

From: Deputy Commissioner John Cech

To: Board of Regents

Please see below for an executive overview of the Level II items that are being proposed for your review and action at the September 2017 meeting of the Board of Regents. These items have been submitted by the campuses and reviewed by the Chief Academic Officers of the Montana University System and community colleges. OCHE staff has reviewed the items and provided a short analysis below relying on information submitted by the campuses. For more information and specific details on each item, please see the supporting documentation included on the Academic, Research, and Student Affairs Committee agenda.

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### **Montana State University**

#### **Bachelor of Arts in Computer Science**

Montana State University requests authorization to offer a Bachelor of Arts degree in Computer Science. This degree will enable students to gain depth in both computer science and a second area that is not a traditional STEM area and addresses the statewide, nationwide, and worldwide shortage of students with computing skills. Software is pervasive in today's world and it is important to graduate computer scientists with more diverse academic backgrounds who will have insights into new potential applications.

The proposed B.A. degree would not replace or modify any existing programs, and there is no other B.A. degree in Computer Science offered in the MUS. A B.S. degree in Computer Science is offered by Montana State University, the University of Montana, and Montana Tech. Existing MSU classrooms, computer labs, and student spaces within the Gianforte School of Computing will be used to support the new degree, but larger classrooms will be needed if the program is popular. There is no current need for new equipment. Additional part-time instructors and full-time GTAs will be required to meet the initial demand. It is conservatively estimated that five additional students will be attracted to MSU because of the new B.A. degree in FY 2019, 10 in FY 2020, and 15 in FY 2021. MSU is prepared to accommodate 50 or more students.

*OCHE Staff Recommendation: Approve*

### **Montana State University**

#### **Re-establish Electrical Engineering PhD**

Montana State University requests authorization to re-establish a separately named PhD program in Electrical Engineering. MSU previously offered a PhD in Electrical Engineering (EE) from 1962-1996. The proposed re-establishment of the degree enables MSU to improve recruiting of top students by offering a degree with a widely recognized title, the PhD in Electrical Engineering, rather than the PhD in Engineering with an "option" in electrical engineering. The current title creates the perception of a lesser degree for those seeking a more traditionally recognizable terminal degree. This proposal requests that the resources currently assigned to provide the Electrical & Computer Engineering option of the consolidated PhD in Engineering be re-assigned to provide the standalone PhD in Electrical Engineering. There would be no changes in reporting lines, program mission, faculty assignments, physical resource needs, or duplication of administrative activities.

Other than the existing MSU PhD in Engineering, no other MUS program provides the doctoral degree in this field. The MSU Electrical & Computer Engineering (ECE) faculty and the Montana Tech Electrical Engineering (EE) faculty have agreed to continue coordinating faculty research and graduate cooperation, as well as encourage qualified Montana Tech faculty to participate in the re-established EE doctoral program administered by the MSU ECE Department. An agreement between the MSU ECE faculty and the Montana Tech EE faculty has been in place since 2008 that allows qualified electrical engineering professors from Montana Tech to recruit, mentor, and supervise graduate students.

*OCHE Staff Recommendation: Approve*

### **Great Falls College MSU**

#### **Rename Academic Affairs-Division of General Studies**

Great Falls College MSU requests authorization of a minor change in the renaming of a division of Academic Affairs. The division of General Education, Business, Technology & Transfer will be renamed the Division of General Studies. This change better reflects and simplifies the mission and aspirations of the programs in those areas.

*OCHE Staff Recommendation: Approve*

### **Helena College University of Montana**

#### **Authorization of Powerplant and Airframe C.A.S. degrees**

Helena College University of Montana requests authorization to make permanent the temporary Powerplant and Airframe C.A.S. degrees in Aviation Maintenance Technology. This aviation program has sustained over 75 years of growth and it is currently the only educational program in the State of Montana that prepares students to become licensed Airframe and Powerplant mechanics. The requirements and hours of the program are strictly maintained by the Federal Aviation Administration (FAA) in accordance with rigorous FAA standards. Current students are able to obtain an A.A.S. degree upon completion of the Aviation Maintenance program. The two proposed C.A.S. degrees unbundle the existing A.A.S. degree in Airframe and Powerplant. Allowing students to earn an interim credential provides the opportunity for gainful employment in the field while still in school to complete the remainder of the requirements for the A.A.S. degree. It also allows students flexibility to move into and out of the program while locking in their educational accomplishments at more than one point.

The Aviation Maintenance program is currently in operation and encompasses all required elements for the proposed degrees—physical space, tools, equipment, personnel, and other supporting resources. These new degrees will add no additional strain to the College or the Aviation program.

*OCHE Staff Recommendation: Approve*