DATE:	February 5, 2014
то:	Chief Academic Officers, Montana University System
FROM:	Neil Moisey, Deputy Commissioner for Academic, Research, & Student Affairs John Cech, Deputy Commissioner for Two-Year & Community College Education
RE:	Level I Approvals and Announcements

This memorandum is intended to inform you of the Level I changes in academic programs are under consideration for approved in the Office of the Commissioner of Higher Education since the January 2014 meeting of the Board of Regents. It also includes announcements that may be of interest to the Board. Any comments regarding items below must be received by the Office of the Commissioner of Higher Education no later than **(February 12, 2014)**. If you have any questions, we would be happy to answer them with the help of our colleagues in academic affairs. Comments and questions should be directed to Amber Dullum, Assistant to the Deputy Commissioners.

OCHE Approvals

Montana State University-Bozeman:

- Request to Re-title Major to Industrial and Management Systems Engineering ITEM #162-2010+R0314 | Level | Request Form
- Request to Establish Industrial and Management Systems Engineering Minor ITEM #162-2009+R0314| Level I Request Form |Curriculum Proposal| Attachment 1

Terminations, Moratoriums, and Consolidations

Great Falls College MSU:

- Notice of Intent to terminate the Collision and Refinishing Technology Certificate of Applied Science Step 1 ITEM #162-2901+R0314 | Level I Request Form
- Notice of Intent to terminate the Public Safety Communications Certificate Step 1 ITEM #162-2902+R0314 | Level I Request Form

Montana Tech of The University of Montana:

 Request to Place Diagnostic Medical Sonography Program into Moratorium ITEM #162-1505+R0314 | Level I Request Form

Campus Approval of Certificates

The University of Montana-Missoula:

 Request to Establish a Certificate in Language Rejuvenation and Maintenance ITEM #162-1001+R0314 | Level I Request Form

ITEM 162-2010+R0314 Request to Re-title Major to Industrial and Management Systems Engineering

THAT

The Board of Regents of Higher Education authorizes Montana State University Bozeman to change the name of the major from Industrial Engineering to Industrial and Management Systems Engineering.

EXPLANATION

The Department of Mechanical and Industrial Engineering at Montana State University requests approval to change the name of one of its majors from Industrial Engineering to Industrial and Management Systems Engineering. In light of the significant curricular changes and revised student outcomes, and to adopt a program name that more accurately reflects the curricular content and broad applicability of the degree, the name change is requested for this Bachelor of Science degree.

ATTACHMENTS

Level I Request Form

Item Number: 162-2010+R0314	Meeting Date: March 6-7, 2014	
Institution: Montana State University	CIP Code: 14.3501	

Program Title: Request to Re-title Major to Industrial and Management Systems Engineering

Level I proposals are those that may be approved by the Commissioner of Higher Education or the Commissioner's designee. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board. The institution must file the request with the Office of the Commissioner of Higher Education by means of a memo to the Deputy Commissioner for Academic and Student Affairs, by no later than five weeks prior to the final posting date for the next scheduled meeting of the Board. The Deputy Commissioner will review the proposal and respond to the proposing campus with any questions or concerns within one week, allowing the proposing campus one week to respond before the Item is posted for the BOR scheduled meeting.

X A. Level I (place an X for <u>all</u> that apply):

Level I proposals include campus initiatives typically characterized by (a) minimal costs; (b) clear adherence to approved campus mission; and (c) the absence of significant programmatic impact on other institutions within the Montana University System and Community Colleges. For Level I actions on degree programs or certificates, the process must begin when the proposing campus posts its intent on the MUS academic planning web site.

- χ 1. Re-titling existing majors, minors, options and certificates
 - 2. Adding new minors or certificates where there is a major (Submit with completed Curriculum Proposals Form)
 - **3.** Adding new minors or certificates where there is an option in a major (Submit with completed Curriculum Proposals Form)
- 4. Departmental mergers and name changes
- 5. Program revisions (Submit with completed Curriculum Proposals Form)
- 6. Distance or online delivery of previously authorized degree or certificate programs
 - **7.** Placement of program into moratorium (No Program Termination Checklist at this time document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)
 - 8. Filing Notice of Intent to Terminate/Withdraw existing majors, minors, options, and certificates (No Program Termination Checklist at this time)
 - **9. Terminate/withdraw existing majors, minors, options, and certificates** (Submit with completed Program Termination Checklist)

B. Level I with Level II documentation:

With Level II documentation circulated to all campus chief academic officers in advance, the Deputy Commissioner or designee may propose additional items for inclusion in the Level I process. For these items to move forward, the Deputy Commissioner or designee must reach consensus with the chief academic officers. When consensus is not achieved, the Deputy Commissioner or designee will move the item to the Level II review process.

1. Options within an existing major or degree (Submit with completed Curriculum Proposals Form);

- 2. Eliminating organizational units within larger institutions such as departments, divisions and colleges or schools with the exception of the Colleges of Technology where changes require Board action (Submit with completed Curriculum Proposals Form)
- 3. Consolidating existing programs and/or degrees (Submit with completed Curriculum Proposals Form)

C. Temporary Certificate or A.A.S. degree programs

Certificate or Associate of Applied Science Degree Programs may be submitted as Level I proposals, with memo and backup documentation, when they are offered in cooperation with and /or at the request of private or public sector partners and the decision point to offer the program is not consistent with the regular Board of Regents program approval process. Level I approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the normal program approval process as Level II Proposals.

All other Level I Certificate or Associate Degree programs may be placed on submission at any Board of Regents meeting. They will be placed on action agendas at subsequent meetings. All campuses agree to insure that all other campuses receive program information well in advance of submission.

D. Campus Certificates

Although certificate programs of 29 credits or fewer may be implemented by the individual campuses without approval by the board of regents, those certificates do need to be reported to the office of the commissioner of higher education and listed on the Montana University System's official degree and program inventory. These Level I proposals will be listed as information items at the next regular meeting of the board.

Specify Request:

The Department of Mechanical and Industrial Engineering at Montana State University requests approval to change the name of one of its majors from Industrial Engineering to Industrial and Management Systems Engineering. In light of the significant curricular changes and revised student outcomes, and to adopt a program name that more accurately reflects the curricular content and broad applicability of the degree, the name change is requested for this Bachelor of Science degree.

ITEM 162-2009+R0314 Request to Establish an Industrial and Management Systems Engineering Minor

THAT

The Board of Regents of Higher Education authorizes Montana State University to establish a minor in Industrial and Management Systems Engineering.

