****

**Computerized Manufacturing and Machining – CNC Machinist**

**Diploma**

**Program Coordinator: Danny Roberts E-mail:** [**danny.roberts@kctcs.edu**](mailto:danny.roberts@kctcs.edu) **Phone: 859-246-6773**

[**Program Website**](https://bluegrass.kctcs.edu/education-training/program-finder/computerized-manufacturing-machining.aspx)

**Student Name: Student ID:**

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **New students must start CMM classes in the Fall semester.** | | | | | |
| **First Semester** | **Credit Hours** | **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** |  |  |  |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Third Semester** | **Cr. Hrs.** | **Term** | **Grade** | **Prerequisites** | **Notes** |
| CMM 214 Industrial Machining | 6 |  |  | CMM 124 | Fall only |
| CMM 230 Conversational programming OR  CMM 234 CNC Machines 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 |  |  |  | Digital literacy course or competency exam |
| **Total Semester Credit Hours** | **15 – 18** |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fourth Semester** | **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 Programming/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** | **13** |  |  |  |
| **Total Diploma Credit Hours** | **55 – 58** |  |  |  |

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

**Graduation Requirements:**

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

|  |
| --- |
| **Additional Information** |
| New students must start CMM classes in the Fall semester.  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 Credit Hours |
| Certificate | Exploratory Machining I | CMM 114, 5 hours of electives | 11 |

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

**Certificate Requirements:**