

ELEVATE

CORPORATE PARTNERSHIPS



**PURDUE
UNIVERSITY®**

School of Industrial Engineering



ELEVATE CORPORATE PARTNERSHIPS

PURDUE UNIVERSITY SCHOOL OF INDUSTRIAL ENGINEERING



**AARON
RAMSEY**

Director of
Industry
Relations



**BEN
FONG, PhD, PE**

Associate
Professor of
Practice &
Director, PMP
-MSIE



**JULIA
SIBLEY**

Research &
Strategic Lead

INDUSTRIAL ENGINEERING: THE PERSISTENT PURSUIT OF EXCELLENCE

Industrial engineers (IEs) are constantly striving for efficiency & efficacy - thus continuous improvement. Let us work with you to best serve your needs through multi-faceted engagement.

By allowing us to tackle your challenges, you will benefit from additional engineering resources while meeting top talent. Your engagement will increase your recruiting success by exposing students to the exciting opportunities at your company. Purdue has made it easier to work with world-renowned faculty by revising our contracting & IP models. This includes new corporate-friendly IP guidelines for student projects.

When you want well-trained technical talent, look no further than our Professional Masters program students. Besides mentoring & training to hone professional skills, this program culminates in a capstone project with Masters-level solutions.

Perhaps an expert-taught executive program tailored to your need would introduce you & your leadership team to leading edge technologies, identify emerging trends, & empower transformational, data-driven decision making.

Our school builds on the combined strength of corporate partners, outstanding faculty, & accomplished alumni working hand-in-hand to train tomorrow's leaders. We look forward to partnering with you.



School of Industrial Engineering

BECOME A PART OF THE JOURNEY

Industrial Engineers are
***DESIGNERS, ANALYZERS &
MANAGERS*** of complex
human integrated
systems.

We are ***OPTIMIZERS***;
striking a balance of
low cost, high
productivity, &
maximum profit.

We are ***INTEGRATORS***
of information,
people, material
resources, &
equipment.

RECRUITING TALENT

Internships & Co-Ops
Exclusive Company Days
Career Fairs & Info Sessions



SHAPING EDUCATION

Mentoring Students
Executive Education
Professional Masters Program



SOLVING PROBLEMS

Capstone Projects
Faculty Collaboration
Executive-in-Residence



A FUTURE BUILT ON FUNDAMENTALS

DIGITAL MANUFACTURING

Internet of Things (IoT)
Factory of the Future
Cyber-Physical Systems
Digital Twins

HUMAN-MACHINE INTEGRATION

Collaborative Robotics
Virtual & Augmented Reality
Adaptable Interface Design
Game-Based Learning

RISK MANAGEMENT

Predictive Algorithms
Market Design
Multi-Objective Decision Analysis
Risk Perception & Response

PRODUCTION SYSTEMS

Inventory Control
Lean Manufacturing
Facilities Design & Material Flow



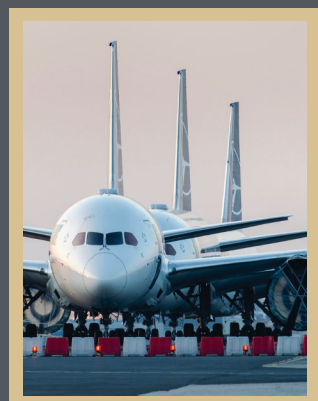
HUMAN FACTORS

Work Design & Measurement
Cognitive Task Analysis
Team & Group Dynamics



SYSTEMS MANAGEMENT

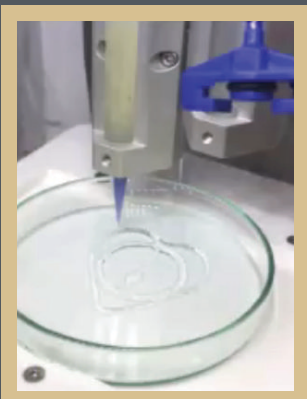
Engineering Economics & Finance
Project Management
Organizational Design