EXPLANATION

The Department of Mechanical and Industrial Engineering at Montana State University requests approval to offer a minor in Industrial and Management Systems Engineering. The new, non-teaching minor in Industrial and Management Systems Engineering consisting of 21 credits: 12 credits of required engineering management courses, one technical problem-solving elective and two management electives. The minor leverages existing courses and will be available only to non-majors.

ATTACHMENTS

Level I Request Form Curriculum Proposal Form Appendices

Item Number:	162-2009+R0314	Meeting Date:	March 6-7, 2014		
Institution:	Montana State University	CIP Code:	14.3501		
Program Title: New: Industrial and Management Systems Engineering					

+Level I proposals are those that may be approved by the Commissioner of Higher Education or the Commissioner's designee. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board. The institution must file the request with the Office of the Commissioner of Higher Education by means of a memo to the Deputy Commissioner for Academic and Student Affairs, by no later than five weeks prior to the final posting date for the next scheduled meeting of the Board. The Deputy Commissioner will review the proposal and respond to the proposing campus with any questions or concerns within one week, allowing the proposing campus one week to respond before the Item is posted for the BOR scheduled meeting.

x A. Level I (place an X for <u>all</u> that apply):

Level I proposals include campus initiatives typically characterized by (a) minimal costs; (b) clear adherence to approved campus mission; and (c) the absence of significant programmatic impact on other institutions within the Montana University System and Community Colleges. For Level I actions on degree programs or certificates, the process must begin when the proposing campus posts its intent on the MUS academic planning web site.

- 1. Re-titling existing majors, minors, options and certificates
- Adding new minors or certificates where there is a major (Submit with completed Curriculum
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 - **3.** Adding new minors or certificates where there is an option in a major (Submit with completed Curriculum Proposals Form)
- 4. Departmental mergers and name changes
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- 6. Distance or online delivery of previously authorized degree or certificate programs
 - 7. Placement of program into moratorium (No Program Termination Checklist at this time document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)
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- 1. Options within an existing major or degree (Submit with completed Curriculum Proposals Form);
 - 2. Eliminating organizational units within larger institutions such as departments, divisions and colleges or schools with the exception of the Colleges of Technology where changes require Board action (Submit with completed Curriculum Proposals Form)
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C. Temporary Certificate or A.A.S. degree programs

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D. Campus Certificates

Although certificate programs of 29 credits or fewer may be implemented by the individual campuses without approval by the board of regents, those certificates do need to be reported to the office of the commissioner of higher education and listed on the Montana University System's official degree and program inventory. These Level I proposals will be listed as information items at the next regular meeting of the board.

Specify Request:

The Department of Mechanical and Industrial Engineering at Montana State University requests approval to offer a minor in Industrial and Management Systems Engineering. The new, non-teaching minor in Industrial and Management Systems Engineering consisting of 21 credits: 12 credits of required engineering management courses, one technical problem-solving elective and two management electives. The minor leverages existing courses and will be available only to non-majors.

1. Overview

The four-year degree program in Industrial Engineering (IE) was established in 1923, one of the first academic programs in the country in this emerging field. By the 1940's, the field was well-established, and in 1950 the undergraduate Industrial Engineering program at MSU received accreditation by the Accreditation Board of Engineering and Technology (ABET). The program has maintained continuous accreditation since that time.

In 1967, the program name was changed to "Industrial and Management Engineering" to reflect the breadth of the field and the applicability of Industrial Engineering tools in many management functions of industrial, primarily manufacturing, operations. In 2000, ABET significantly modified its accreditation criteria, known at the time as EC2000. When the Industrial and Management Engineering program applied for accreditation renewal in 2003 under the new criteria, the College was informed that the program would need to be accredited under two sets of program specific criteria, Industrial Engineering and Engineering Management, if it wanted to retain the program name. Upon inspection of the curriculum relative to the new criteria, the faculty determined that the program easily met the Industrial Engineering criteria, but would not necessarily meet the Engineering Management criteria. Given the extreme late notice, the decision was made to change the name of the major to Industrial Engineering rather than risk losing accreditation. A request for name change to the Board of Regents was fast-tracked through the university approval system and approved at the September 2003 Board of Regents meeting.

The graduate program, which is not accredited by ABET, retained its name. Students still earn a Master of Science degree in Industrial and Management Engineering.

Since 2003, the IE program has experienced significant turnover in faculty. The currently faculty mix supports a stronger emphasis in the design of systems to effectively manage organizations. During the 2011-2012 academic year, the faculty conducted a major modernization of the Industrial Engineering curriculum to reflect the strengths of the current faculty mix, and to better anticipate and support future trends in the field. The significantly enhanced curriculum was approved through the university's approval process, and has been incorporated into the 2012-2014 catalog. The IE program educational objectives and student outcomes have also been updated (see Appendix A).

In light of the significant curricular changes and revised student outcomes, and to adopt a program name that more accurately reflects the curricular content and broad applicability of the degree, the faculty of the Industrial Engineering program requests a name change to include "Management Systems" in the Bachelor of Science degree title. Furthermore, the faculty would like to make a portion of the upgraded curriculum available to students from other majors interested in management of technical organizations. Thus we also propose an undergraduate minor in Engineering Management. 2. Provide a one paragraph description of the proposed program. Be specific about what degree, major, minor or option is sought.

We request a name change for the Industrial Engineering major to "Industrial and Management Systems Engineering." Beginning with the 2014-16 catalog, students would earn a Bachelor of Science degree in Industrial and Management Systems Engineering. And, we propose a new non-teaching minor in Engineering Management consisting of 21 credits: 12 credits of required engineering management courses, one technical problem-solving elective and two management electives. The minor leverages only existing courses, and will be available only to non-majors.

3. Need

A. To what specific need is the institution responding in developing the proposed program?

The name change in 2003 back to Industrial Engineering for the undergraduate degree, after three- and-a-half decades with "management" in the name, was unfortunate in a number of aspects. The field of Industrial Engineering has continued to broaden beyond its origins in manufacturing, particularly in the last two decades. Today, industrial engineers are employed across broad sectors of the economy, including transportation, finance, government, education and healthcare sectors to name a few. Our own graduates reflect this trend since only about 45% of current MSU graduates move into manufacturing for their first position. Primarily, industrial engineers analyze existing organizational systems, and design improved ways of producing goods or providing services that maximize value to customers while minimizing waste. Due to the broad applicability of industrial engineering tools, most industrial engineering graduates have job titles that are something other than "Industrial Engineer," including process engineer, project engineer, process improvement specialist, systems engineer, or project manager. It is therefore critical from both student recruitment and marketing standpoints that the degree name accurately reflects not only the curriculum, but also the career prospects for someone with this educational background.

