

Computer Integrated Macining and Manufacturing Track Year 1

Semester 1

Class Number	Class Name	Class Description	Credit Hours
CIMM 100	Introduction to Machining and Manufacturing	This course is designed to introduce the student to the manufacturing environment, requirements and career opportunities of major technologies in industry. The course will cover the history, setting of manufacturing and industry, safety, drawing, measurement and layout and an introduction to basic shop equipment.	3
CIMM 105	Introduction to Blueprint Reading	The student will learn to read and interpret basic blueprints commonly found in manufacturing. This course is designed for students in the machining and manufacturing careers.	2
CIMM 115	Manual Mill	The student will learn to select appropriate tooling, setup and safely operate a manual mill. This course is designed for students in machining and manufacturing careers.	3
CIMM 122	CNC Mill Operation Fundamentals	The student will learn the fundamentals of Computer Numerical Control (CNC) mill programming and operation. This course is designed for students in machining and manufacturing careers.	4

Semester 2

Class Number	Class Name	Class Description	Credit Hours
COLL 100	First-Year Seminar	The course is designed to help students adjust to the MCC community, develop a better understanding of the learning process, and acquire essential academic survival skills.	1
INTE 107	Industrial Electrical Safety	This course will introduce the student to electrical safety rules and procedures in the industrial arena. The student will learn the NFPA 70E requirements, meter safety and how to safely work around electrical circuitry in the workplace. Student will complete CPR certification.	2
EHSS 111	Introduction to Health and Safety for General Industry	This course provides the participants with an overview of the Occupational Safety and Health Administration (OSHA) standards relevant to general industry. Among the subjects covered in the program are: an introduction to OSHA, fire protection, electrical safety, hazard communication, bloodborne pathogens, walking and working surfaces, personal protective equipment, machine guarding and safety and health programs. Students will receive a 10-hr General Industry Safety and Health Outreach Card.	1
CIMM 155	Grinding Operations	This course covers the fundamentals of safely operating various pieces of grinding equipment. The emphasis will be on the care and use of surface grinders. This course is designed for students in machining and manufacturing careers.	2
CIMM 231	NIMS - Job Planning and Bench Layout	Students receive NIMS Level I Credentials in Job Planning, Benchwork, and Layout upon successful completion of the performance tests and theory exams. NIMS documents the skills of the individuals through the skill standard developed through a consortium.	1
CIMM 232	NIMS - Milling	A student receives NIMS Level I Credentials in Milling upon successful completion of the performance test and theory exam. NIMS documents the skills of individual through the consortium developed skill standard.	1
CIMM 235	NIMS - Surface Grinding	A student receives NIMS Level I Credential Surface Grinding upon successful completion of the performance test and theory exam. NIMS documents the skills of the individual through the consortium developed skill standards.	1

Computer Integrated Macining and Manufacturing Track Year 2

Semester 3

Class Number	Class Name	Class Description	Credit Hours
CIMM 110	Manual Lathe Operation	The student will learn to select appropriate tooling, setup and safely operate a manual lathe. This course is designed for students in machining and manufacturing careers.	3
CIMM 121	CNC Lathe Operation Fundamentals	The student will learn the fundamentals of Computer Numerical Control (CNC) lathe programming and operation. This course is designed for students in machining and manufacturing careers.	4
CIMM 160	Advanced Lathe Operations	This course covers numerous topics in lathe operation not covered by the basic courses. This will include CNC Lathe as well as Manual Lathe. The course is designed for students in the machining and manufacturing careers.	4

Semester 4

Class Number	Class Name	Class Description	Credit Hours
CIMM 161	Advanced Mill Operation	This course covers numerous topics in mill operation not covered by the basic courses. This will include CNC mill as well as manual mill. The course is designed for students in the machining and manufacturing careers.	4
CIMM 200	Advanced Machining	This course will provide advanced machining concepts in lathe and mill operations. It will also give an overview of Metallurgy and Geometric Dimensioning and Tolerancing.	3
CIMM 290	Captstone Project	The student will work in the lab under the direction of a faculty member to demonstrate the ability to do multiple machining operations with Job Planning, Measurement, Safety, Heat Treatment, Blueprint Reading, Milling, Turning, and Grinding.	2
INTE 124	Employment Strategies for Technical Careers	This course prepares the student to use strategies for successful career goal setting, job seeking, obtaining, maintaining and terminating employment in technical areas. Topics include conducting a job search, preparing a resume and cover letter, and participating in job interviews.	2
CSIS 100	Digital Literacy	This course provides a basic introduction to personal computing. Through the use of lecture, demonstration, and hands-on experience, the student will be introduced to microcomputer hardware, operating systems, several software applications. The internet, internet safety, and internet-based applications are also covered. A keyboarding component is included.	2