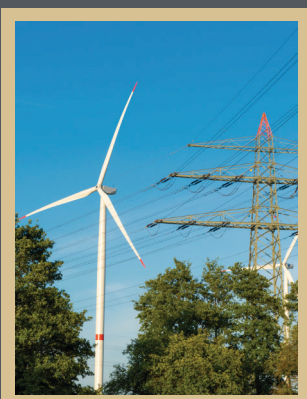
OPERATIONS RESEARCH

Optimization Modeling
Stochastic Modeling & Queueing Analyses
Simulation Modeling



MANUFACTURING

Product Design
Manufacturing Processes & Materials
Quality & Reliability Analysis



INFORMATION SYSTEMS

Cyber Infrastructure
Machine Learning & AI
Enterprise Resource Planning



NOVEL MATERIALS

Nano- / Bio-Materials
Additive Manufacturing
Smart Wearable & Implantable Devices
Flexible / Programmable Materials

DATA-DRIVEN DECISION MAKING

Computational Probability
Multi-Agent & Autonomous Systems
Distributed Algorithms
Quantum & Other Novel Computing Paradigms

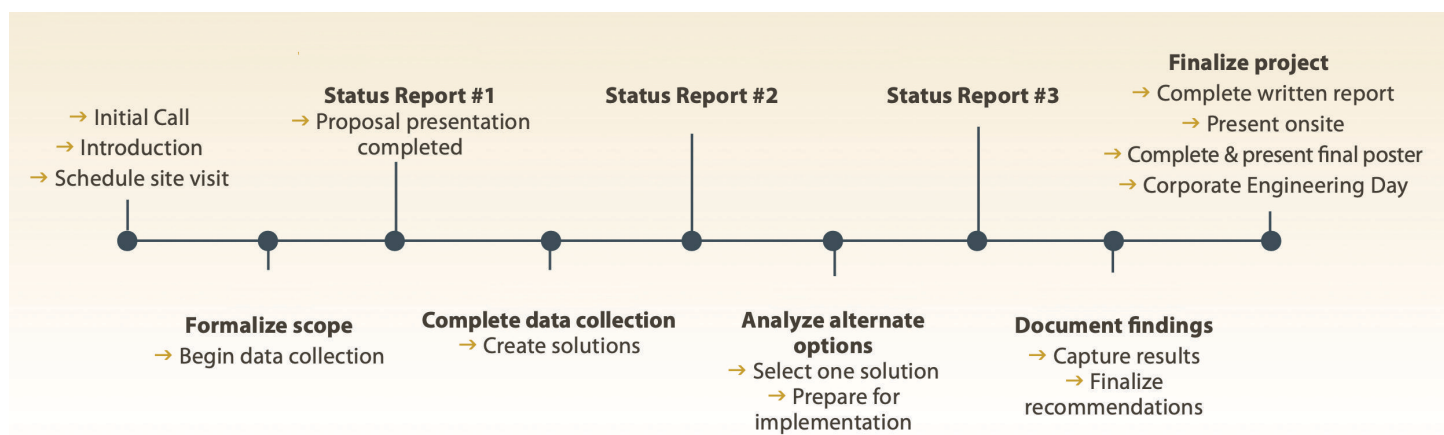
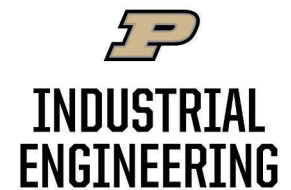
RESILIENT SUPPLY CHAINS

Complex Emergent Systems
Self-Healing Networks
Smart Grids
Sharing Economy

IE SENIOR CAPSTONE PROJECTS



Purdue Industrial Engineering capstone projects are inspired and supported by our partnerships. Each project involves a two-way relationship that promises significant returns for your philanthropic investment and participation.



