e-vote 6/28/16

# Curriculum Development Form
## New Program (Academic Award)

Program Name (Academic Award): ~~Advanced Manufacturing Core~~ Manufacturing Foundations CIP Code: 1506.13

Type of Academic Award: ☐ AA ☐ AAS ☐ AFA ☐ AS ☐ Diploma ☒ Certificate

Current Location: ☒ Faribault ☒ North Mankato Proposed Location: ☒ Faribault ☐ North Mankato

Contact Person: Jon Morgan Proposed Credits: 8

Date of Proposal: May 3, 2016 Proposed Implementation Date: Summer 2016

What program is being proposed? An 8-credit certificate that will prepare students for the MSSC Certified Production Technician certificate. All four classes are already approved and integrated in the advanced mfg. programs.

What impact will this new program have? Can be delivered through the credit and non-credit sides of the college and be a pathway into advanced manufacturing programs as a result of credit for prior learning processes.

Describe the rationale for this new program: Can be a feeder to programs for those students who may not typically enroll (incumbent workers). Will help SCC and MnAMP meet the outcomes required for the TAACCCT grant for which we are the lead college. Other colleges are currently gaining FYEs that SCC could have.

***Attach additional material if necessary***

**As Faculty Developer, by signing this *New Program* form, the Curriculum Committee is assured of the following (check marks required):**

***Prior to Preparing Documentation***

- ☑ Initiation — idea was submitted to Department Chair(s) and Academic Dean/Director for discussion and support
- ☑ Explored existing program offerings to identify potential duplication
- ☑ Completed Intention Form

***MnSCU Notice of Intent (NOI) — Program Navigator*** no need, because it's a new award based on an existing program (Manufacturing Production Technology) 17 cr. Certificate

- ☐ Program Plan brought to Curriculum Committee for information purposes
- ☐ Articulation agreement included for AA, AS, AFA programs
- ☐ Vice President of Student and Academic Affairs approval
- ☐ President approval
- ☐ MnSCU Program Navigator upload — New Notice of Intent (NOI) informing other MnSCU colleges/universities of the program
- ☐ MnSCU initiates the intention stage for feedback; 60 days to complete official paperwork after MnSCU approval

***Continue the Curriculum Development Process***

- ☒ Completed the WIDS Program Project, which includes outlining scope and sequence of program

**Please Note:** If courses do not already exist, the shell of each course must be created in WIDS before the WIDS Program Project can be completed

- ☒ Identified prerequisites (if any) for admission to the program
- ☒ Created measurable program student learning outcomes
- ☒ Proofread documentation for correct content
- ☒ Proofread documentation for grammatical and typographical errors
- ☐ Uploaded additional documentation to WIDS (comparison template, etc.) N/A

Faculty Developer Signature 6/22/16 Date

THIS REQUEST WAS PREVIOUSLY SUBMITTED. CHANGE PER MARTA MOHR.

**As Primary Department Chair, by signing this *New Program* form, the Curriculum Committee is assured of the following (check marks required):**

- ☐ Documentation through email and department meetings made available for other faculty and programs to provide feedback
- ☑ Proofread documentation for correct content and proper structure
- ☑ Proofread documentation for grammatical and typographical errors
- NA For LAS programs, signature of all LAS Department Chairs included
- NA For technical programs, the change was discussed at Advisory Committee meeting (provide meeting minutes)

TAACCT Grant Stakeholders in favor, Businesses requesting this.

☑ I support this program plan ☐ I do not support this program plan — please provide reason(s):

Ryan Carpenter 10-22-14

Primary Department Chair Signature Date

*For all new programs, if Primary Department Chair does not support the new program proposal, faculty developer can elevate the proposal to AASC for resolution.*

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**For AA and AFA Degrees Only — As a LAS Department Chair, by signing this *New Program* form, the Curriculum Committee is assured of the following (check marks required):**

☐ Documentation through email and department meetings made available for other faculty and programs to provide feedback

☐ I support this program plan ☐ I do not support this program plan — please provide reason(s):

LAS Department Chair Signature Date

☐ I support this program plan ☐ I do not support this program plan — please provide reason(s):

LAS Department Chair Signature Date

☐ I support this program plan ☐ I do not support this program plan — please provide reason(s):

LAS Department Chair Signature Date

*If all four LAS Department Chairs do not support the new program proposal, faculty developer can elevate the proposal to AASC for resolution.*

**As Academic Dean/Director, by signing this *New Program* form, the Curriculum Committee is assured of the following (check marks required):**

☑ Identified potential opportunities and impacts of the change on other programs/departments — DARS search
☑ Provided supporting documentation to populate Program Navigator

☑ I support this program plan ☐ I do not support this program plan — please provide reason(s):

