

# **Engineering Day 2021**

## Virtual Machine Contest

### <u>Goal:</u>

Create a custom Windows 10 VM using either VM Workstation Player or Hyper-V

#### **Rules/Judging:**

- 1. Students may work alone or in groups of 2 to build a VM with the following specifications:
  - a. Windows 10 PRO
  - b. 3 Virtual Processors
  - c. 4 gigs of RAM
  - d. 3 Virtual HDDs (1 32gig primary and 2 1 gig secondary drives)
  - e. Network adapter removed
- 2. Once Windows is installed, students will need to:
  - Create a Mirrored Array from the 2 secondary drives and mount it to a folder located on the main drive.
  - Use the CLI to add a new user to the system and change their password.
  - Modify the register to implement a change to the Operating System. This change will be reveled at the beginning of the test and student will have internet access on the HOST machine to research how to make the change.
  - Setup Windows Backup to backup user files to the newly created Array.
- 3. Students will be provided with a HOST machine capable of running the VM and all other required software including a Windows 10 ISO.
- 4. An experienced high school technician will be available to advise each team and help ensure success.
- 5. The time limit is 20 minutes with judging accomplished by Crowder instructors and/or IT specialists.

#### Score:

Students will be scored on a rubric and earn points for how well they complete the various tasks. The team/student with the highest score wins.