



THURSDAY, MARCH 25 1:00-1:50 PM

# ME Research Seminar

## Using Community-Engaged Learning to Prepare 21st Century Leaders

**DR. WILLIAM OAKES, PE**  
PURDUE UNIVERSITY

*150th Anniversary Professor*

*Director, EPICS Program*

*Professor of Engineering Education*

**THURSDAY 3/25 1-1:50 PM**

Zoom: [tinyurl.com/MinesS21](https://tinyurl.com/MinesS21)

*Info & past videos: [me.sdsmt.edu](https://me.sdsmt.edu) > seminars  
Seminar will be recorded and posted online*

### **Talk Abstract:**

Preparing students to thrive in today's global economy is central to the mission of engineering education. Innovative approaches are needed to meet the ever increasing learning outcomes and content without adding time or resources. Community engagement has been shown to be a powerful pedagogy to meet academic outcomes including the core disciplinary skills as well as the broad professional skills to equip future leaders. It has also been shown to benefit student retention and can be a powerful tool creating a more diverse and inclusive program. This presentation will highlight successes and challenges of the EPICS Program linking community engagement and multidisciplinary design. Results will be shared including research findings on the impact of graduates and attracting higher percentages of female students. Opportunities will be explored for South Dakota Mines.

### **Speaker Bio:**

William (Bill) Oakes is a 150th Anniversary Professor, Director of the EPICS Program, Professor of Engineering Education at Purdue University and a registered professional engineer. He is one of the founding faculty members in the School of Engineering Education having had courtesy appointments in Mechanical, Environmental and Ecological Engineering and Curriculum and Instruction in the College of Education. He was the first engineer to receive the U.S. Campus Compact Thomas Ehrlich Faculty Award for Service-Learning. He was a co-recipient of the U.S. National Academy of Engineering's Bernard Gordon Prize for Innovation in Engineering and Technology Education and the recipient of the U.S. National Society of Professional Engineers' Educational Excellence Award. He is a fellow of the American Society for Engineering Education and the National Society of Professional Engineers.