CURRICULUM COMMITTEE CHECKLIST

NAME OF PROGRAM: Mechatronics

Date: 10/26/11

Step 1  Reviewed change at division meeting.

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

Step 3  Instructional Dean reviewed and indicated need for Curriculum Committee approval.

Instructional Dean’s signature

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

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

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

Step 7  Curriculum Committee approved.

Curriculum Committee Chair’s signature

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

Step 9  Vice President of Academic Affairs approved.

Vice President of Academic Affairs’ signature

Step 10 New Course Maximum Enrollment to Shared Governance.

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

**New Course or Course Change Proposal Form**

**Date of Proposal:** 10/25/11

**Author:** Doug Laven

**Proposal Type:** | *New Course | Modify Course X | Delete Course
---|---|---|---

**Contact for the Course:** Doug Laven

**Course Designator, Number and Title (i.e.: ACCT 1800, Business Law):**
MECA 2230 Robotics

**Number of Credits:** 4

**Prerequisites:** MECA 2150 - MECHATRONICS SYSTEM OPERATIONS II

**Course Description:** This course will provide students with the principles of programming and control of automated systems and multi-axis robotic systems in an industrial environment. The student will gain the ability to simulate program, and implement various types of automated machine systems, integrate actuators and sensors commonly found in robotic systems, and setup an automated robotic work cell. The student will also perform fundamental automated system troubleshooting procedures. Technical writing skills and safety procedures will be implemented throughout the course. This course builds on the student's understanding of basic electrical, mechanical, pneumatic, and programming concepts. (Prerequisites MECA 2150 - MECHATRONICS SYSTEM OPERATIONS II)

**Grading Method:**

<table>
<thead>
<tr>
<th>Grade X</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall X</td>
<td>Spring X</td>
</tr>
<tr>
<td>Summer</td>
<td>Alternate Years</td>
</tr>
<tr>
<td>Variable</td>
<td>On Demand</td>
</tr>
</tbody>
</table>

**Instructional Type:**

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Lab</th>
<th>Lecture/Lab</th>
<th>Internship</th>
<th>Seminar</th>
</tr>
</thead>
</table>

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

**Faculty Name**

**Faculty Signature**

**Class Max**

**Date**

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**Dean's Name**

**Dean's Signature**

**Date**

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*Suzanne Nordblom

10/26/11

*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.*

**Is this Course Proposed as a Liberal Arts Course:**

**Yes** | **No**

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

**Yes** | **No**

**If this Course is a Requirement/Elective for a Specific Program or Programs?**

**Yes** | **No**

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<table>
<thead>
<tr>
<th>If Yes, Which Program(s)?</th>
<th>Mechatronics Engineering Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe What is Changing/Being Added, and the Rationale:</td>
<td>The course credits are going from 3 to 4 credits.</td>
</tr>
<tr>
<td>What Impact Will This New Course or Change Have on Other Programs or Areas?</td>
<td>None</td>
</tr>
</tbody>
</table>

➢ Attach Common Course Outline to this Form.
Appendix B

New Course or Course Change Proposal Form

Date of Proposal: September 27, 2011

Author: David Ewel

Proposal Type: | New Course *Modify Course Delete Course

Contact for the Course: David Ewel or Doug Laven

Course Designator, Number and Title (e.g.: ACCT 1800, Business Law): MECA 2233, Robotics & Industrial Automation

Number of Credits: 4

Prerequisites: MECA 2150 - MECHATRONICS SYSTEM OPERATIONS II

Course Description: This course will provide students with the principles of programming and control of automated systems, process control systems and multi-axis robotic systems used in an industrial environment. The student will gain the ability to program and implement various types of automated machine systems, integrate actuators and sensors commonly found in automated systems, and setup an automated robotic work cell. The student will also perform fundamental automated system troubleshooting procedures. Technical writing skills and safety procedures will be implemented throughout the course. This course builds on the student’s understanding of basic electrical, mechanical, pneumatic, and programming concepts.

Grading Method: | *Grade Pass/Fail

Scheduling: Fall *Spring Summer Alternate Years Variable On Demand

Instructional Type: Lecture: 2 Lab: 1 Lecture/Lab: 1 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>
</table>

Dean's Name Dean's Signature Date

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.

Is this Course Proposed as a Liberal Arts Course: Yes *No

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

Is This Course a Requirement/Elective for a Specific Program or Programs? *Yes No

If Yes, Which Program(s)? Mechatronics

Describe What is Changing/Being Added, and the Rationale: Additional content in the areas of process control systems and troubleshooting of automated systems is being added.

What Impact Will This New Course or Change Have on Other Programs or Areas? Other than additional lecture/lab requirement in room A-136, none.

Attach Common Course Outline to this Form.