

EICC COURSE DEVELOPMENT MODEL (CDM)

CATALOG COURSE NUMBER: MFG-224

COURSE TITLE: Coordinate Measuring Machine (CMM)

Originating College: CCC MCC SCC

Effective Term/Year: Spring 2014

Initiating Faculty Member: Kenneth Darmody

Initiating Department Coordinator: Ben Kettering

Reason for submission: Check all that apply

New Course If yes, type of course:

A&S

To be considered for General Education? Yes No Category:

To be part of an A & S Concentration? Yes No Concentration:

CTE Program Title: Required Elective

General Education or Program Review Reactivation of an inactive course Making course inactive

Changing course; please explain:

Other; please explain: up graded CMM software.

Contact Hours/Distribution of Contact Hours

Lecture Hours

Lab Hours

Clinical Hours

Coop Hours

Hours per Week: 0 Hours per Week: 2.00 Hours per Week: 0 Hours per Week: 0

Number of Weeks: 16.50 Number of Weeks: 16.50 Number of Weeks: 16.50 Number of Weeks: 16.50

***Note: If offering a course for the full fall or spring semester, the number of weeks is 16.5*

Total Lecture Hrs: 0 Total Lab Hrs: 39.60 Total Clinical Hrs: 0 Total Coop Hrs: 0

Semester Hours Credit: 1.00 if variable credit, give range:

Allow repeat* for credit: Yes No

If yes, total course repeats allowed: If yes, total credits:

*Note that repeat for credit means a student can pass the course and then repeat it for additional credit. An internship course is an example of a course that could be set up as repeatable for additional credit

Course or courses this CDM replaces, if any:

CATALOG COURSE DESCRIPTION: This course will emphasize the proper use of Coordinate Measuring Machine (CMM) to qualify and inspect parts for various manufacturing processes. Various CMM hands-on projects will strengthen the proper use of this equipment.

RECOMMENDED ENTRY LEVEL SKILLS/KNOWLEDGE:

PRE-REQUISITE COURSES

CCN#	COURSE TITLE
MFG 186	Plant Safety
MFG 192	Blueprint Reading

CO-REQUISITE COURSES

CCN#	COURSE TITLE

PUBLISHED MATERIAL(S) USED FOR CDM DEVELOPMENT: "Literature » Mitutoyo America Corporation."

Mitutoyo America Corporation. N.p., 2013. Web. 08 Nov. 2013.

In general it is expected that source material will be dated within 5 years of this CDM date. If all materials/ textbooks cited above are older than this, please explain:

GENERAL COURSE GOALS

Upon successful completion of this course the student should be able to:

- Apply knowledge of Coordinate Measuring Machine software.
- Apply knowledge of Coordinate Measuring Machine in a manufacturing environment.
- Demonstrate knowledge in precise measurement procedures.

TOPICAL OUTLINE

1. CMM Software Tutorial
2. Establishing A Coordinate System
3. Part Program

COURSE OBJECTIVES

Upon successful completion of the course, a student should be able to:

1. CMM Software Tutorial
 - a. Describe software functions.
 - b. Identify proper use of software.
2. Establishing A Coordinate System
 - a. Identify a coordinate system.
3. Part Program
 - a. Describe a part program.
 - b. Use a part program.
 - c. Identify editing procedures.
 - d. Demonstrate how to edit a part program.

RECOMMENDED METHODS OF INSTRUCTION: Check all appropriate methods of instruction to facilitate student learning of course objectives.

- | | | |
|--|--|--|
| <input type="checkbox"/> Case Studies | | <input type="checkbox"/> Class Discussions |
| <input checked="" type="checkbox"/> Computer lab work | | <input type="checkbox"/> Computer-assisted tools |
| <input type="checkbox"/> Computer-assisted writing | | <input type="checkbox"/> Conducting experiments |
| <input type="checkbox"/> Demonstration or modeling | | <input type="checkbox"/> Electronic interaction |
| <input type="checkbox"/> Field observation | | <input type="checkbox"/> Field trips |
| <input type="checkbox"/> Guest speaker | | <input type="checkbox"/> Guided practice |
| <input type="checkbox"/> In-class writing or editing workshops | | <input type="checkbox"/> Journals |
| <input type="checkbox"/> Lecture | | <input type="checkbox"/> Library instruction and resources |
| <input type="checkbox"/> Model building | | <input type="checkbox"/> Peer review |
| <input type="checkbox"/> Readings | | <input type="checkbox"/> Role play |
| <input type="checkbox"/> Service learning | | <input type="checkbox"/> Simulation |
| <input type="checkbox"/> Student and instructor conferences | | <input type="checkbox"/> Student collaborative learning |
| <input type="checkbox"/> Student presentation | | <input checked="" type="checkbox"/> Student projects |
| <input type="checkbox"/> Tests or quizzes | | <input type="checkbox"/> Worksheets/surveys |
| <input type="checkbox"/> Writing assignments/exercises (graded or not) | | |
| <input type="checkbox"/> Other (please list specifics): | | |

RECOMMENDED EVALUATION METHODS: Check all appropriate methods of evaluation to assess student achievement of course objectives.

- | | | |
|---|--|--|
| <input type="checkbox"/> Class workshops | | <input type="checkbox"/> Classroom discussions/participation |
| <input type="checkbox"/> Collaborative work | | <input type="checkbox"/> Demonstration of skill(s) |
| <input type="checkbox"/> Individual conferences | | <input type="checkbox"/> Journals |

- Laboratory reports
- Portfolios
- Quizzes
- Student presentations
- Tests
- Other (please list specifics):

- Oral presentations
- Pretest/Posttest
- Reading responses
- Student projects
- Writing Assignments

ATTENDANCE: Policies on attendance will be formulated by the instructor and communicated to the students on the course syllabus.

ACADEMIC DISHONESTY: Policies on academic dishonesty can be found in the EICC student code of conduct published in the student handbook.

CDM CREATION/REVIEW/REVISION INFORMATION	
Originally Written by:	Date:
Department Chair, Comments, & Date:	
Does similar curriculum exist at other EICC Colleges? <input type="checkbox"/> CCC <input type="checkbox"/> MCC <input type="checkbox"/> SCC <input type="checkbox"/> No	
If yes, Counterparts Consulted, College, Comments & Date:	
CDM Review or Revision Date:	
Faculty member(s) & College:	
Does similar curriculum exist at other EICC Colleges? <input type="checkbox"/> CCC <input type="checkbox"/> MCC <input type="checkbox"/> SCC <input type="checkbox"/> No	
Changes made to course which will require further review steps:	
<input type="checkbox"/> Making course inactive <input type="checkbox"/> Credit hours <input type="checkbox"/> Contact hours <input type="checkbox"/> Course Description	
<input type="checkbox"/> 25% or more of course objectives <input type="checkbox"/> Other minor revisions or no revisions	
Dean Review, Comments & Date:	
If changes made require further review and approval:	
College Curriculum Committee Sign-off & Date:	
IC Review Subcommittee Sign-off & Date:	
Instructional Council Approval:	