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**Computerized Manufacturing and Machining – Tool & Die Apprentice**

**Certificate**

**Associate in Applied Science degree**

**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**](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.***

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| **New students must start CMM classes in the Fall semester.** | | | | | |
| **First Semester** | **Credit Hours** | **Term** | **Grade** | **Prerequisites** | **Notes** |
| CMM 150 Shop Theory OR  CMM 110 Fundamentals of Machine Tools A | 2  (3) |  |  |  |  |
| CMM 118 Metrology/Control Charts | 2 |  |  |  |  |
| BRX 110 Basic Blueprint Reading for Machinist | 2 |  |  |  |  |
| CMM 132 CAD/CAM/CNC | 3 |  |  |  |  |
| MAT 116 Technical Mathematics | 3 |  |  |  |  |
| **Total Semester Credit Hours** | **12 - 13** |  |  |  |

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| **Second Semester** | **Cr. Hrs.** | **Term** | **Grade** | **Prerequisites** | **Notes** |
| CMM 151 Machinery’s Handbook/Metallurgy OR  CMM 112 Fundamentals of Machine Tools B | 3  (4) |  |  |  |  |
| BRX 210 Mechanical Blueprint Reading | 2 |  |  |  |  |
| CMM 153 Mold Theory | 3 |  |  |  |  |
| CMM 154 Die Theory | 3 |  |  |  |  |
| WLD 151 Basic Welding A OR  Digital Literacy\* OR  IEX 295 Special Problems III | 2  (0 – 3)  (3) |  |  |  | \*Digital literacy course or competency exam |
| **Total Semester Credit Hours** | **11 - 15** |  |  |  |

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| **Third Semester** | **Cr. Hrs.** | **Term** | **Grade** | **Prerequisites** | **Notes** |
| CMM 152 Jigs, Fixtures and Gaging OR  CMM 120 Applied Machining I | 3  (3) |  |  |  |  |
| CMM 130 Manual Programming | 3 |  |  |  |  |
| **Total Semester Credit Hours** | **6** |  |  |  |
| **Total Certificate Credit Hours** | **29 – 34** |  |  |  |

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

**Graduation Requirements:**

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