



# **Aligning Engineering Education and Industry Needs: Business and Management Skills for Engineers**

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# The Challenge

- Employers and advisory boards want graduates equipped with a basic understanding of leadership, business, and management skills
  - Employers hire for technical skills but engineers are promoted (or fired) based on their team, business, and management skills
- How do we integrate a basic skill set into the engineering curriculum?

# One Opportunity- EMBoK and EM Handbook



- Engineering Management Body of Knowledge (basic skills) and EM Handbook (more advanced skills)
  - Developed by a team of domain leads representing academia and industry
  - Growing international perspective (work with the Chinese Academy of Engineering)
  - Revised on a 4-year cycle (next edition of the EMBoK due in 2019 and Handbook in 2021)

# Create Pull into the Classroom: Simple Course Prep



- To “ease” bringing these materials into a 1, 2, or 3 credit course (could be a tech elective), ASEM developed a PPT bank of 1000 + slides for the EMBoK
- “No” work for the faculty member to prepare course materials
- We plan to complete a case study book in the near future

# Create Pull into the Classroom: Minimal Cost



- To minimize course cost, our “academic partnership” facilitates an entire class(es) to become ASEM members
- Members can access the EMBoK and Handbook for free – no textbook cost
- Members also receive electronic versions of other society publications: *Practice Periodical* and the *Engineering Management Journal*



# Status and Next Steps

- 14 universities are current academic partners
- Professional Certifications:
  - New graduates: Certified Associate in Engineering Management
  - Professionals: Certified Professional in Engineering Management
- ASEM is interested in society partnerships
- Contact Dave or me for details / options:
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