B. How will students and any other affected constituencies be served by the proposed program?

Students will be positively impacted by having a degree name that is inherently more marketable across a broader spectrum of organizations. The word "industrial" continues to speak to the traditional manufacturing base which still employs many industrial engineering graduates. At the same time, because the existing degree name greatly limits the perceived market, "management systems" will speak to sectors in which industrial engineering as a field is perhaps not well-known but where the skills and knowledge of the field are highly applicable. At the same time, the modernized degree title will accurately reflect the fast career path into management of many of our graduates. The term "engineering" connotes the technical, analytical and problem-solving skills associated with persons with an engineering background.

At the same time, when MSU students are looking for a major, they will more readily associate the degree name with the curricular content. It is anticipated that this will

help prospective students associate the degree with appropriate career aspirations.

Finally, potential employers will be attracted by the degree and/or minor as increasingly employers of engineers are looking for graduates with the capability and interest to combine analytical and technical skills with business or management knowledge.

With respect to the engineering management minor, numerous reports have concluded that the engineer of the 21st century must have a broader skill set, one inclusive of business knowledge and strong interpersonal communication skills. ¹Thus, engineering students will benefit from the opportunity to broaden their education to better prepare themselves for engineering in the 21st century. Students in other technical majors may also benefit from the topics addressed in the Engineering Management minor.

¹See: National Academy of Engineering, The Engineer of 2020: Visions of Engineering in the New Century, The National Academies Press, 2004.

C. What is the anticipated demand for the program? How was this determined?

At present, Industrial Engineering has about 85 majors. This is down from the peak of 120 majors in 2003 when the program name change went into effect. We believe the steady decline in majors has been influenced by the inherent marketing challenges of the current degree name. With the change, we expect a steady increase back to approximately 120 majors.

The engineering management minor will be available to all majors other than I&MSE majors, pending approval of the name change and minor. We estimate that approximately 10% of all other engineering majors would be interested in the program, and that about half of those will actually pursue the minor. Therefore, we expect 20-30 minors per year.

4. Institutional and System Fit

A. What is the connection between the proposed program and existing programs at the institution?

The name change concerns only the Industrial Engineering program on the MSU-Bozeman campus. No other comparable programs exist within the MUS.

The proposed minor consists primarily of Industrial Engineering coursework that is specifically related to engineering management plus several electives courses from the College of Business and the Departments of Psychology and Sociology. The proposed

program has been discussed with leadership of these programs and their support provided. A number of courses in the minor are already listed as electives in other engineering and technology degrees as well as the leadership fellow's certificate at MSU.

B. Will approval of the proposed program require changes to any existing programs at the institution? If so, please describe.

Currently, the Industrial Engineering program is housed within the Department of Mechanical and Industrial Engineering of the College of Engineering at MSU. The proposed degree name change will require that all catalog information, websites, and print materials be updated to reflect the new program name. We would request a change in the rubric used for our courses from EIND to EIMS ("Engineering: Industrial & Management Systems"). Otherwise, no impact to the department or to other programs is expected.

C. Describe what differentiates this program from other, closely related programs at the institution (if appropriate).

Currently, there is no minor focused on engineering management at the MSU-Bozeman campus. The College of Business offers a minor in Business Administration, which bears some similarity to the proposed minor. Requirements of the Business Administration minor are:

BUSINESS ADMINISTRATION MINOR

Students seeking a minor in business administration must complete the following courses.

	Credits
Take one of the following:	
BMGT 205Professional Communication Fundamentals	3
WRIT 201College Writing II	3
WRIT 221Intermediate Tech Writing	3
ACTG 201Principles of Fin Acct	3
ACTG 202Principles of Managerial Accounting	3
BMGT 335Management and Organization*	3
BMKT 325Principles of Marketing*	3
BFIN 322Business Finance*	3
BGEN 361Principles of Business Law*	3
ECNS 202Principles of Macroeconomics	3
ECNS 204ISMicroeconomics	3
STAT 216QIntroduction to Statistics	3
	30

*Of the four required courses denoted with an *, three must be taken in residence at MSU.

The business minor exposes students to a broad range of business functions, including accounting, marketing, and finance. The proposed minor focuses more narrowly on effective administration of the engineering or operations functions of an organization, and is designed to specifically equip engineers and other technically trained individuals to assume leadership roles within their organization. While the two minors share concepts, they have only one elective course in common.

D. How does the proposed program serve to advance the strategic goals of the institution?

The proposed changes support the vision of Montana State University through their effort to promote greater understanding of the human aspects of complex problem solving. The changes align to strategic goals as follows:

The changes are expected to increase enrollment of students in Industrial and Management Systems

Engineering which will directly improve metric A.1.1 and positively influence:

- MSU's goal of preparing students for careers and future study:
 - In recent years, Industrial Engineering graduates have achieved some of the highest pass rates of the Fundamentals of Engineering Exam in the College (100% S12). More students in the program will directly influence Metric L.1.1
 - For the past two academic years, graduates have achieved nearly 100% placement in careers or graduate school. More students in the program will directly influence both metrics L.3.1 and L.3.2.
 - MSU's student engagement goal The current IE curriculum includes one service learning designated course and three courses in the leadership fellows program. The minor requires two of these courses, helping to drive deeper student engagement and improve metrics E.1.3 and E.3.1 – 2.
 - MSU's Stewardship Goal Recent senior capstone projects in IE have included efforts to streamline campus projects with Open MSU (positive impact to metric S.3.2) and work with MSU's Sustainability Center to dramatically increase campus recycling collections (positive impact to metric S.4.2). Increasing enrollments in the program will enable greater leverage of these resources in similar areas.

The creation of the minor in Engineering Management will promote MSU's integration goal – A growing minor in Engineering Management promotes increased work across disciplines, improving metric I.2.2

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.

No comparable program exists within the MUS.

- 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.

The degree name change requires no changes to the present curriculum; ²which is presented in Appendix B. For comparison, the curriculum from the 2010-2012 catalog is shown in Appendix C to illustrate the extent of curricular changes made for the 2012-2014 catalog.

The draft catalog description for the Engineering Management minor follows.

