Jefferson College

COMPUTER INTEGRATED MANUFACTURING ACADEMIC GUIDE 2019-2020
Certificate Plan

The Academic Plan is a semester-by-semester plan for the full-time student. Part-time students should work with an advisor to customize the map to fit individual needs.

| ACADEMIC PLAN | | | NOTES |
|---|---|---|---|
| **Fall 1st Year** | | **Cr Hrs** | **Semester 1** |
| | COL101 Introduction to College | 1 | COL101 and Reading Proficiency are pre-reqs for some next semester course work |
| | CIM105 Introduction to Machining Procedures | 3 | CIM105 is a pre-req for some next semester course work |
| | CIM125 CNC Programming | 3 | CIM125 is a pre-req for some next semester course work |
| | MTH105 Industrial Math | 3 | MTH105 is a pre-req for some next semester course work |
| | MTT108 Industrial Blueprint Reading | 3 | |
| | **Total Hours** | **13** | |
| **Spring 1st Year** | | | **Semester 2** |
| | CIM150 Machining Procedures | 3 | CIM150 is a pre-req for some next semester course work |
| | CIM155 CNC Programming II | 5 | CIM155 is a pre-req for some next semester course work |
| | MTT116 Dimensional Metrology | 3 | MTT116 is a pre-req for some next semester course work |
| | **Total Hours** | **11** | |
| **Fall 2nd Year** | | | **Semester 3** |
| | CIM205 Advanced Machining Procedures | 3 | |
| | CIM210 Quality Assurance | 3 | |
| | CIM225 Advanced CNC Programming | 5 | CIM225 is a pre-req for some next semester course work |
| | **Total Hours** | **11** | |
| **Spring 2nd Year** | | | **Semester 4** |
| | CIM235 Computer Integrated Manufacturing | 3 | CIM235 is a pre/co-req for some course work |
| | CIM240 Computer Aided Manufacturing | 5 | CIM240 is a pre/co-req for some course work |
| | CIM250 Introduction to 3D Contouring | 3 | |
| | **Total Hours** | **11** | |

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**Program Description:**

In this program, students will learn computer integration in industrial manufacturing, which is the key to providing high precision and intricate machined metal parts into the world's growing demand for extremely technical design. With the assistance of computer aided drafting and computer aided manufacturing (CAD/CAM), the gap between manufacturing and engineering tightens. The results of this integration are higher standards of precision and quality, along with programming, set-up, and machine cycle time reduction of CNC machining centers and turning centers.

**Admission Requirements:**

There are no specific admission requirements for this program. CIM coursework requires reading and a level of math proficiency. Certain general education coursework requires specific measures for placement. See www.jeffco.edu/future-students/admissions/math-english-placement or consult an advisor for more information.

**Department Faculty Advisors:** Matt West

**Interim Associate Dean:** Christopher DeGeare

**Employment Outlook/Median Salary*:**

| Career | Degree Level Required | ** Growth | Median Annual Salary |
|---|---|---|---|
| Machinist | High School Diploma, Post-Secondary Preferred | 1% | $43,160 |
| Computer-controlled machine tool operators, metal, and plastic | High School Diploma, Post-Secondary Preferred | -9% | $34,840 |
| Computer numerically controlled machine tool programmers, metal, and plastic | High School Diploma, Post-Secondary Preferred | 2.4% | $50,580 |

**Employment information based on current Bureau of Labor Statistics Occupational Outlook Handbook.*
***Projected % of change in employment 2016-2026; the average for all occupations is 7%.*

**Jefferson College Program Highlights:**

Computer Integrated Manufacturing students gain knowledge and experience in modern manufacturing practices through hands-on training with the latest equipment and software, the same equipment and software used in today's high-tech manufacturing industry. Day and evening courses are offered.

**Transfer Information:**

CORE 42 MOTRANSFER GUARANTEED Courses with this symbol are guaranteed to transfer to any public college or university in Missouri. Pursuing a higher degree? Get the most credit for your transfer and earn your Bachelor's degree from Missouri Baptist University by attending MBU courses at the Jefferson College, Hillsboro campus! Certificate courses apply directly to the Associate of Applied Science degree in Computer Integrated Manufacturing, which will transfer to Missouri Baptist University's Bachelor of Science in Applied Management.