[Computerized Manufacturing and Machining – CNC Machinist](https://bluegrass.kctcs.edu/education-training/program-finder/computerized-manufacturing-machining.aspx)

Diploma

Coordinator: Danny Roberts ([danny.roberts@kctcs.edu](mailto:danny.roberts@kctcs.edu)) 859-246-6773

Student Name: Student ID:

*Students must meet college readiness benchmarks as identified by the Council on Postsecondary Education or remedy the identified skill deficiencies.*

NOTE: New students must start CMM classes in the Fall semester.

Semester 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CMM 114 Fundamentals of Machine Tools | 6 |  |  |  | Fall only |
| CMM 118 Metrology/Control Charts | 2 |  |  |  | Fall only |
| BRX 112 Blueprint Reading for Machinist | 4 |  |  |  | Fall only |
| Total Semester Credit Hours | 12 |  |  |  |  |

Semester 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CMM 124 Applied Machining | 6 |  |  | CMM 114 | Spring only |
| CMM 134 Manual Prog. CAD/CAM/CNC OR  CMM 138 Intro to Prog. and CNC Machines | 6 |  |  | CMM 114 | Spring only |
| Written Comm., Oral Communication, OR Heritage/Humanities course | 3 |  |  |  |  |
| Total Semester Credit Hours | 15 |  |  |  |  |

Semester 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CMM 214 Industrial Machining | 6 |  |  | CMM 124 | Fall only |
| CMM 230 Conversational programming OR  CMM 234 CNC Mach. and Coding Practices | 6 |  |  | CMM 134 or CMM 138 | Fall only |
| Social/Behavioral Sciences, Natural Sciences, OR Quantitative Reasoning course | 3 |  |  |  |  |
| Digital Literacy | 0 – 3 |  |  |  | Course or competency exam |
| Total Semester Credit Hours | 9 – 12 |  |  |  |  |

Semester 4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| CMM 224 Advanced Industrial Machining | 6 |  |  | CMM 134 and CMM 214 | Spring only |
| CMM 240 Intro to 3D Programming OR  CMM 244 Advanced Prog./Setup Practices | 6 |  |  | CMM 134 or CMM 138  CMM 230 | Spring only |
| CMM 298 Practicum OR  CMM 299 Cooperative Education | 1 |  |  |  |  |
| Total Semester Credit Hours | 7 |  |  |  |  |
| Total Diploma Credit Hours | 43 – 46 |  |  |  |  |

**Graduation Requirements:**

* 25% or more of Total Diploma Credit Hours must be earned at BCTC.
* Cumulative GPA must be 2.0 or higher.

Advisor Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Advisor Contact \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Additional Information**

General Education courses (math, natural sciences, writing, social and behavioral sciences, and heritage or humanities) can be taken in any order. It is recommended that math be taken in the first semester if possible.

Students must earn a grade of C or better in each CMM and BRX course.

Alternate course numbers that are equivalent to courses listed in the above plan:

CMM 110 and CMM 112 = CMM 114

BRX 110 and BRX 201 = BRX 112

CMM 120 and CMM 122 = CMM 124

CMM 130 and CMM 134 = CMM 134

CMM 210 and CMM 212 = CMM 214

CMM 2301 and CMM 2302 = CMM 230

CMM 220 and CMM222 = CMM 224

CMM 2401 and CMM 2402 = CMM 240

**Embedded Credentials**

|  |  |  |  |
| --- | --- | --- | --- |
| Credential | Title | Requirements | Total Cr. Hours |
| Certificate | Exploratory Machining I | CMM 114, 5 hours of electives | 11 |

**Certificate Requirements:**

* 25% or more of Total Certificate Credit Hours must be earned at BCTC.
* Grade of C or higher in each course required for certificate.

*Reviewed by: Danny Roberts Effective Term: Fall 2021*

*Review Date: 2-10-2021*