CLOUD COUNTY COMMUNITY COLLEGE

Our Mission: Cloud County Community College prepares students to lead successful lives and enhances the vitality of our communities.

**GENERAL INFORMATION**

**Course Number and Title:** IE 125 Blueprint Reading and Cutting Processes  
**Term and Year:**Spring 2022  
**Credit Hours and Course Description and Prerequisites:** 2 cr – In this course, students will learn the importance of blueprints/working drawings in welding as well as a variety of cutting processes. Line conventions, drawing views, dimensioning, scales, and welding symbols will be explored. Students will describe and demonstrate oxy-acetylene, plasma, and carbon arc cutting following shop drawings.

**Prerequisites:** None  
**Division:** Mathematics, Science, and Technical Programs    
**Department:** Agriculture

**Student Learning OUTCOMES and Assessment**

**Course Learning Outcomes**

For this course, students are expected to demonstrate the skills associated with the course learning goals as described by the student learning outcomes below:

1. Explain the oxy-fuel cutting process
2. Demonstrate safe and correct set up of an OFC workstation
3. Explain the plasma-arc cutting process
4. Demonstrate safe and correct set up of an PAC workstation
5. Identify and interpret welding symbols on blueprints/shop drawings
6. Perform manual cuts according to blueprints/shop drawings

In class, students are assessed on the mastery of these outcomes using the learning management system. Student names will not be used when reporting results. Outcomes-based assessment is used to improve the instructional planning, design, and quality of student learning throughout the college

**Program Learning Outcomes**

For this course, students are expected to demonstrate the skills associated with the program learning outcomes as described below.

IE\_PLO 1: Develop the cognitive and physical skills necessary to pass American Welding Society certifications

IE\_PLO 2: Identify safe welding practices and procedures conforming to American Welding Society standards.

In class students are assessed on mastery of these outcomes. Student names will not be used when reporting results. Program accomplishment is partially measured through performance on program outcomes. Outcomes-based assessment of program learning outcomes is used to improve and enhance the programs throughout the college.

**Institutional Learning Outcomes**

For this course, students are expected to demonstrate the skills associated with the college wide learning outcomes as described below.

**Employment:**

ILO\_Em1. Demonstrate knowledge of norms and expectations of professional environments.

ILO\_Em2. Demonstrate skills in working with others in a professional and constructive manner.

In class, students are assessed on the mastery of these outcomes. Student names will not be used when reporting results. Outcomes-based assessment of the institutional learning outcomes is used to ensure we are meeting the mission of the college, following the guiding values and enhance instructional planning, design, and quality of student learning throughout the college.