Curriculum Development Form
Modify an Existing Program (Academic Award)

Program Name (Academic Award):
Mechatronics Industrial Maintenance Certificate

CIP Code: 15.0406

Type of Academic Award: □ AA □ AAS □ AFA □ AS □ Diploma □ Certificate

Current Location: □ Faribault □ North Mankato

Proposed Location: □ Faribault □ North Mankato

Current Credits: 19

Proposed Credits: 25

Date of Proposal: 2/18/2015

Proposed Implementation Date: 8/1/2015

Contact Person: Alex Goff

What is the modification being proposed?
Add the 4 MSSC core courses, remove MECA1240, rename MECA2420.

What impact will the modification have?
Allow students to come into the program with a MSSC credential

Describe the rationale for this modification:
Based on national and regional industry input

Attach additional material if necessary

As Faculty Developer, by signing this Modify an Existing 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

Continue the Curriculum Development Process
☐ Completed the comparison template outlining old program plan vs. new program plan, noting changes between the old and new
☐ 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.)

Faculty Developer Signature 2·19·15

Date
As Primary Department Chair, by signing this Modify an Existing 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
☐ For LAS programs, signature of all LAS Department Chairs included

☑ For technical programs, the change was discussed at Advisory Committee meeting (provide meeting minutes)

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

[Signature]
Primary Department Chair Signature

[Date]
Date

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

For AA and AFA Degrees Only — As a LAS Department Chair, by signing this Modify an Existing 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):

[Signature]
LAS Department Chair Signature

[Date]
Date

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

[Signature]
LAS Department Chair Signature

[Date]
Date

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

[Signature]
LAS Department Chair Signature

[Date]
Date

If all four LAS Department Chairs do not support the modified program proposal, faculty developer can elevate the proposal to AASC for resolution.
As Academic Dean/Director, by signing this Modify an Existing 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):

ademic Dean/Director Signature              Date

If Academic Dean/Director does not support the modified 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. Place signed original forms in Curriculum Committee mailbox.

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

Curriculum Committee Chair Signature              Date

Vice President of Student and Academic Affairs Signature              Date

President Signature              Date

The following steps are possible post-approval steps

Modify an Existing Program
   — Credit length change

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

Modify an Existing Program
   — No credit length change

Student Affairs (documentation posted on CC website)
   • ISRS; DARS; eCatalog

Scope and Sequence for Perkins Programs of Study
South Central College
Mechatronics Program
Mechatronics Industrial Maintenance Certificate Crosswalk

Existing Award
Mechatronics
Industrial Maintenance Certificate
AY 14-15 Curriculum
19 Credits
Existing PC:

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<th>Course Title</th>
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</tr>
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<td>MECA 2120</td>
<td>Fluid Power I</td>
<td>3</td>
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</tr>
<tr>
<td>MECA 2240</td>
<td>Senior Project (1-5 credits)</td>
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<td>new</td>
</tr>
<tr>
<td>Required MATH Course</td>
<td>MATH 1050 Math for Technical Careers</td>
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</table>

Total Credits 19

Proposed Award (New from Existing)
Mechatronics
Industrial Maintenance Certificate
AY 15-16 Curriculum
25 Credits
New PC:

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</table>

Total Credits 25
North Mankato Campus  
Mechatronics Advisory Committee Meeting  
Monday, December 8, 2014  
2:00 pm – 4:00 pm  
A-136

**MINUTES**

**Call Meeting to Order:**  
Mr. Scott Cooper called the meeting to order at 2:00 pm.

**Welcome & Introductions:**  
Mr. Doug Laven welcomed the group and thanked them for all their support of the Mechatronics program at South Central College (SCC).

**Present:** John Froehlich (E.I. Microcircuits), Scott Cooper (3M New Ulm), Rollie DuChene (3M New Ulm), Tom Mayer (3M Hutchinson), Bob Kosek (3M Hutchinson), Brian Voss (Itron, Inc.), Terry Treanor (Condux Tesmec), Dean Barbara Embacher (SCC), Doug Laven (SCC), Jerry Soost (SCC), Nicole Tachen (SCC)

**Approval of May 7, 2014 Minutes and Agenda:**  
Mr. Cooper asked for a motion to approve the May 7, 2014 meeting minutes and May 7, 2014 agenda. A motion was made to approve the minutes and agenda by Mr. DuChene, seconded by Mr. Froehlich and passed with no opposition and no abstentions.

**Program Update –**

**Introduction of Mechatronics Students:**  
Studying for finals prevented students from joining this advisory board meeting.

**Grant Update:**  
Dean Embacher shared that South Central College was awarded a 15M dollar TAACCCT grant. She described the Certified Production Technician Core Curriculum and how it would impact the current Mechatronics program along with the other manufacturing related programs at South Central College. Most of the curriculum is currently embedded in the courses, but will be removed to create four new classes. These four core classes will be used at twelve other colleges across the state as a pre-requisite to the Mechatronics program and several others. A motion was made to approve the new core curriculum by Mr. Mayer, seconded by Mr. DuChene and passed with no opposition and no abstentions.

**New Business –**

**Faculty Changes:**

Dean Embacher relayed that, faculty member, Mr. David Ewel would be leaving the program and his
last day would be December 19, 2014. We are currently looking for new faculty both full-time and adjunct. Please send anyone interested to our website for further information. Mr. Cooper asked if additional space is being considered for Mechatronics on the North Mankato campus. Dean Embacher explained that we are currently number four on the bond proposal for the state. If we do not get on this bond we will be high on the list for 2016 bond proposal.

**Mechatronics on the Faribault Campus:**
Courses on the Faribault campus for Mechatronics are expected to begin in Fall of 2015.

**Update on Online Classes:**
Mr. Laven shared two success stories with the group regarding the online PSEO students. Several students have indicated finding a niche in Mechatronics and want to continue the program. An independent evaluator out of Chicago is evaluating our online and face-to-face courses to rate success.

**Curriculum:**
Solidworks will no longer be offered as a requirement for the program, but we will continue to offer it as an elective. Changes will also be made to the current Robotics class and we will focus on automation. These were both suggestions that came out of the Program Review earlier this year. Nicole will send out the SWOT analysis we received from the committee.

**Industry Recognized Standardized Assessment:**
We will be using PMMI as our industry recognized assessment in the Mechatronics program. We have found that they line up very closely with our program and core curriculum.

**Matching Funds:**
We still have the matching funds program available to us. We already have 80K dollars to spend on mechanical trainers. Donations are still being accepted. Mr. Voss asked to have a list of items we are looking to be sent out.

**Voice of the Customer:**
We are growing our Center for Business and Industry and are working to break down our courses into smaller modules so that a student can come take a module at a time for credit.

**Meeting Adjournment:**
Mr. Scott asked to adjourn the meeting. A motion was made by Mr. DuChene, seconded by Mr. Voss and passed with no opposition and no abstentions.