Online Resources for the CNC

Note: The links below were accurate as of February 2024. Web addresses may have changed or been deleted.

To learn about the machine Operating Systems:

Explorer (Small CNC) – For Mach 3 Operating System ➡ https://legacywoodworking.com/
- o From the home page click on the dropdown menu icon, (looks like ☰)
  - Scroll down to "CNC Training"
  - Scroll down and click on "Mach 3 Controller" heading
    - Fast Start – 3 Axis
    - Machine Orientation
      (NOTE: On our small machine the X-Axis is across the front of the machine, it is the opposite the way it is described in the video.)
    - Start Up Routine
    - Shut Down Routine

Maverick (Large CNC) – For Delta Operating System ➡ https://legacywoodworking.com/
- o From the home page click on the dropdown menu icon, (looks like ☰)
  - Scroll down and click on "CNC Training"
  - Scroll down to "Delta Controller" heading
    - Overview
    - Machine Set Up Check List
    - 3 Axis Fast Start

To learn about the CAD/CAM software:

Legacy Videos: ➡ https://legacywoodworking.com/
- o From the home page click on the dropdown menu icon, (looks like ☰)
  - Scroll down and click on "CNC Training"
  - Scroll down to "Vectric CAD/Cam"
    - 18 Videos covering basics as well as some advanced design techniques
      - ➢ Uses Aspire Version 9.5 (we are currently using VCarve Pro v. 12.0)
      - ➢ Some software tools are now available that are not in v. 9.5 (i.e. Sheets and several toolpaths)
      - ➢ May be a few tasks that now can now be accomplished slightly differently
      - ➢ Main difference between Aspire and VCarve Pro is that you cannot do 3D model <u>design</u> in VCarve Pro. Can import 3D models into VCarve Pro and machine them.
- o Hover over CNC Training then in the dropdown menu click on "CNC Workshop" for videos from various online classes on varied topics relating to CNC.

Vectric Videos: ➡ access from the <u>VCarve Pro Software Dashboard</u> (these videos are also available on youtube.com, but not organized there as introductory videos)
- o Click on "Tutorial Video Browser…" located on left hand side of program dashboard
- o Click on the Avalon sign: The "Avalon Nameplate", "Bulls Head" sign and "Open" sign are all good introduction videos.

Online Resources for the CNC

Vectric Videos: from youtube.com

Caution: You will get some videos from providers other than Vectric. They may or may not be valid presentations. Some are just trying to sell you their bits or access to their website.

Suggested topics to search for on youtube.com:
- "Vectric Software Tutorials" – Will find numerous videos on using the software. Just browse through. Will also get unrelated videos (i.e.: football, pimple popping, etc.)
- "Vectric Tips and Tricks" – Extensive videos on various subjects, some from Vectric and other videos from 3rd party vendors.
- "Vectric {toolpath name}" i.e. profile toolpath – will get videos on a specific toolpath plus some off topic videos.
- "Vectric {operation name}" i.e. draw polyline or node editing – again will find videos on the specific topic plus other garbage.

Free 3rd Party Providers:

IDC Woodcraft - https://idcwoodcraft.com – Click on Learning Center – in dropdown menu choose "For Beginners"

Caution: IDC Woodcraft sells CNC bits so expect some self-promotion.
- Under "Vectric VCarve" there are 60 video tutorials that explain how to use various aspects of the software.
- Under "CNC for Beginners" there are 81 video tutorials about best practices for achieving good results with your projects.
- Under "Projects" there are 36 videos where you are shown the project from design to machining. Some good ideas for inspiration.

Mark Lindsay – marklindsaycnc.com – Has 3 areas of interest
- Click on "The CNC Process for the Absolute Beginner" for an article on the basics of the CNC.
- Click on "Vectric for the Absolute Beginner Video Series" for a series of 50 videos on toolpaths and techniques for using Vectric software.
- Click on "V-Carving for the Absolute Beginner Video Series" for 4 videos on using the V-Carving toolpath.

  Note: Mark speaks very slowly so I suggest you go to the "Settings" (Gear Icon at lower right of screen) and increase playback speed to 1.25 or 1.5 times normal.

Commercial Instruction:

Learnyourcnc.com – Several levels of instruction and includes Lifetime updates as Vectric adds new features.
Cost:
- "Boot Camp" - https://academy.learnyourcnc.com/library
    - free for 7 days
    - 14 introductory videos
- VCarve Master Training Course $249
- Aspire Master Training Course $399

Stepcraft.us – One on One Tutor
- Cost: $99.00/ hour