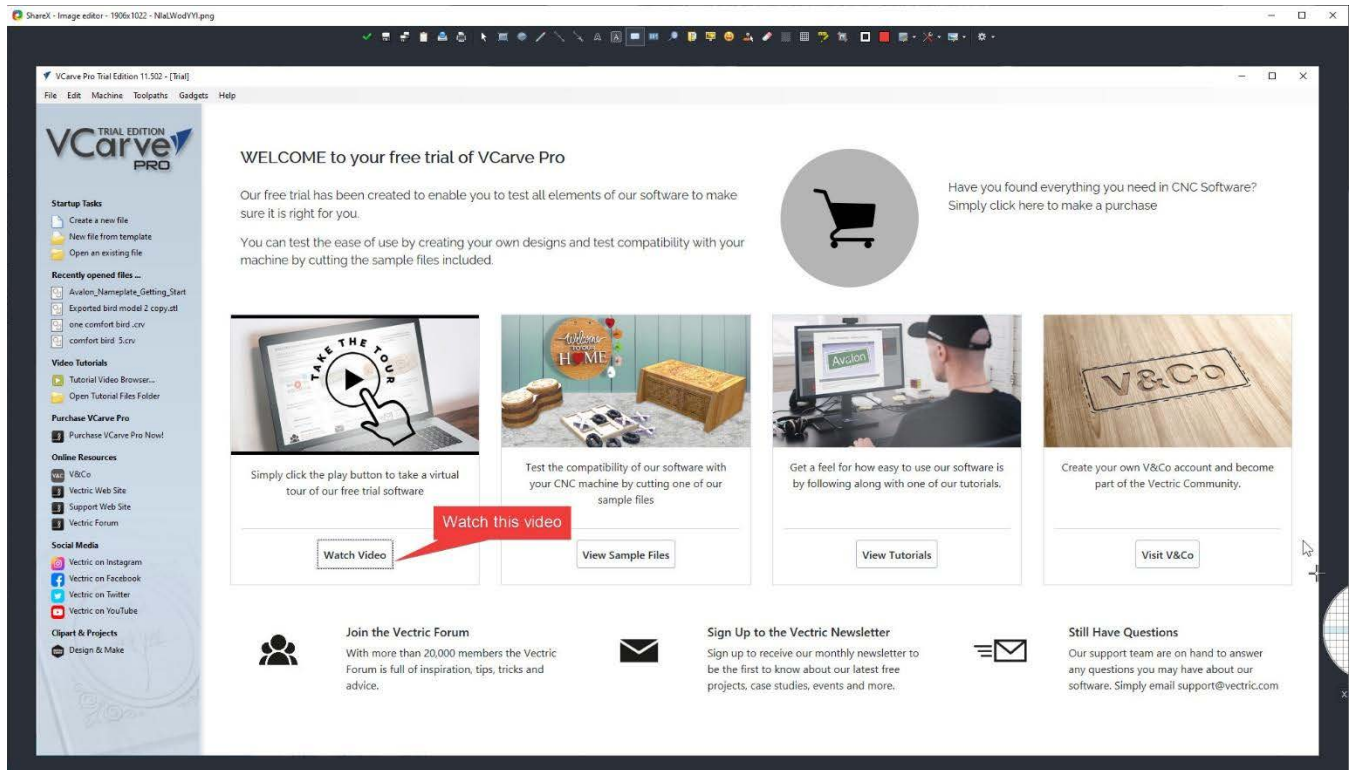
Further, you can start down the path of learning CNC on your own. The intro class will provide a solid foundation to build on, but you should expect that at least some of your learning will be self supported. So let's get started!

Prior to the class:

Ensure that your laptop (you'll be bringing it to class) meets the minimum requirements to run VCarve Pro. You can find those requirements [here](#). We have also successfully run VCarve Pro on Apple computers (with both Intel and Apple CPU chips), using [Parallels](#) and Windows 11. We recommend the use of a 3-button mouse. The scroll wheel and middle button make manipulating the 2D and 3D drawings much easier.

Download a copy of the MakerSpace version of VCarve Pro. This specific version is needed for the Makerspace program, of which The Guild is a member. You will not need to purchase the software for projects that are cut on The Guild's CNC machines. You will need to register with Vectric to get the Makerspace version. Here's the invitation link: [Download VCarve](#). You'll create an account with Vectric if you don't already have one and receive a link to download the software. It is important that you remember which of your email addresses you use when you register (and your password!) because you'll need it to log into your account when you are at the class to cut your design.

After installing VCarve, run it. You'll be presented with the following screen. You should watch the introductory video indicated. It is a brief, albeit potentially confusing overview of the software, but it also describes the resources Vectric provides in tutorials, free projects, support forums, etc. It is a good introduction into the CNC world.



The hope is that these activities will whet your appetite for more. They are representative of what it means to learn and use CNC outside of the classroom. However, you will never be alone in your pursuit. The best learning resource of all is the community of CNC'ers at The Guild. To a man (and woman!) they are only too happy to help. The mentorship model, established with the Intro class, is one of the best for learning CNC. Or woodworking in general. Or any skill really! The completion of the Intro class will be a one-on-one session with your mentor at which you will demonstrate your skills at operating the CNC machine

One last request: Assuming you've made it this far and will now enroll in the class, help your mentor get calibrated as to your computer skills by answering the following questions:

Summarize your computer skill level as basic, intermediate, or advanced:

Are you involved in computer technology in your professional life? How?

Do you know how to download and install software applications?

Have you used any kind of 2D or 3D design software? Have you done 3D printing?

Can you connect your computer to a WiFi network?

Have you watched videos as a way to learn a new skill?

Copy these questions into an email (you do know how to do that, right?), answer them, and send your responses to [CNC-Mentors](#) That way we'll have an idea of where you're coming from before the class begins.

Once again, we are excited about the opportunity to welcome you to the world of CNC at The Guild where we build knowledge, skills, community and projects!

CNC Leadership Team

Rich Bader, Vince Corbin, Craig Jones, Ian Walton, Tracy Whalen