ENGINEERING MANAGEMENT MINOR (non-teaching)

The Mechanical and Industrial Engineering Department within the College of Engineering offers a non- teaching minor in Engineering Management. The field of Engineering Management is focused on the managerial, financial and systems level aspects of engineering problem solving. Students are required to complete 21 credits for the minor by taking a core group of four courses and selecting an additional three elective courses. Students completing the minor will find themselves better prepared to successfully work in a technical leadership capacity.

The Engineering Management minor is not available to Industrial & Management Systems Engineering majors. Students earn the minor by completing the following courses:

Required Pre-Requisite Courses One of the following:					
EGEN 350	Applied Engineering Data Analysis				
EIND 354	Engineering Probability and Statistics I				
One of the followin	g:				
M 166Q	Calculus for Technology II				
M 172Q	Calculus II				
Recommended Cor	e Elective Courses				
One or more of the	following:				
BGEN 242D	Introduction to International Business				
PSYX 101IS	Introductory Psychology				
SOCI 101IS	Introduction to Sociology				
Required Courses (12 credits)				
EGEN 325	Engineering Economic Analysis				
EIND 300	Engineering Management & Ethics				
EIND 373	Production Inventory Cost Analysis				
EIND 434	Project and Engineering Management				
Technical Problem Solving Elective (pick one, 3 credits)					
EIND 455	DOE For Engineers				
EIND 457	Regression & Multivariate Analysis for Engineers				
EIND 458	Production and Engineering Management				
EIND 477	Quality Assurance				

Managerial Problem Solving Elective Courses (pick two, 6 credits)				
BMGT 329	Human Resources Management			
BGEN 361	Principles of Business Law			
BMGT 406	Negotiation/Dispute Resolution			
BMGT 420	Leadership and Motivation			
BMGT 464	International Management			
ECNS 309	Managerial Economics			
EIND 425	Technology Entrepreneurship			
PSYX 360	Social Psychology			
PSYX 461	Indust & Organiz Psych			
PSYX 481	Judgment & Decision Making			
SOCI 345	Sociology of Organizations			
SOCI 370	Sociology of Globalization			

²See: <u>http://www.montana.edu/wwwcat/programs/mie.html#ime</u>

B. Describe the planned implementation of the proposed program, including estimates of numbers of students at each stage.

Changes are targeted for the 2014-2016 catalog. Students graduating under the 2012-2014 or earlier catalogs will receive degrees in Industrial Engineering. Students graduating under the 2014-2016 catalog will receive degrees in Industrial and Management Systems Engineering. The Engineering Management minor will become available starting in Fall 2014.

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.

The proposed name change will require faculty and staff time to update catalog descriptions, brochures, and other paperwork as well as to work with the Registrar in implementing the new course rubric. This will occur during the 2013-2014 academic year as part of the service requirement of the Program Coordinator, in time for implementation in Fall 2014. We anticipate the first graduates under the new degree name will be in Spring 2015.

Faculty and staff resources will also be required to administer the new minor, including advising students and certifying degree applications. It is anticipated that the efficiencies associated with Degree Works will mitigate the additional amount of workload required. Based upon recent experience with existing minors, we anticipate that approximately 0.10 FTE would be required in the first 1-2 years, reverting to 0.05 FTE once the minor is established. This, too, will be part of the service requirement of the Program Coordinator.

As course enrollments grow from these changes additional teaching resources may be required at some time in the future. If applicable, those resources will be obtained through existing procedures for obtaining instructional resources.

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.

Administrative staff support will also be required to answer student questions, process paperwork, locate alternative classrooms should enrollments increase sufficiently to require larger classroom space, process catalog updates, and generally support the program. It is anticipated that a net increase of approximately one person-hour per week will be required.

7. Assessment

How will the success of the program be measured?

Assessment of the new I&MSE degree will use the existing systems in place for the Industrial Engineering program, which has been continuously accredited since 1950. The senior accreditation officer of the Accreditation Board of Engineering and Technology (ABET) advised us of the following with respect to accreditation of the new degree name:

- The EAC Executive Committee has decided that when the word "systems" is added to the degree name, the lead society will remain the same and the systems engineering program criteria are not invoked.
- There is a distinct possibility that having "management" in the degree title with engineering will invoke the engineering management criteria
- The next review cycle for the IE program is scheduled for 2015-2016. If we have no graduates under the new name until 2015, then the College can make the name change request as part the Request for Evaluation. No special review need be requested.
- We should get the new name approved through the university's approval process, then submit a name change request to ABET.

In accordance with this advice, we will apply for accreditation of the new degree in the next accreditation cycle of ABET, scheduled for Fall 2015. That Request for Evaluation will include the new degree name. We will request evaluation under the Industrial Engineering program criteria, but will also be prepared to be evaluated under the Engineering Management program criteria. It is expected that the program will remain fully accredited.

The minor will initially be assessed by enrollment growth, then later (after year 4) by job placement and regular faculty review.

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.

- Nov. 2012 Industrial Engineering faculty vote unanimously to seek a degree name change to "Industrial and Management Systems Engineering."
- Dec. 2012 Accreditation Board contacted about prospective name change. We were informed that if no degrees are awarded before Spring 2015, that we could apply for accreditation of the new degree name in the normal cycle and not have to request a special review since we are due for an accreditation review in Fall 2015.
- Dec. 2012 Faculty benchmarked other degrees accredited under the same or similar name. Several programs bear the name "Industrial and Management Engineering" or similar, but none with the exact degree name. MSU would be unique in this regard.
- April 2013 Level I proposal reviewed by the Industrial Engineering faculty, and unanimously approved. The engineering management minor was reviewed by the Dean and representative faculty in the College of Business, and received their enthusiastic support to participate in an interdisciplinary project. The minor was also reviewed by the department heads of psychology and sociology, and received their support.
 May 2013 Level I proposed reviewed by Mechanical and Industrial Engineering department head, and received approval. The Dean of the College of Engineering reviewed and authorized the proposal to move forward. The proposal was sent to the entire
- June 2013 Accreditation Board contacted via email to confirm the process for name change. Response received and proposal updated accordingly.

faculty of the M&IE department for comment.

Sept 2013 Final review by the IE faculty and M&IE Department Head. Minor updates made based on this review and feedback from prior reviews. Submitted to the College Curriculum Committee.

