

# COMPUTER-AIDED MACHINING (CAMM)

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## **CAMM 111, INTRO TO COMPUTER NUMERICAL CONTROL 2 (4)**

This introductory course covers manual CNC programming techniques for 3-axis milling machines and 2-axis turning centers. Basics of job planning, tooling, tool path graphics and verification are included. Course focuses on Fanuc-compatible controllers using late model CNC equipment. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Concurrent: TECN 111 and TECN 131

**Typically Offered:** Fall and Spring Semesters

## **CAMM 215, ADVANCED CNC MILLING MACHINES 3 (6)**

Covers advanced CNC programming techniques for mills or machining centers. Topics include set-up, operation, and maintenance of the machines as well as 4th-axis programming, parametric programming and introduction to Computer-Aided Machining (CAM) techniques for machining centers. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: CAMM 111; Course placement policy: Grade of C or higher in MTHM 033 or satisfactory placement assessment score in mathematics

**Typically Offered:** Fall Semester

## **CAMM 225, ADVANCED CNC LATHES 3 (5)**

This course covers advanced CNC programming techniques for lathes or turning centers. Topics include set-up, operation, and maintenance of the machines as well as parametric programming techniques and introductory Computer-Aided Machining (CAM) for turning centers. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: CAMM 111; Course placement policy: Grade of C or higher in MTHM 033 or satisfactory placement assessment score in mathematics

**Typically Offered:** Spring Semester

## **CAMM 235, CAD-CAM GRAPHICS 3 (6)**

Course develops skill in graphic toolpath generation for machining and turning. Students build wireframe, surface, and solid models using CAM software and develop associated toolpath. The course also covers CAD data translation, CNC communications, customization of post-processors and other related topics. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Prerequisite: CAMM 111 and CADD 111

**Typically Offered:** Spring Semester

## **CAMM 287, WORK BASED LEARNING I - CAMM 1-3 (1)**

This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4

**Course Entry Requirement(s):** A student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline of placement; have a min GPA of 2.5 in the discipline and a 2.0 overall GPA; and have division approval.

**Typically Offered:** Offer as required

## **CAMM 288, WORK BASED LEARNING II - CAMM 1-3 (1)**

Building on experiences from Work Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4

**Course Entry Requirement(s):** Prerequisite: CAMM 287

**Typically Offered:** Offer as required

## **CAMM 289, WORK BASED LEARNING III - CAMM 1-3 (1)**

Building on experiences from Work Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4

**Course Entry Requirement(s):** Prerequisite: CAMM 288

**Typically Offered:** Offer as required