## NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

## WEL 130 - INERT GAS WELDING (3 CR.)

## **COURSE DESCRIPTION**

Introduces practical operations in the uses of inert-gas- shield arc welding. Discusses equipment, safety operations, welding practice in the various positions, process applications, and manual and semi-automatic welding. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

#### **GENERAL COURSE PURPOSE**

WEL 130 is a basic course in inert gas welding, where the student will learn the basic theory and practical application of the process. The student will develop an understanding of the manual and semi-automatic welding processes, shielding gases, filler rods, and safety practices. Experienced inert gas welders will find WEL 130 educational as a refresher course.

#### **COURSE OBJECTIVES**

Upon completion of this course the student will be able to:

- A. become proficient in theory and operation of inert gas equipment
- B. have a proficient knowledge in the selection of shielding gases and filler rods
- C. demonstrate his proficiency of welding techniques on assigned lab projects
- D. demonstrate their knowledge of safety and set-up at all times in the lab areas

# **MAJOR TOPICS TO BE INCLUDED**

- A. Careers in inert gas welding, general shop safety, safety in set-up of equipment
- B. T.I.G. equipment, shielding gases, filler rods, and technique
- C. M.I.G. equipment, shielding gases, filler wire, and technique

# **EXTRA TOPICS (optional)**

Inert gas welding in the vertical and overhead positions