APPENDIX A: Industrial Engineering Mission, Objectives and Outcomes

The mission of the Mechanical & Industrial Engineering Department is to serve the State of Montana, the region, and the nation by providing outstanding leadership and contributions in knowledge discovery, student learning, innovation and entrepreneurship, and service to community and profession. The Department's vision is to be a leader in discovery, learning, innovation, and service through a focus on core competencies, multi-disciplinary collaborations, and investment in the Departmental community. Within that context, the Industrial Engineering faculty has established the mission statement, objectives, and program outcomes stated below.

IE Program Mission

The mission of the undergraduate program in Industrial Engineering is to produce graduates well grounded in both classical and current industrial engineering knowledge and skills consistent with the land-grant mission of MSU. Graduates will be prepared to be productive citizens and contributors to the economic well-being of employers.

IE Program Educational Objectives

Industrial Engineering graduates will:

- I. Utilize industrial and management systems engineering tools and knowledge in their chosen career paths;
- II. Employ effective communication;
- III. Work in multidisciplinary professional teams;
- IV. Engage in life-long learning, including post-graduate education for some graduates;
- V. Contribute to industry and society, including involvement in professional and other service activities;
- VI. Design, manage, improve, and integrate systems across a broad range of organizations; and
- VII. Participate in ethical leadership in design and operational activities that contribute to their organization and community.

IE Student Outcomes

Students completing the Industrial Engineering program will demonstrate:

- (a) an ability to apply knowledge of mathematics, science, and engineering;
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data;
- (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
- (d) an ability to function on multidisciplinary teams ;
- (e) an ability to identify, formulate, and solve engineering problems from a systems perspective;
- (f) an understanding of professional and ethical responsibility;
- (g) an ability to communicate effectively;
- (h) the broad education necessary to understand the systems level impact of engineering solutions in a global, economic, environmental, and societal context;
- (i) a recognition of the need for, and an ability to engage in life-long learning;
- (j) a knowledge of contemporary issues;
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice;
- (I) an ability to design, develop, implement, and improve integrated systems that include people, materials, information, equipment and energy; and
- (m) an understanding of the systems used to effectively organize and deploy resources in production, service and other technological environments.

APPENDIX B

Industrial Engineering Curriculum, 2012-2014 catalog

Freshman Year	F	S	Junior Year	F	s
CHMY 141College Chemistry I		4	EGEN 310Intro to Engineering Design		3
Take one of the following:			EGEN 325Engineering Economic Analysis		3
CLS 101USCollege Seminar	3		EIND 300Engineering Management & Ethics	3	
COM 110USPublic Communication	3		EIND 354Engineering Probability & Statistics I	3	
WRIT 101WCollege Writing I*	3		EIND 364Principles of Operations Research I	3	
EIND 101Intro to Industrial Engineering	1		EIND 371Intro to Computer Integrated	3	
EIND 142Intro to Systems Engineering		2	Manufacturing	0	
M 171QCalculus I	4		EIND 410Interaction Design		2
M 172QCalculus II		4	EIND 413Ergonomics & Human Factors Eng	3	
EMEC 103CAE I - Engr Graphics Communication	n 2		Take one of the following:		
PHSX 220Physics I		4	EIND 455DOE for Engineers		3
University Core Elective	3	3	EIND 457Regression Multivariate Analysis for		3
	16	17	Eng		5
Sophomore Year	F	S	EIND 464Principles of Operations Research II		3
CSCI 111Programming with Java I		4	Industrial Engineering Cognate Elective**		3
EMAT 251Materials Structures and Properties	3			15	17
EGEN 201Engineering Mechanics-Statics	3		Senior Year	F	S
EGEN 205Mechanics of Materials		3	EIND 422Intro to Simulation	3	
EIND 313Work Design & Analysis		3	EIND 434Project & Engineering Management	3	
ETME 215 Manufacturing Processes		3	EIND 442Facility/Material Handling Systems	3	
M 273QMultivariable Calculus	4		Design	U	
<u>M 221</u> Linear Algebra		3	EIND 458Production & Engineering Management		3
PHSX 222Physics II	4		EIND 499R Capstone: Industrial Engineering		3
University Core Elective	3				~
	17	16	EIND 477Quality Assurance		3
			EGEN 488Fundamentals of Engineering Exam	~	0
			Engineering Core Elective	3	0
			Industrial Engineering Cognate Electives**	3	3
			University Core Elective		3

*Students exempt from MSU writing requirement may substitute WRIT 221.

**See <u>IE Cognate Policy</u> for details.

A minimum of 128 credits is required for graduation; 42 of these credits must be in courses numbered 300 or above.

15 15

APPENDIX C

Industrial Engineering 2012-2014 Catalog Credit Reductions and Additions <u>Summary Sheet</u>

Course Area/Title	Current	Cr	Proposed	Cr	Credit	Credit
					Reduction	Addition
Professional Practice / Management	EIND300	2	EIND300	3		+1
Engineering Statistics	EIND355	1			-1	
Operations Research	EIND264	3	EIND464	3	-3	+3
			Т	otals	-4	+4

	1	1	To	tals	-20	+20
University Core	Core 2.0	15	Core 2.0	12	-3	
	Cat. A & C	9	Cognate Elec.	9	-9	+9
Professional Electives	Category B	3	Eng. Science	3	-	-
Multidisciplinary Engineering Design			EGEN310	3		+3
			EIND457 ³			
Engineering Statistics	EIND454	3	EIND455 ² or	3	-3	+3
Human Factors / Ergonomics			EIND413	3		+3
Human Centered / Engineering Design			EIND410	2		+2
Electrical Engineering	EELE250	4			-4	
Math	M274	4	M221	3	-1	
			or WRIT221 ¹			
Writing	WRIT101W	3	WRIT101W	3	-	-

1 – Only students who are exempt from MSU writing requirements may substitute WRIT221 for WRIT101W.

2 – New course, co-convened with existing EIND554 course. Offered alternate years, beginning S13.

3 – New course. Offered alternate years, beginning S14.

