

**ITEM 148-2006-R0910**

**Minor in Mechatronics, Montana State University**

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**THAT**

The Board of Regents of Higher Education authorizes Montana State University to establish a Minor in Mechatronics

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**EXPLANATION**

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. Mechatronics is an emerging engineering field that has altered the traditional boundaries of engineering education, particularly in the disciplines of mechanical, electrical, and computer engineering. An ever expanding array of products comprising electro-mechanical systems is found in all aspects of our everyday life, ranging from automobiles to home appliances to entertainment systems.

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. Students in the relevant majors do not ordinarily take courses that cross the established discipline boundaries, so the proposed Mechatronics Minor provides a credential recognizing the integration of ME, EE, and CpE, within a contemporary engineering design methodology.

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.

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**ATTACHMENTS**

Level II Request Form  
Curriculum Proposals