

# PREVIOUS SPONSORS



## MATERIALS MATTER



Contact Us

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# MSE SENIOR DESIGN PROJECTS

*INDUSTRY-DRIVEN. HANDS-ON. IMPACTFUL.*



**PURDUE**  
UNIVERSITY®

School of Materials Engineering



## PROGRAM OVERVIEW

The Materials Engineering Senior Design Program at Purdue University partners student teams with industry sponsors to tackle real-world engineering challenges.

Projects focus on practical, implementable, and innovative solutions, giving students professional experience while delivering value to sponsors.

- ◆ Two-semesters (Fall & Spring)
- ◆ Focus on implementable, novel solutions
- ◆ Teams of 4–6 students
- ◆ Faculty-guided, industry-mentored projects
- ◆ Project IP terms defined up front; sponsors typically retain IP

## PROJECT FOCUS AREAS

- ◆ Process design
- ◆ Materials characterization & testing
- ◆ Failure analysis
- ◆ Properties measurement
- ◆ Materials and process modeling
- ◆ Process optimization
- ◆ Safety, Ethics, and Energy consumption
- ◆ Engineering Design

## COMPANY BENEFITS

- ◆ Student interaction and exposure
- ◆ Potential new business partnership
- ◆ Visibility through posters in Armstrong Hall
- ◆ Invitation to MSE student night
- ◆ Solutions to that high-importance, low-priority problems that never quite get done
- ◆ May be tax deductible
- ◆ Exploring new cutting-edge techniques in a low-risk, high-payoff environment



## STUDENT EXPERIENCE

- ◆ Real-world engineering experience
- ◆ Exposure to current industry challenges
- ◆ Potential pathways to employment or new ventures
- ◆ Professional skill development:
  - ◆ Technical writing & presentations
  - ◆ Research and problem-solving
  - ◆ Project management
  - ◆ Experience with advanced lab techniques & equipment
  - ◆ Team collaboration
  - ◆ Industry networking

## INDUSTRY IMPACTS

“The senior design program is a fantastic way to partner with students and investigate important technology issues for our current and future products.” — **Medtronic**

“The project continually gives a solid return on investment through new material and process knowledge — and access to Purdue MSE’s best and brightest.” — **Cummins Inc.**



## HOW TO SPONSOR

To get more information or to become a project sponsor, contact our office by **March 1st**.

**David Gildemeister**

Associate Professor Of Practice

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