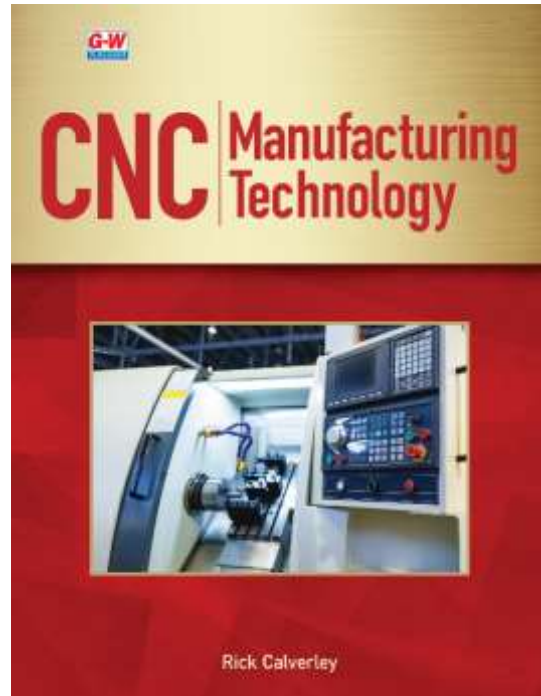




**Correlation of
CNC Manufacturing Technology, Calverley
 (Goodheart-Willcox Publisher ©2021)
 to
 NIMS Credential Overviews: CNC Lathe Operations**

The following chart correlates Goodheart-Willcox Publisher's *CNC Manufacturing Technology* to the NIMS Credential Overviews for CNC Lathe Operations. Listed are the knowledge and skills criteria for NIMS credentialing for CNC Lathe Operations, and the corresponding/applicable content from *CNC Manufacturing Technology*.

Each NIMS credential represents a collection of skills and knowledge, and a person that earns one has demonstrated competency in that occupational area. As that person earns more of these stackable credentials, they show that they are a valuable individual with an array of skills that have been verified against an industry-written standard.



Knowledge and Skills	G-W Content
CNC Lathe Operations	
Applied Mathematics	
Arithmetic	Chapter 4
IPM Calculations	Chapter 10
SFM to RPM Conversion	Chapters 9, 10
Sign Numbers	Chapter 4
Use of Scientific Calculator	Chapter 5
Cutting Tool Assembly	
Fitting (tightening and setting)	Chapter 8
Inspection of Cutters	Chapter 8
Inspection of Holders	Chapter 8

Correlation of *CNC Manufacturing Technology* to NIMS Credential Overviews: CNC Lathe Operations
page 2

Knowledge and Skills	G-W Content
Geometrical Dimensioning and Tolerancing	
Feature Control Frame	Chapter 5
Geometric Control Symbols	Chapter 5
Geometric Tolerancing Categories	Chapter 5
Geometric Tolerancing Characteristics	Chapter 5
Geometric Tolerancing Zone Shapes	Chapter 5
Symbols Associated with Feature Control Frames	Chapter 5
Inspection	
Feature with Size Verification	Chapter 6
Feature without Size Verification	Chapter 6
Runout Verification	Chapter 6
Surface Finish Verification	Chapter 6
Total Runout Verification	Chapter 6
Machine Maintenance	
Coolants	Chapter 2
Oils and Lubrications	Chapters 2,8
Refractometer Readings	
Machine Safety	
Machine Guarding	Chapter 3
Machining Applications	
Facing	Chapter 7
OD Turning	Chapter 10
Measurements	
Reading Micrometers	Chapter 6
Reading Steel Rules	Chapter 6
Reading Vernier Scales	Chapter 6
Use of Calipers	Chapter 6
Use of Dial Indicators	Chapter 6
Use of Drop Indicators (travel dial)	Chapter 6
Use of Micrometers	Chapter 6
Use of Steel Rules	Chapter 6

Correlation of *CNC Manufacturing Technology* to NIMS Credential Overviews: CNC Lathe Operations
page 3

Knowledge and Skills	G-W Content
Operations	
Deburring	
Fixture Offset Adjustments	Chapter 10
Geometry Offset Adjustments	Chapter 10
Machine Controls	Chapter 10
Machine Startup and Shutdown	Chapter 10
Machine Warm Up	
Part Loading (chuck/collet)	Chapter 10
Workshift Adjustments	Chapter 10, 12
Print Reading	
Block Tolerances	Chapter 5
Line Types and Conventions	Chapter 5
Orthographic Projection	Chapter 5
Surface Finish Requirements	Chapter 5
Title Blocks and Revisions	Chapter 5
Shop Safety	
Blood Born Pathogen	Chapter 3
Fire Prevention/Suppression	Chapter 3
Hazardous Material Information System (HMIS)	Chapter 3
Lock Out/Tag Out	Chapter 3
Personal Protective Equipment (PPE)	Chapter 3
Safety Data Sheets (SDS)	Chapter 3
Waste Removal	Chapter 3