Unit: CNC Plasma Cutter
Learning Goals: *In this unit:*
1. *Students will demonstrate ability to use CAD to produce a simple plan for cutter.*
2. *Students will be able to safely set up and operate the CNC Plasma Cutter.*

Rigorous Learning Goal/Scale 1

Course:	Robotics/Engineering –CNC Plasma Cutter Unit
Score 4 Additional Success with the complex content and concepts—inferences, novel applications	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.** • *Student demonstrates knowledge of CNC Plasma Cutter Operation And can explain how to plan the image cut outs in order to achieve a successful cut with no fall outs and/or loss of accuracy to part.* Student makes no major errors or omissions regarding the score 4 content
Score 3 Mastery of complex content and concepts of learning goal	**TARGET LEARNING GOAL: The student will** • *be able to use CAD to produce a simple plan for cutter.* Student makes no major errors or omissions regarding the score 3 content
Score 2 Success with simpler content—vocabulary, foundational skills	**The student will recognize or recall specific vocabulary or basic content, such as:** • *Working Drawing, .DXF format, flash drive* **The student will perform basic skills or process, such as:** • **Basic math operations, Read a ruler/measure, CAD techniques -Editing, Fillet, Chamfer, Zoom, Trim, Line, Circle, Save**
Score 1 Partial success with help	**With help, student achieves partial success at score 2 content and/or score 3 content**
Score 0 No success even with help	**Even with help, no success**

Rigorous Learning Goal/Scale 2

Course:	Robotics/Engineering –CNC Plasma Cutter Unit
Score 4 Additional Success with the complex content and concepts—inferences, novel applications	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.** • *Student can independently identify, trouble shoot and correct errors that may occur while trying to set up/operate the CNC Plasma Cutter.* **Student makes no major errors or omissions regarding the score 4 content**
Score 3 Mastery of complex content and concepts of learning goal	**TARGET LEARNING GOAL: The student will** • *be able to safely set up and operate the CNC Plasma Cutter.* **Student makes no major errors or omissions regarding the score 3 content**
Score 2 Success with simpler content—vocabulary, foundational skills	**The student will recognize or recall specific vocabulary or basic content, such as:** • *CNC, Torch, Pierce, General Safety Rules,Murphy's Law, Gantry, Lead In,* **The student will perform basic skills or process, such as:** • *Personal protection practices* • *Common Machinery safety rules.* • *CNC Saftey Rules/Knowledge* • *Emergency protocol* • *Upload CAD files* • *Set Parameters, Home Torch, Add Lead Ins, Set/Test Pierce Ht,* **Student makes no major errors or omissions regarding the score 2 content**
Score 1 Partial success with help	**With help, student achieves partial success at score 2 content and/or score 3 content**
Score 0 No success even with help	**Even with help, no success**