

APPENDIX
A.1

CORE COMPETENCY REQUIREMENTS AND NIMS CREDENTIALS
NIMS CERTIFIED MACHINIST

CORE COMPETENCY
REQUIREMENTS:
NIMS CERTIFIED
MACHINIST

APPRENTICE CORE COMPETENCIES		NIMS CREDENTIALS
1. 2. 3. 4. 5. 6. 7.	Identify and Demonstrate Use of Machine Safety and Personal Protective Equipment Demonstrate Compliance with Lock-out/Tag-out Procedures and OSHA Requirements and Guidelines Machine Operations and Material Handling, Hazardous Materials Handling and Storage, including EPA, Hazmat, and OSHA Part Inspection Process Control Process Adjustment – Single Part Production Participation in Processes Improvement	Measurement, Materials, and Safety Level I
8. 9. 10. 11.	Manual Operations: Layout Manual Operations: Benchwork Sawing Job Process Planning	Job Planning, Benchwork, and Layout Level I
12.	Drilling Operations	Drill Press Skills Level I
13.	Turning Operations: Turning Between Centers	Turning Between Centers Level I
14.	Turning Operations: Turning Between Centers	Turning Between Centers Level II
15.	Turning Operations: Chucking	Chucking Level I
16.	Turning Operations: Chucking	Chucking Level II
17. 18.	Milling: Square Up a Block Manual Milling: Vertical and Horizontal	Milling Level I
19.	Manual Milling: Vertical and Horizontal	Milling Level II
20. 21.	Surface Grinding, Grinding Wheel Safety (Optional) Surface Grinding, Horizontal Spindle, Reciprocating Table (Optional)	Grinding Level I
22.	Surface Grinding, Horizontal Spindle, Reciprocating Table (Optional)	Grinding Level II
23. 24. 25.	CNC Programming - Milling and / or CNC Programming - Turning CNC: Write a Simple CNC Milling and / or CNC Turning Program and Review Tool Path CNC: Operate a CNC Milling Machine and / or Operate a CNC Lathe	CNC Milling and / or CNC Turning Level I
26. 27. 28.	General Housekeeping & Maintenance Preventative Maintenance - Machine Tools Tooling Maintenance	Included in all Machining Credentials

***NOTE: There is not a specific sequence to the implementation of the Core Competencies. The twenty eight Core Competencies and the twelve NIMS Credentials, listed above, must be satisfactorily completed to meet the requirements of a NIMS Certified Apprentice Apprenticeship Program and earn a *Certificate of Completion*.**