

APPENDIX
A.1

CORE COMPETENCY REQUIREMENTS AND NIMS CREDENTIALS
NIMS CERTIFIED MACHINIST

CORE COMPETENCY
REQUIREMENTS:
NIMS CERTIFIED
MACHINIST

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

***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*.**