Industrial Engineering Curriculum, 2010-2012 catalog

Freshman Year F	
CHMY 141-College Chemistry 1	
Take one of the following:	
CLS 101US-College Seminar	
COM 110US-Public Communication 3	
CS 160-Intro to CS 4	
WRIT 101W-College Writing L	
I&ME 101-Intro to IE 1	
I&ME 142-Intro to Production	
M 171Q-Calculus I 4	
M 172Q-Calculus II	
ME 117-ME Design Graphics	
ME 116-Engr Design Graphics Lab	
PHYS 211-Gen & Mod Phys I	
University Core Elective	
15 16	
	I&ME 454-Engineering Probability
Sophomore Year F	& Stats II
CHBE 213-Materials Science	1&ME 458–Production &
EE 250-Circuits Devices and Motors	Engr Management
EM 251-Statics & Particle Dynamics	ME 255-Manufacturing Processes
1&ME 264-Intro Models/Computers	University Core Electives
1&ME 313-Work Design & Analysia	
1&ME 271-Microcomputers in Industry 3	
M 273Q-Multivariable Calculus	Senior Year F S
M 274-Intro to Diffential Equations	I&ME 422-Intro to Simulation
PHYS 212-Geo & Mod Phys II	1&ME 434-Project & Engr Management 8
	1&ME 442-Facility/Material Handling Design
University Core Elective	
18 10	I&ME 444R-Senior Design Project2
	19-MV 445P Independent Senior Design
Junior Year F	I&ME 477-Quality Assurance
EM 253- Mechanics of Materials	ENGR 499-Engr Prog Assmnt
I&ME 300-Professional Practice	Professional Electives
& Responsibility	
I&ME 325-Engineering Economy	15 15
1&ME 354-Engineering Probability & Statistics 1	. 15 15
I&ME 355-Engineer Statistics Lab	A minimum of 128 credits is required for gradua-
18:ME 364-Principles of Operations Research I	tion; 42 of these credits must be in courses num-
acate sor-rinciples of Operations Research 1	bered 300 or above.

ITEM 162-2901+R0314 Notice of Intent to terminate the Collision and Refinishing Technology Certificate of Applied Science

THAT

Great Falls College MSU notifies the Board of Regents of its intent to terminate the Collision and Refinishing Technology Certificate of Applied Science.

EXPLANATION

The Board was notified that the Collision and Refinishing Technology Certificate of Applied Science program was placed into moratorium in March 2011. Great Falls College MSU will terminate the program.

ATTACHMENTS

Level I Request Form

Item Number:	162-2901+R0314	Meeting Date:	March 6-7, 2014
Institution:	Great Falls College MSU	CIP Code:	47.0603
Program Title:	Notice of Intent to Terminate: Collision	and Refinishi	ng Technology Certificate of Applied

Level I proposals are those that may be approved by the Commissioner of Higher Education or the Commissioner's designee. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board. The institution must file the request with the Office of the Commissioner of Higher Education by means of a memo to the Deputy Commissioner for Academic and Student Affairs, by no later than five weeks prior to the final posting date for the next scheduled meeting of the Board. The Deputy Commissioner will review the proposal and respond to the proposing campus with any questions or concerns within one week, allowing the proposing campus one week to respond before the Item is posted for the BOR scheduled meeting.

X A. Level I (place an X for <u>all</u> that apply):

Level I proposals include campus initiatives typically characterized by (a) minimal costs; (b) clear adherence to approved campus mission; and (c) the absence of significant programmatic impact on other institutions within the Montana University System and Community Colleges. For Level I actions on degree programs or certificates, the process must begin when the proposing campus posts its intent on the MUS academic planning web site.

- 1. Re-titling existing majors, minors, options and certificates
- 2. Adding new minors or certificates where there is a major (Submit with completed Curriculum Proposals Form)
- **3.** Adding new minors or certificates where there is an option in a major (Submit with completed Curriculum Proposals Form)
- 4. Departmental mergers and name changes
- 5. Program revisions (Submit with completed Curriculum Proposals Form)
 - 6. Distance or online delivery of previously authorized degree or certificate programs
 - 7. Placement of program into moratorium (<u>No Program Termination Checklist at this time –</u> document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)
- 8. Filing Notice of Intent to Terminate/Withdraw existing majors, minors, options, and certificates
 X (No Program Termination Checklist at this time)
 - 9. Terminate/withdraw existing majors, minors, options, and certificates (Submit with completed

Program Termination Checklist)

B. Level I with Level II documentation:

With Level II documentation circulated to all campus chief academic officers in advance, the Deputy Commissioner or designee may propose additional items for inclusion in the Level I process. For these items to move forward, the Deputy Commissioner or designee must reach consensus with the chief academic officers. When consensus is not achieved, the Deputy Commissioner or designee will move the item to the Level II review process.

1. Options within an existing major or degree (Submit with completed Curriculum Proposals Form);

- 2. Eliminating organizational units within larger institutions such as departments, divisions and colleges or schools with the exception of the Colleges of Technology where changes require Board action (Submit with completed Curriculum Proposals Form)
- **3. Consolidating existing programs and/or degrees** (Submit with completed Curriculum Proposals Form)

C. Temporary Certificate or A.A.S. degree programs

Certificate or Associate of Applied Science Degree Programs may be submitted as Level I proposals, with memo and backup documentation, when they are offered in cooperation with and /or at the request of private or public sector partners and the decision point to offer the program is not consistent with the regular Board of Regents program approval process. Level I approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the normal program approval process as Level II Proposals.

All other Level I Certificate or Associate Degree programs may be placed on submission at any Board of Regents meeting. They will be placed on action agendas at subsequent meetings. All campuses agree to insure that all other campuses receive program information well in advance of submission.

D. Campus Certificates

Although certificate programs of 29 credits or fewer may be implemented by the individual campuses without approval by the board of regents, those certificates do need to be reported to the office of the commissioner of higher education and listed on the Montana University System's official degree and program inventory. These Level I proposals will be listed as information items at the next regular meeting of the board.

Specify Request:

As required by Board of Regents Policy 303.4 Program Termination, Great Falls College MSU hereby notifies the Board of Intent to Terminate the Collision and Refinishing Technology Certificate of Applied Science.

ITEM 162-2902+R0314 Notice of Intent to Terminate: Public Safety Communications Certificate

THAT

Great Falls College MSU notifies the Board of Regents of its intent to terminate the Public Safety Communications Certificate.

EXPLANATION

The Board was notified that the Public Safety Communications Certificate program was placed into moratorium in March 2011. Great Falls College MSU will terminate the program.

