

# Next Generation Professional Engineering Program Opportunities

# Dean's Industry Advisory Council

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#### SCHOOL OF ENGINEERING AND TECHNOLOGY

A PURDUE UNIVERSITY SCHOOL Indianapolis



#### **New Economy**

- Innovation
- Global Supply Chains
- Operational Excellence
- Customer-Focused
- Complex Technologies



#### **New Capabilities**

- Creative Problem-Solving
- Entrepreneurship
- Flattening Organizations
- Technology-Business Tradeoffs
- Team Projects



# New Educational Programs

- Professional Engineering Masters
- Technical Leadership and Management Certificates
- Experiential Learning





# "Fork in the Road" Decision

- Experienced Engineers Decision
- Management Track
- Technical Expertise Track

# Technical Leadership and Management Portfolio

- Technical Professionals
  - Some Business Skills
- Technical Managers
  - BusinessFundamentals +Management Skills
- Technical Leadership
  - Business Mastery + Technical Expertise

#### IUPUI SCHOOL OF ENGINEERING AND TECHNOLOGY

# **Business & Management Skills**

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- Project Management
- Communication
- Team Development
- Global Customers & Markets
- Business Plan Development
- Financial Analysis
- Six Sigma and Lean Management
- Creativity and Innovation
- Product Development
- Strategic Planning
- Market Analysis

# **Looking Outside**



- Professional Masters in Engineering Degree
  - Engineering and Business/Management/Leadership
  - Capstone Industry Project
  - 30 credit hours- both full-time and part-time
- Technical Business Management Certificates
  - Business Fundamentals
  - Project and Team Management
  - 12 to 15 credit hours both full-time and part-time
- Technical Leadership Certificates
  - Business Management Curriculum
  - · Agile Leadership Skills
  - 12 to 15 credit hours both full-time and part-time
- Dual Degree
  - MBA/MSE
  - 42 business credit hours + 24 engineering credit hours

# The Opportunity



## Join Our Discussion On

## **Next Generation Professional Engineering Programs**

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