Barb Embacher — Academic Dean/Director Signature — 6-20-16 — Date

*If Academic Dean/Director does not support the new program proposal, faculty developer can elevate the proposal to AASC for resolution.*

***Upload this signed form as a PDF to WIDS Shared Document folder — Curriculum Committee.***

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***Following Curriculum Committee support, this form is completed with final signatures.***

Curriculum Committee Chair Signature — 6/29/16 — Date

Vice President of Student and Academic Affairs Signature — 6-30-16 — Date

President Signature — 6/30/16 — Date

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***The following steps are possible post-approval steps***

**New Program**

Upload to MnSCU Program Navigator
- Curriculum Committee Chair electronic approval
- Vice President of Student and Academic Affairs electronic approval
- President electronic approval
- Vice President of Student and Academic Affairs electronic approval (2nd)
- MnSCU reviews for final approval
- MnSCU grants approval

Student Affairs
- ISRS; DARS; eCatalog

Scope and Sequence for Perkins Programs of Study
Federal Dept. of Education review
Higher Learning Commissions (HLC) review

**South Central College**
**Program Design**

# CERT Manufacturing Foundations

## Program Information

**Instructional Level** Certificate

**Career Cluster** Engineering, Manufacturing & Technology

### Description

This entry-level certificate prepares students for the Manufacturing Skills Standards Council's Certified Production Technician certificate. It introduces students to manufacturing careers and gives them opportunities to enhance or develop important work-place knowledge and skills.

## Program Student Learning Outcomes

1 **Identify appropriate safety, maintenance, manufacturing process, and quality procedures.**

2 **Apply specific safety, maintenance, manufacturing process, and quality procedures in a manufacturing setting.**

## Program Configurations

## Single Semester - Any Start

### Credits

| | |
|---|---|
| Technical Course | 8.00 |
| **Total Credits** | **8.00** |

### Semester 1

| Course # | Course Title | Credits | Function |
|---|---|---|---|
| CMAE 1514 | **Safety Awareness** | 2.00 | Technical Course |
| CMAE 1518 | **Manufacturing Process and Production** | 2.00 | Technical Course |
| CMAE 1522 | **Quality Practices** | 2.00 | Technical Course |
| CMAE 1526 | **Maintenance Awareness** | 2.00 | Technical Course |

## Program Course List

| Number | Title | Credits | Pre/Corequisites |
|---|---|---|---|
| **CMAE 1514** | **Safety Awareness** | 2.00 | None |
| **CMAE 1518** | **Manufacturing Process and Production** | 2.00 | None |
| **CMAE 1522** | **Quality Practices** | 2.00 | None |
| **CMAE 1526** | **Maintenance Awareness** | 2.00 | None |

from CLC

# Manufacturing Foundations Certificate - 8 Credits

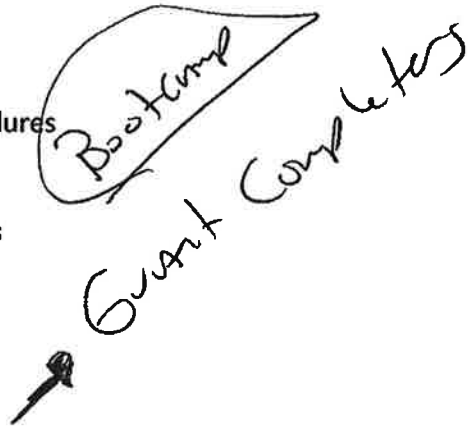
**Program Description**:

This program is designed to meet the entry level needs of students entering into the manufacturing environment from a variety of directions. Students completing this certificate will have a broad background in the manufacturing production enterprise. Strong foundation skills that explore the four key aspects of the manufacturing production are the core of student learning in this certificate. Successful completion of this certificate will prepare the student for entry level employment in the manufacturing sector, possible advancement of position, and/or industry certification through the National Skill Standards Program.

The nationwide National Skills Standards System, based on industry-defined and federally endorsed national standards, offers both entry-level and incumbent workers the opportunity to demonstrate they have acquired the skills increasingly needed in the high growth, technology-intensive jobs of the 21st century. The National Skill Standards System awards certificates to individuals who pass any of its four Production modules: Safety Awareness; Quality Practices; Manufacturing Processes; and Maintenance Awareness. Successful completion of all four certificates earns the client a Certificate Production Technologist certification.

## Program Outcomes:

Identify and apply appropriate safety procedures
Analyze and apply specific manufacturing process procedures
Identify and apply specific quality procedures
Identify maintenance processes and procedures
Understand the coordination of industry safety programs




## Recommended Course Sequence:

| | |
|---|---|
| CMAE1514 | Safety Awareness |
| CMAE1518 | Manufacturing Processes |
| CMAE1522 | Quality Practices |
| CMAE1526 | Maintenance Awareness |