ATTACHMENTS

Level I Request Form

Item Number:	162-2902+R0314	Meeting Date:	March 6-7, 2014
Institution:	Great Falls College MSU	CIP Code:	43.5031

Program Title: Notice of Intent toTerminate: Public Safety Communication Certificate

Level I proposals are those that may be approved by the Commissioner of Higher Education or the Commissioner's designee. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board. The institution must file the request with the Office of the Commissioner of Higher Education by means of a memo to the Deputy Commissioner for Academic and Student Affairs, by no later than five weeks prior to the final posting date for the next scheduled meeting of the Board. The Deputy Commissioner will review the proposal and respond to the proposing campus with any questions or concerns within one week, allowing the proposing campus one week to respond before the Item is posted for the BOR scheduled meeting.

X A. Level I (place an X for <u>all</u> that apply):

Level I proposals include campus initiatives typically characterized by (a) minimal costs; (b) clear adherence to approved campus mission; and (c) the absence of significant programmatic impact on other institutions within the Montana University System and Community Colleges. For Level I actions on degree programs or certificates, the process must begin when the proposing campus posts its intent on the MUS academic planning web site.

- 1. Re-titling existing majors, minors, options and certificates
- 2. Adding new minors or certificates where there is a major (Submit with completed Curriculum Proposals Form)
- **3.** Adding new minors or certificates where there is an option in a major (Submit with completed Curriculum Proposals Form)
- 4. Departmental mergers and name changes
- 5. Program revisions (Submit with completed Curriculum Proposals Form)
- 6. Distance or online delivery of previously authorized degree or certificate programs
 - 7. Placement of program into moratorium (No Program Termination Checklist at this time document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)
- 8. Filing Notice of Intent to Terminate/Withdraw existing majors, minors, options, and certificates
 X (No Program Termination Checklist at this time)
 - **9. Terminate/withdraw existing majors, minors, options, and certificates** (Submit with completed Program Termination Checklist)

B. Level I with Level II documentation:

With Level II documentation circulated to all campus chief academic officers in advance, the Deputy Commissioner or designee may propose additional items for inclusion in the Level I process. For these items to move forward, the Deputy Commissioner or designee must reach consensus with the chief academic officers. When consensus is not achieved, the Deputy Commissioner or designee will move the item to the Level II review process.

- 1. Options within an existing major or degree (Submit with completed Curriculum Proposals Form);
 - 2. Eliminating organizational units within larger institutions such as departments, divisions and colleges or schools with the exception of the Colleges of Technology where changes require Board action (Submit with completed Curriculum Proposals Form)
 - **3.** Consolidating existing programs and/or degrees (*Submit with completed Curriculum Proposals Form*)

C. Temporary Certificate or A.A.S. degree programs

Certificate or Associate of Applied Science Degree Programs may be submitted as Level I proposals, with memo and backup documentation, when they are offered in cooperation with and /or at the request of private or public sector partners and the decision point to offer the program is not consistent with the regular Board of Regents program approval process. Level I approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the normal program approval process as Level II Proposals.

All other Level I Certificate or Associate Degree programs may be placed on submission at any Board of Regents meeting. They will be placed on action agendas at subsequent meetings. All campuses agree to insure that all other campuses receive program information well in advance of submission.

D. Campus Certificates

Although certificate programs of 29 credits or fewer may be implemented by the individual campuses without approval by the board of regents, those certificates do need to be reported to the office of the commissioner of higher education and listed on the Montana University System's official degree and program inventory. These Level I proposals will be listed as information items at the next regular meeting of the board.

Specify Request:

As required by Board of Regents Policy 303.4 Program Termination, Great Falls College MSU hereby notifies the Board of Intent to Terminate the Public Safety Communication Certificate.

ITEM 162-1505+0314 Request to place Diagnostic Medical Sonography Program in Moratorium

THAT

Highlands College of Montana Tech wishes to notify the Board of Regents of its intent to place the Diagnostic Medical Sonography Program in Moratorium.

EXPLANATION

Notwithstanding various efforts, the Diagnostic Medical Sonography Program has not been successful in attracting the hospital healthcare provider with the resources necessary to move this program forward.

ATTACHMENTS

Level I Request Form

Item Number:	162-1505+R0314	Meeting Date:	March 6-7, 2014	
Institution:	Highlands College of Montana Tech	CIP Code:	51.0910	
Program Title:	Diagnostic Medical Sonography			

Level I proposals are those that may be approved by the Commissioner of Higher Education or the Commissioner's designee. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board. The institution must file the request with the Office of the Commissioner of Higher Education by means of a memo to the Deputy Commissioner for Academic and Student Affairs, by no later than five weeks prior to the final posting date for the next scheduled meeting of the Board. The Deputy Commissioner will review the proposal and respond to the proposing campus with any questions or concerns within one week, allowing the proposing campus one week to respond before the Item is posted for the BOR scheduled meeting.

X A. Level I (place an X for <u>all</u> that apply):

Level I proposals include campus initiatives typically characterized by (a) minimal costs; (b) clear adherence to approved campus mission; and (c) the absence of significant programmatic impact on other institutions within the Montana University System and Community Colleges. For Level I actions on degree programs or certificates, the process must begin when the proposing campus posts its intent on the MUS academic planning web site.

- 1. Re-titling existing majors, minors, options and certificates
- 2. Adding new minors or certificates where there is a major (Submit with completed Curriculum Proposals Form)
- **3.** Adding new minors or certificates where there is an option in a major (Submit with completed Curriculum Proposals Form)
- 4. Departmental mergers and name changes
- 5. Program revisions (Submit with completed Curriculum Proposals Form)
- 6. Distance or online delivery of previously authorized degree or certificate programs
 - 7. Placement of program into moratorium (No Program Termination Checklist at this time document steps taken to notify students, faculty, and other constituents and include this
- X information on checklist at time of termination if not reinstated)
 - 8. Filing Notice of Intent to Terminate/Withdraw existing majors, minors, options, and certificates (No Program Termination Checklist at this time)
 - **9. Terminate/withdraw existing majors, minors, options, and certificates** (Submit with completed Program Termination Checklist)

B. Level I with Level II documentation:

With Level II documentation circulated to all campus chief academic officers in advance, the Deputy Commissioner or designee may propose additional items for inclusion in the Level I process. For these items to move forward, the Deputy Commissioner or designee must reach consensus with the chief academic officers. When consensus is not achieved, the Deputy Commissioner or designee will move the item to the Level II review process.