WHAT IT TAKES:

**\$5K
DONATION**

**1
POINT OF
CONTACT**

**2-4
HOURS PER
WEEK**

**1
TECHNICAL
PROJECT**

WHAT YOU SUPPORT:

**10
WEEKS**

**400
AVERAGE
STUDENT
HOURS**

**3-4
STUDENTS**

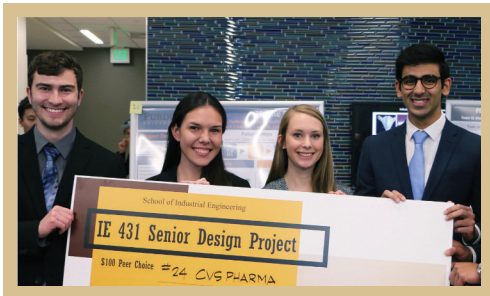
**1
POSTER
PRESENTATION**

**3+1
STATUS
REPORTS &
WRITTEN
FINAL**

**1
ON SITE
PRESENTATION**

**MULTIPLE
ON SITE
VISITS FOR
DATA
ANALYSIS**

SUPPORT STUDENT DEVELOPMENT



PROJECT EXAMPLES:
bit.ly/IEPastProjects

SUBMIT PROJECTS

Submissions require:

- Company Information
- Champion's Contact
- Project Title
- Brief Summary

bit.ly/PurdueIECorpProjects



IP PROTECTION

Intellectual property rights are available to sponsors. NDAs are commonly issued between students, course facilitators and the sponsoring organization.

CONTACT

Aaron Ramsey,
Director of Industrial Relations
aaronramsey@purdue.edu
765.496.0943
765.490.2432

HAIL PURDUE - \$5,000 or \$25,000 5 year pledge

Engage in one senior design capstone project

Connect with IE student organizations or classes

Present to IE design class and meet faculty to discuss project

Attend campus for semester end, capstone poster exhibition

Recruit at IE Career Fair

Host student Information Session

BOILER UP - \$15,000 or \$75,000 5 year pledge

Engage in total of four senior design capstone projects

Promote brand on IE video signage, social media and IE website

Access the private Purdue IE LinkedIN group

Meet with Purdue IE faculty

Host private recruiting day in school lobby

Maximize presence at recruiting fair with double space

BOILERMAKER SPECIAL - \$25,000 or \$125,000 5 year pledge

Engage in total of five senior design capstone projects

Receive annual *Future IE Graduates* student profiles

Promote job opportunities in IE announcements

Host lunch or dinner for IE students to talk about your organization in informal setting

Name a student team award from your organization during the IE awards ceremony

PROFESSIONAL EDUCATION

PROFESSIONAL MASTERS

DEVELOPING LEADERS OF TOMORROW

READY-TO-LAUNCH TALENT

The Professional Masters Program prepares well-trained talent that is ready to contribute to your company on day one.

LET US MEET THE NEED

The Professional Masters Program (PMP) provides a mix of courses from our highly-ranked Industrial Engineering Graduate Program & targeted professional development activities.

With 21 credit hours of coursework, students have flexibility to pursue a plan of study that suits their professional development needs in the core areas of industrial engineering & beyond.

The program features nine credit hours of professional development and practicum through an industry-

sponsored capstone project & professional development activities. The program is designed to connect you with leaders of tomorrow with strong technical & professional skills.



APPLICATIONS ACCEPTED

<https://bit.ly/PurdueIEPMP>

SPONSOR PMP-MSIE PROGRAM

PROFESSIONAL MASTERS TWO-SEMESTER CAPSTONE PROJECT

WHAT IT TAKES:	\$50K DONATION		1 PROJECT STAKEHOLDER	
WHAT YOU SUPPORT:	28 WEEKS	2-4 STUDENTS	1 PROFESSOR	1+1 PROPOSAL + STATUS UPDATE
	1120 AVERAGE STUDENT HOURS	1 WEEKLY VIRTUAL MEETING	3-7 MULTIPLE SITE VISITS	1 FINAL TERM REPORT TO COMPANY

