Machine Tool Collaborative Program Courses (5 semesters for degree plus 1 for Advanced CNC Certificate)

**Semester 1**
ADM 101 Precision Measurement
MTT 147 Introduction to Machine Shop I
MTT 148 Introduction to Machine Shop I Lab
MTT 138 Milling I Lab
MTT 121 Basic Blueprint Reading for Machinists

**Semester 2**
ENG101 English Composition
*MTH 100 Intermediate College Algebra
ADM 111 Manufacturing Safety Practices
MTT 149 Introduction to Machine Shop II
MTT 150 Introduction to Machine Shop II Lab

**Semester 3**
*MTH 103 Introduction to Technical Mathematics
MTT 141 Basic CNC Milling
MTT 241 CNC Milling Lab I
ADM 106 Quality Control Concepts
SPH 107 Fundamentals of Public Speaking

**Semester 4**
MTT 140 Basic CNC Turning
MTT 243 CNC Turning Lab I
ADM 105 Fluid Systems
ADM 108 Intro to 3D Modeling
Social Science Elective

**Semester 5**
MTT 213 Advanced CNC Milling
MTT 242 CNC Milling Lab II
MTT 212 Adv. CNC Turning
ADM 104 Intro. To Thermal/Electrical Principals
Humanities Elective

**Total Credits 75**

*If student plans to pursue a bachelor’s degree or further education MTT 112 Precalculus Algebra and MTT 113 Precalculus Trigonometry can be substituted.

Advanced CNC Certificate - Semester 6
MTT 219 CNC Graphics: Milling (Advanced Cad Cam)
MTT 220 CNC Graphics Turning (Advanced Cad Cam)
MTT 281 Special Topics (Intermediate 3D Modeling)
MTT 282 Special Topics (Multi-axis machining)

**Total Credits 12**