- 1. Options within an existing major or degree (Submit with completed Curriculum Proposals Form);
 - 2. Eliminating organizational units within larger institutions such as departments, divisions and colleges or schools with the exception of the Colleges of Technology where changes require Board action (Submit with completed Curriculum Proposals Form)
 - **3.** Consolidating existing programs and/or degrees (*Submit with completed Curriculum Proposals Form*)

C. Temporary Certificate or A.A.S. degree programs

Certificate or Associate of Applied Science Degree Programs may be submitted as Level I proposals, with memo and backup documentation, when they are offered in cooperation with and /or at the request of private or public sector partners and the decision point to offer the program is not consistent with the regular Board of Regents program approval process. Level I approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the normal program approval process as Level II Proposals.

All other Level I Certificate or Associate Degree programs may be placed on submission at any Board of Regents meeting. They will be placed on action agendas at subsequent meetings. All campuses agree to insure that all other campuses receive program information well in advance of submission.

D. Campus Certificates

Although certificate programs of 29 credits or fewer may be implemented by the individual campuses without approval by the board of regents, those certificates do need to be reported to the office of the commissioner of higher education and listed on the Montana University System's official degree and program inventory. These Level I proposals will be listed as information items at the next regular meeting of the board.

Specify Request:

Notwithstanding various efforts, the Diagnostic Medical Sonography Program has not been successful in attracting the hospital healthcare provider with the resources necessary to move this program forward.

ITEM 162-1001+R0314 Request to Establish Certificate in Language Rejuvenation and Maintenance

THAT

The Board of Regents of Higher Education authorizes the University of Montana-Missoula to offer a certificate in Language Rejuvenation and Maintenance.

EXPLANATION

A significant number of Native and non-Native University of Montana students, as well as Native groups in Montana and neighboring states, have expressed concern about preventing the extinction of Native languages. This certificate is broadly designed to meet the needs of students who are interested in language revitalization as well as instructors of Native languages seeking language instruction skills. This unique certificate will draw current UM students and could also attract students to UM from tribes in Montana and the surrounding areas. This 18-credit certificate would be the only one in North America positioned within a Native American Studies Department.

ATTACHMENTS

Level I Request Form

Item Number:	162-1001+R0314	Meeting Date:	March 6-7, 2014
Institution:	University of Montana-Missoula	CIP Code:	16.0103

Program Title: Creation of a Certificate in Language Rejuvenation and Maintenance

Level I proposals are those that may be approved by the Commissioner of Higher Education or the Commissioner's designee. The approval of such proposals will be conveyed to the Board of Regents at the next regular meeting of the Board. The institution must file the request with the Office of the Commissioner of Higher Education by means of a memo to the Deputy Commissioner for Academic and Student Affairs, by no later than five weeks prior to the final posting date for the next scheduled meeting of the Board. The Deputy Commissioner will review the proposal and respond to the proposing campus with any questions or concerns within one week, allowing the proposing campus one week to respond before the Item is posted for the BOR scheduled meeting.

A. Level I (place an X for <u>all</u> that apply):

Level I proposals include campus initiatives typically characterized by (a) minimal costs; (b) clear adherence to approved campus mission; and (c) the absence of significant programmatic impact on other institutions within the Montana University System and Community Colleges. For Level I actions on degree programs or certificates, the process must begin when the proposing campus posts its intent on the MUS academic planning web site.

- 1. Re-titling existing majors, minors, options and certificates
- 2. Adding new minors or certificates where there is a major (Submit with completed Curriculum Proposals Form)
- **3.** Adding new minors or certificates where there is an option in a major (<u>Submit with completed</u> <u>Curriculum Proposals Form</u>)
- 4. Departmental mergers and name changes
- 5. Program revisions (Submit with completed Curriculum Proposals Form)
- 6. Distance or online delivery of previously authorized degree or certificate programs
 - 7. Placement of program into moratorium (No Program Termination Checklist at this time document steps taken to notify students, faculty, and other constituents and include this information on checklist at time of termination if not reinstated)
 - 8. Filing Notice of Intent to Terminate/Withdraw existing majors, minors, options, and certificates (No Program Termination Checklist at this time)
 - **9. Terminate/withdraw existing majors, minors, options, and certificates** (Submit with completed Program Termination Checklist)

B. Level I with Level II documentation:

With Level II documentation circulated to all campus chief academic officers in advance, the Deputy Commissioner or designee may propose additional items for inclusion in the Level I process. For these items to move forward, the Deputy Commissioner or designee must reach consensus with the chief academic officers. When consensus is not achieved, the Deputy Commissioner or designee will move the item to the Level II review process.

- 1. Options within an existing major or degree (Submit with completed Curriculum Proposals Form);
 - 2. Eliminating organizational units within larger institutions such as departments, divisions and colleges or schools with the exception of the Colleges of Technology where changes require Board action (Submit with completed Curriculum Proposals Form)
- **3. Consolidating existing programs and/or degrees** (Submit with completed Curriculum Proposals Form)

C. Temporary Certificate or A.A.S. degree programs

Certificate or Associate of Applied Science Degree Programs may be submitted as Level I proposals, with memo and backup documentation, when they are offered in cooperation with and /or at the request of private or public sector partners and the decision point to offer the program is not consistent with the regular Board of Regents program approval process. Level I approval for programs under this provision will be limited to two years. Continuation of a program beyond the two years will require the normal program approval process as Level II Proposals.

All other Level I Certificate or Associate Degree programs may be placed on submission at any Board of Regents meeting. They will be placed on action agendas at subsequent meetings. All campuses agree to insure that all other campuses receive program information well in advance of submission.

X D. Campus Certificates

Although certificate programs of 29 credits or fewer may be implemented by the individual campuses without approval by the board of regents, those certificates do need to be reported to the office of the commissioner of higher education and listed on the Montana University System's official degree and program inventory. These Level I proposals will be listed as information items at the next regular meeting of the board.

Specify Request:

A significant number of Native and non-Native University of Montana students have expressed concern about the state of Native languages. Montana has 12 tribes and UM last showed a Native enrollment of just under 800 students. Neighboring states (Idaho, Washington, Wyoming, North Dakota, and South Dakota) also have a significant number of federally and non-federally recognized tribes. Inclusive of Montana's 12 tribes, 50 of the groups are actively concerned about preventing their languages from slipping into extinction. In the past four years, Professor Greymorning has had contact with over 50 language communities as a result of requests to

run language teacher training workshops, which illustrates the interest and need for this certificate. The certificate is broadly designed to meet the needs of students who are interested in language revitalization as well as instructors of Native languages seeking language instruction skills. This unique certificate will draw current UM students and could also attract students from tribes in Montana and the surrounding areas. This 18-credit certificate would be the only one in North America positioned within a Native American Studies Department.