CURRICULUM COMMITTEE CHECKLIST

NAME OF PROGRAM: Mechatronics

Date: March 29, 2013

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Step 1  Reviewed change at division meeting.  
YES  NO  
X  

Step 2  Presented as informational item at Division Chair Meeting(s) and checked if it affects other departments. Like programs must meet with Division Chairs on all affected campuses (North Mankato and Faribault).

Division Chair’s signature

YES  NO  

Step 3  Instructional Dean reviewed and indicated need for Curriculum Committee approval.  
YES  NO  
X  

Instructional Dean’s signature

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Step 4  Advisory Committee approval indicated in meeting minutes if necessary. Minutes provided to Curriculum Committee.

YES  NO  
X  

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Step 5  Curriculum Committee made recommendations (changes, additional approvals, etc.). If no, skip to Step 7.

YES  NO  

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Step 6  Committee’s recommendations completed. (Skip if not applicable.)

YES  NO  

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Step 7  Curriculum Committee approved.

CURRICULUM COMMITTEE Chair’s signature

YES  NO  

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Step 8  Minutes and necessary materials provided to VP of Academic Affairs.

YES  NO  

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Step 9  Vice President of Academic Affairs approved.

YES  NO  

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Step 10 New  Course Maximum Enrollment to Shared Governance.

YES  NO  

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Step 11  President’s approval for all changes requiring MnSCU approval.

President’s signature

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Name change to

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Appendix B

New Program or Program Change Proposal Form

Date of Proposal: March 29, 2013

Author: Doug Laven

Proposal Type: _____ New Program  X  Program Redesign  _____ Suspend Program  
               _____ Reinstat Program  ____ Add Emphasis  _____ Delete Emphasis

Contact for the Program: Doug Laven

Program Name: Mechatronics \ Industrial Maintenance Certificate  CIP Code: _____
Division in Which Program is Currently or Will Be Held: Science, Technology, Engineering and Math

Proposal Start (Term/Year): Fall 2013

Program Description: This is a new certificate that will be offered by the Mechatronics program.

Degrees Offered: ____ AS  _____ AAS  _____ AA  _____ Diploma  X  Certificate

Program Location: X  Faribault Campus  X  North Mankato Campus  _____ Online

Prerequisites: None

Number of Credits: 19

If there is a Program Change, Summarize Changes to the Program. ________________________________

Rationale for Program Development or Program Change. Industry and Workforce Center request.

What Impact Will this New Program or Change Have on Other Programs or Areas? The Center for Business and Industry will work together to develop the Boilers License Prep course.

Are There Articulations With Other Colleges? No.

Attach Program Design to this Form. Below are Some Recommended Items:
   a. List of program requirements (i.e.: what the catalog page shows for each program).
   b. Cross walk from previous program curriculum to new (how students already started in the old program can finish after this new program begins).
   c. All required course numbers and titles.
   d. Additional supporting information, such as minutes documenting recommendation for proposal.
Appendix B

**New Course or Course Change Proposal Form**

Date of Proposal: April 24, 2013

Author: Doug Laven

Proposal Type: (*) New Course

Contact for the Course: Doug Laven

Course Designator, Number and Title (i.e.: ACCT 1800, Business Law): MECA 1150, Boiler Operation Principles.

Number of Credits: 1

Prerequisites: None

Course Description: This 19 credit certificate is designed to prepare students to enter the Industrial Maintenance field in an entry-level position and to enhance the skills of students already employed in the field. This certificate will allow successful students be proficient in many different areas including plant safety, reading technical drawings, mechanical drives, bearings, lubrication, alignment, pneumatics, industrial electricity, motor controls, boilers and welding. This stackable certificate allows a pathway for students to continue their education in Mechatronics.

Grading Method: Grade x Pass/Fail

Scheduling: Fall Spring Summer Alternate Years Variable On Demand x

Instructional Type: Lecture Lab Lecture/Lab Internship Seminar

(*) Class Maximum: (For New Courses Only) / All Unlimited faculty members of a program or discipline must sign.

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Faculty Signature</th>
<th>Class Max</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doug Laven</td>
<td></td>
<td>24</td>
<td>April 24, 2013</td>
</tr>
</tbody>
</table>

Dean's Name: [Signature]

If there is not enough space provided, please use the back of this form for additional signatures or click on a row with the right button of the mouse, select insert and then select insert rows below to add rows to the table.

<table>
<thead>
<tr>
<th>Is this Course Proposed as a Liberal Arts Course?</th>
<th>Yes</th>
<th>No x</th>
</tr>
</thead>
</table>

If Yes, Which MnTC Area/Areas Will it Fulfill (http://www.mntransfer.org)?

<table>
<thead>
<tr>
<th>Is This Course a Requirement/Elective for a Specific Program or Programs?</th>
<th>Yes</th>
<th>No x</th>
</tr>
</thead>
</table>

If Yes, Which Program(s)?

Describe What is Changing/Being Added, and the Rationale: This course has been developed for individuals who want to supplement their Industrial Maintenance Certificate.

<table>
<thead>
<tr>
<th>What Impact Will This New Course or Change Have on Other Programs or Areas?</th>
<th>None</th>
</tr>
</thead>
</table>
### Mechatronics \ Industrial Maintenance Certificate

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECA 1122</td>
<td>Electricity-Devices and Circuits I</td>
<td>3</td>
</tr>
<tr>
<td>MECA 2120</td>
<td>Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>MECA 1220</td>
<td>Mechanical systems</td>
<td>3</td>
</tr>
<tr>
<td>MECA 2240</td>
<td>Senior Project (Internship)</td>
<td>5</td>
</tr>
<tr>
<td>MECA 1140</td>
<td>GD&amp;T</td>
<td>1</td>
</tr>
<tr>
<td>MECA 1240</td>
<td>Quality Concepts in Manufacturing</td>
<td>2</td>
</tr>
<tr>
<td>CIM 2550</td>
<td>Applied Welding</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

### Elective Courses

- MECA 1150  **Boiler Operation Principles**  1