Dedicated teachers, dynamic researchers and faculty devoted to the betterment of Montana are among the winners of the top Montana State University 2015 faculty awards announced this week. The annual awards honor achievement in faculty research, teaching, outreach and creative projects. The awards will be presented at the MSU Spring Convocation, set for 9:30 a.m. Tuesday, Jan. 13, in Reynolds Recital Hall.

James and Mary Ross Provost’s Award for Excellence

Brock LaMeres, electrical and computer engineering, received the 2015 James and Mary Ross Provost’s Award for Excellence, which recognizes excellence in teaching and scholarship. He receives a $2,500 honorarium for the award.

In 2014, a rocket soared into space with a new computer LaMeres and his students built to withstand the effects of space radiation. It was another step in an impressive run of successful tests for their work as part of a series of grants from NASA to build radiation-hardened computers. In 2015, NASA will send one of those computers up to the International Space Station, where it will receive its most demanding test yet. LaMeres uses this project as a way to excite his students in the 200-level digital circuits course he teaches each semester. Giving the students a real-world example of how the concepts of digital design are applied helps them better understand the material and stay motivated. It is just one effort underway by LaMeres to enhance introductory-level courses in engineering at MSU. LaMeres has also received a series of grants from the National Science Foundation to study the impact of e-learning environments on student understanding of introductory topics. LaMeres’ research has compared the learning effectiveness of online courses to those delivered using the traditional face-to-face method. He has also developed “remote laboratory” technology that allows students to complete lab exercises from off-campus. His most recent project is in developing adaptive learning modules to help address background deficiencies and dynamically tailor the material for different student demographics.

His work has led to numerous publications including a recent article in the IEEE Transactions for Engineering Education, the most prestigious journal in his field for education-related research. LaMeres has also received the 2010 President’s Excellence in Teaching Award, the 2012 Teaching Innovation Award and the 2014 Excellence in Online Teaching Award.