



ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Workforce Development

COURSE: CNC 1206 CNC Turning Center Operations II

Date: Spring 2023

Credit Hours: 3

Complete all that apply or mark "None" where appropriate:

Prerequisite(s): CNC 1204 with a grade of C or better.

Enrollment by assessment or other measure? Yes No

If yes, please describe:

Corequisite(s): None

Pre- or Corequisite(s): None

Consent of Instructor: Yes No

Delivery Method:	<input checked="" type="checkbox"/> Lecture	2 Contact Hours (1 contact = 1 credit hour)
	<input type="checkbox"/> Seminar	0 Contact Hours (1 contact = 1 credit hour)
	<input checked="" type="checkbox"/> Lab	2 Contact Hours (2-3 contact = 1 credit hour)
	<input type="checkbox"/> Clinical	0 Contact Hours (3 contact = 1 credit hour)

Offered: Fall Spring Summer

CATALOG DESCRIPTION and IAI NUMBER (if applicable):

This course is a continuation of CNC Turning Center Operations I (CNC 1204). The student will learn how to control quality, basic and advanced setup skills, and advanced programming skills.

ACCREDITATION STATEMENTS AND COURSE NOTES:

None

COURSE TOPICS AND CONTENT REQUIREMENTS:

1. Safety
2. Video instruction
3. Computer simulation
4. Sequence of operations
5. Composition of Program
6. Program loading
7. Reading and interpreting action codes
8. Verification and editing programs
9. Routine maintenance

INSTRUCTIONAL METHODS:

1. Lecture
2. Video Demonstration
3. Practical applications
4. Individualized instrumentation
5. Hands-on lab work
6. Master Task on-line lectures/test

EVALUATION OF STUDENT ACHIEVEMENT:

1. Problem solving
2. Skill proficiency
3. Technical knowledge

INSTRUCTIONAL MATERIALS:

Textbooks

McGraw-Hill Machining and CNC Technology

Resources

Haas CNC reference guide

Haas mill programming workbook

Power point slides

Example Programs

LEARNING OUTCOMES AND GOALS:

Institutional Learning Outcomes

- 1) Communication – to communicate effectively;
- 2) Inquiry – to apply critical, logical, creative, aesthetic, or quantitative analytical reasoning to formulate a judgement or conclusion;
- 3) Social Consciousness – to understand what it means to be a socially conscious person, locally and globally;
- 4) Responsibility – to recognize how personal choices affect self and society.

Course Outcomes and Competencies

1. The student will be able to write a part program.
2. The student will be able to install and set tooling in the Lathe Turret.
3. The student will demonstrate proper workplace loading procedures.
4. Proper loading of programs into the machine control will be demonstrated by the student.
5. Reading and interpretation of action codes will be performed by the student.
6. The student will verify and edit programs.
7. The student will recognize tool wear and replace tools.
8. The student will demonstrate adjustment to speed and feed.