Does your company have potential BE Capstone Design Projects?

Do you want to support the BE Capstone Design Program?

Contact:
Dr. Luke Reese
Industry Liaison / Assoc. Professor
Michigan State University
Biosystems & Agricultural Engineering
524 S. Shaw Lane
103C Farrall Hall
East Lansing, MI 48824
(517) 353-3258
reesel@msu.edu
### Recent Project Examples:

#### Bioenergy Engineering

- **Torrefaction Process Improvement**
  - Increase product yield of torrefaction process.
  - Sponsor: Heat Transfer International

- **Wastewater Treatment Using Anaerobic Digester**
  - Design and develop a novel, efficient pilot-scale (0.45 m³) up flow and fixed film anaerobic digester.
  - Sponsor: Technova

#### Biomedical Engineering

- **Dried Blood Storage Device**
  - Filter paper to efficiently dry and store blood samples.
  - Sponsor: Pfizer, Inc.

- **Design of a LED/Fiber Optic Treatment for Infant Jaundice**
  - Design a portable, wearable, cost-efficient treatment for infant jaundice.
  - Sponsor: Sygiene

#### Ecosystems Engineering

- **Site Evaluation and Design Plan for a Created Forested Wetland Student**
  - Designed wetland for US 27 road construction site.
  - Sponsor: Michigan Department of Transportation

- **Water Quality Best Management Practices Design for a City of Lansing Re-Development Project**
  - Design of an efficient stormwater runoff treatment system for a parking lot re-development.
  - Sponsor: Tetra Tech

#### Food Engineering

- **Hydroponic Processing Optimization for Mung Bean Sprouts**
  - Optimization of hydroponic system for mung bean sprouts.
  - Sponsor: ConAgra

- **Redesign of ProMix Batter Mixer Cooling Mechanisms**
  - Redesign batter coolant system.
  - Sponsor: JBT FoodTech

### Faculty:

- Evangelyn Alocilja, PhD
- Narendra Das, PhD
- Dawn Dechand, PhD
- Kirk Dolan, PhD
- Ehsan Ghane, PhD
- Daniel Guyer, PhD
- Tim Harrigan, PhD
- Sanghyup Jeong, PhD, PE
- Dana Kirk, PhD, PE
- Wei Liao, PhD, PE
- Yan “Susie” Liu, PhD
- Bradley Marks, PhD, PE
- Ilce Medina Meza, PhD
- Luke Reese, PhD
- Steven Safferman, PhD, PE
- Chris Saffron, PhD
- Ajit Srivastava, PhD, PE
- Truman Surbrook, PhD