

# **UPCOMING MATERIALS EDUCATION WORKSHOPS SUPPORTED BY THE NSF**

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# The Enrollment Floodgates Are Open – Best Practices in Materials Science and Engineering Undergraduate Education for Rising Enrollments

September 9-11, 2019, in State College, PA



# Topics and Panels:

- Perspective from within a rapidly growing department
- Integrating laboratories and writing
- Impact on graduate recruiting and enrollment
- Influence of college policies
- Managing the capstone experience
- Materials science and engineering education in physics and chemistry
- View from Canada
- Outlook from departments with non-MatSE degree programs
- Leveraging courtesy appointments to enhance undergraduate student education
- Panels: government agency, industry perspective, research laboratory, technical society

# Materials Science and Engineering Educational Advances Workshop, Spring/Summer, 2020



# Topics:

- Educational innovation in introductory materials courses (often with large non-MSE student bases, often taught outside MSE) and their impact on student learning
- Laboratory innovations, including using virtual tools
- Online materials delivery (at the graduate, undergraduate, and continuing education levels) and data analytics regarding online learning
- Using computational tools in courses from introductory undergraduate to graduate
- Active learning adaptations for MSE-specific courses, including entrepreneurial engagement.