Machine Technology Program Alignment – Kansas Board of Regents CIP: 48.0501

2010 03/26/10 Amended 01/15/13

Machine Technology Level 1

- OSHA 10 or 30 card
- Measurement, Materials, and Safety (NIMS Level I)
- One Additional Credential from the Following Options:
 - Job Planning, Benchwork & Layout (NIMS Level I)
 - CNC Turning: Operations (NIMS Level I)
 - CNC Milling: Operations (NIMS Level I)
 - Manual Milling Skills I (NIMS Level I)
 - Manual Milling Skills II (NIMS Level II)

Machine Technology Level 2

- Level 1 Requirements
- One Additional Credential from NIMS Machining Level I or Level II List (see page 2)

Machine Technology Level 3

- Level 1 Requirements
- Two Additional Credentials from NIMS Machining Level I or Level II List (see page 2)

Machine Technology Degree

- Level 1 Requirements plus Two Additional Credentials from NIMS Machining Level I or Level II List (see page 2)
- 15 Credit Hours of General Education (minimum)

Required Courses within Program

Common Courses	17-25 creaits:
Safety (OSHA 10 or 30)	1-3 credits
Workplace Ethics	2-3 credits
Print Reading	2-3 credits
Quality Control & Inspection	1 credit
Metallurgy	1 credit
CNC Operations	3 credits

<u>Additional Common Courses (Choose from Track I or II)</u>

Track I:	
Bench Work	1 credit
Machine Tool Processes	1 credit
Machining I	3 credits
Machining II	3 credits

Track II:

CNC Milling I 3 credits
CNC Lathe 3 credits

*Math Requirement 1-3 credits

*The state faculty committee chose to leave the course name and competencies associated with the Math Requirement to the discretion of individual colleges

Course list sequence has no implication on course scheduling by colleges.



Certificate B

Maximum of 40 Credit Hours

Certificate C

Maximum of 49 Credit Hours

A.A.S.

Maximum of 64 Credit Hours

for State Funding

Notes

Specifics pertaining to Machine Technology programs:

- 1. Competencies identified within the common courses represent opportunities for articulation with K-12.
- Colleges are encouraged to seek accreditation from the National Institute for Metalworking Skills (NIMS).
- Colleges are "encouraged" to recommend other NIMS credentials to students completing the AAS to meet regional and local needs.
- 4. See page two for information regarding credential options.

National Institute for Metalworking Skills (NIMS)		
Current Credential Listing*		
(August 2011)		
Machining Level I	Measurement, Materials & Safety	
	Job Planning, Benchwork & Layout	
	Manual Milling Skills I	
	Turning Operations: Turning Between Centers	
	Turning Operations: Turning Chucking Skills	
	Grinding Skills I	
	Drill Press Skills I	
	CNC Turning: Programming Setup & Operations	
	CNC Milling: Programming Setup & Operations	
	CNC Turning: Operations	
	CNC Milling: Operations	
Machining Level II	Manual Milling Skills II	
0	Turning II (manual)	
	Drill Press Skills II	
	Grinding Skills II	
	CNC Milling Skills II	
	CNC Turning Skills II	
	EDM – Wire	
	EDM – Plunge	

^{*}Source: National Institute for Metalworking Skills "Complete Guide to NIMS Credentialing Program"; https://www.nims-skills.org/c/document_library/get_file?folderId=230729&name=DLFE-3805.pdf