

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 January 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.

---

### **University of Montana Missoula**

#### **M.S. in Data Science**

The University of Montana is proposing a master of science degree in Data Science within the Department of Mathematical Sciences to augment the existing Data Analytics program on campus. The program focuses on teaching data analytics and theory for real, big data problems. Its emphasis goes beyond mathematics/statistics by integrating computer programming and domain-specific topics. A significant demand for people with deep analytic skills exists in the U.S. According to the McKinsey Global Institute, by 2018 the U.S. could face a shortage of 140,000 to 190,000 workers with these skills. Based on current student enrollment in core data science and graduate interest in data science, the anticipated demand for the program is expected to be 5 to 10 students in the program each year for the first 3 to 5 years.

No new faculty are requested to be hired for the program. For at least the first 2 years, the demands of the program are expected to be met by departmental resources. As the program grows, funding sources will be sought to meet the increased needs. In August, MSU Bozeman submitted an intent to plan to begin developing a master of science in Data Science and Montana Tech recently received approval to offer a bachelor of science in Data Science. Despite the overlap, these proposals do not represent unnecessary duplication. There is a shortage of trained professionals in data and computer science both in Montana and nationally. Many from Montana industry have requested that the MUS increase its production of graduates in these areas. Due to this demand, multiple data science programs have the ability to grow and succeed throughout the MUS.

*OCHE Staff Recommendation: Approve*