MONTANA BOARD OF REGENTS
LEVEL II REQUEST FORM

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<th>Item Number:</th>
<th>148-2006-R0910</th>
<th>Date of Meeting:</th>
<th>Sept. 22-23, 2010</th>
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<tr>
<td>Institution:</td>
<td>Montana State University-Bozeman</td>
<td>CIP Code</td>
<td>14.4201</td>
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<tr>
<td>Program Title:</td>
<td>Minor in Mechatronics</td>
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Level II proposals require approval by the Board of Regents.

**Level II action requested (check all that apply):** Level II proposals entail substantive additions to, alterations in, or termination of programs, structures, or administrative or academic entities typically characterized by the (a) addition, reassignment, or elimination of personnel, facilities, or courses of instruction; (b) rearrangement of budgets, cost centers, funding sources; and (c) changes which by implication could impact other campuses within the Montana University System and community colleges. Board policy 303.1 indicates the curricular proposals in this category:

- [ ] 1. Change names of degrees (e.g. from B.A. to B.F.A.)
- [x] 2. Implement a new minor or certificate where there is no major or no option in a major;
- [ ] 3. Establish new degrees and add majors to existing degrees;
- [ ] 4. Expand/extend approved mission; and
- [ ] 5. Any other changes in governance and organization as described in Board of Regents’ Policy 218, such as formation, elimination or consolidation of a college, division, school, department, institute, bureau, center, station, laboratory, or similar unit.

Specify Request:

Montana State University-Bozeman seeks approval to establish a Minor in Mechatronics for the students majoring in Mechanical, Electrical, and Computer Engineering (ME, EE, and CpE) at Montana State University. The Minor will complement the ongoing cross-disciplinary activities of the College of Engineering, providing opportunities for students from ME, EE, and CpE departments. The objective of the proposed Minor program is to identify a key set of existing courses in the undergraduate curricula of ME, EE, and CpE, so that interested students can acquire the cross-disciplinary knowledge and skills necessary for product design, development, and manufacturing. This program will allow engineering students to expand their opportunities and knowledge base to be productive engineers in a wide variety of job descriptions throughout the communities of Montana. The minor will be offered within the framework of the current catalogs, curricula, courses, and teaching schedules of the Mechanical and Electrical Engineering programs.
CURRICULUM PROPOSALS

1. Overview

2. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

3. Need
   a. To what specific need is the institution responding in developing the proposed program?
   b. How will students and any other affected constituencies be served by the proposed program?
   c. What is the anticipated demand for the program? How was this determined?

4. Institutional and System Fit
   a. What is the connection between the proposed program and existing programs at the institution?
   b. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.
   c. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).
   d. How does the proposed program serve to advance the strategic goals of the institution?
   e. Describe the relationship between the proposed program and any similar programs within the Montana University System. In cases of substantial duplication, explain the need for the proposed program at an additional institution. Describe any efforts that were made to collaborate with these similar programs; and if no efforts were made, explain why. If articulation or transfer agreements have been developed for the substantially duplicated programs, please include the agreement(s) as part of the documentation.

5. Program Details
   a. Provide a detailed description of the proposed curriculum. Where possible, present the information in the form intended to appear in the catalog or other publications. NOTE: In the case of two-year degree programs and certificates of applied science, the curriculum should include enough detail to determine if the characteristics set out in Regents’ Policy 301.12 have been met.
b. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

6. Resources
   a. Will additional faculty resources be required to implement this program? If yes, please describe the need and indicate the plan for meeting this need.

   b. Are other, additional resources required to ensure the success of the proposed program? If yes, please describe the need and indicate the plan for meeting this need.

7. Assessment
   How will the success of the program be measured?

8. Process Leading to Submission
   Describe the process of developing and approving the proposed program. Indicate, where appropriate, involvement by faculty, students, community members, potential employers, accrediting agencies, etc.