SUPPORT COVERS

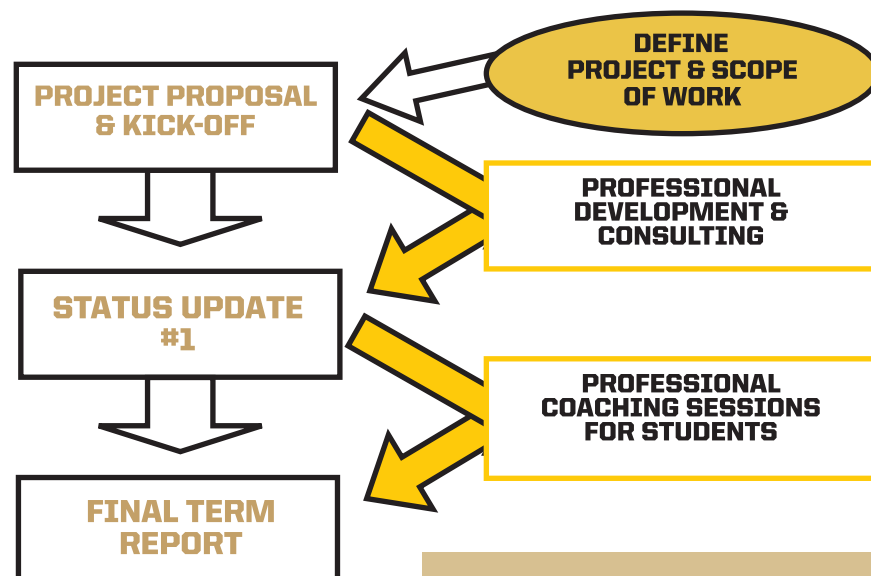
Team Traveling Expenses
Project Hours
Faculty Coaching
PMP Scholarship

LONG-TERM BENEFITS

Multi-Phased CI Projects
Long-Term Talent Pipeline
Recruiting Benefits

TWO CYCLES

Late August - Early December
Mid-January - Early May



PROJECT PARTNERS NEEDED

BEN FONG, PhD, PE

Associate Professor of Practice
nbfong@purdue.edu

CONTINUING EDUCATION

ONLINE MASTERS

HELPING PROFESSIONALS REACH HIGHER

DEVELOP RISING STARS

The Online Masters Program allows your employees to gain credentials for career growth while employed.

LET US MEET THE NEED

The Online Masters in Industrial Engineering is ranked #1 in the nation by *U.S. News & World Report*.

Students have access to the same courses & professors from our in-person Industrial Engineering Graduate Program.

Designed for non-traditional students, the program provides the maximum flexibility to pursue courses in their topic of interest.



LEARN MORE

<http://bit.ly/PurdueOnlineMSIE-MSE>



School of Industrial Engineering

INNOVATE COLLABORATIVELY



Sponsoring research engages world-renowned faculty to provide innovative solutions for your business.

Faculty and students work on your project, providing the highest level of collaboration.

Your business becomes known to talented students.

MENTOR STUDENTS



Each of us have been the beneficiary of a guide or mentor from time to time. Share your experience & wisdom with students through the two-way mentorship program while better understanding the perspectives of young talent.

RECRUIT TALENT

Industrial Engineering presents many opportunities to increase your visibility, share corporate culture, & inspire students with your company's vision.

The school & student organizations sponsor semi-annual career fairs exclusively for IE students & partners.

You will have access to all of our top students, Graduate & Undergraduate.

Job postings are shared with students.



PURDUE

INDUSTRIAL ENGINEERS AROUND THE WORLD

OUR ALUMNI AND STUDENTS BRING GLOBAL PERSPECTIVES TO PURDUE INDUSTRIAL ENGINEERING

Since its founding in 1955, the Purdue School of Industrial Engineering has played a critical role in the history of the industrial engineering profession. From fostering the development of computer simulation methodology to intelligent manufacturing, we have been continuously revolutionizing Industrial Engineering.

At Purdue, we help the field of Industrial Engineering take Giant Leaps as we "Rethink IE" in cognition and decision making, next-generation products and services, computational IE, complex systems and networks, & much more.



School of Industrial Engineering

HOME COUNTRIES OF PURDUE IE STUDENTS



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