Advancing the IE Body of Knowledge

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IE BoK Governing Board
Agenda

✓ IE BoK Overview – Diana
✓ ISE Magazine Forum – Diana
✓ Applications
  Case Study: Application of IE BoK in Industry (SCM) - Diana
✓ Audiences
  Young Professionals – Tarun
  Recent Graduates – Tarun
  Job Searchers - Tarun
  Academia - Iris
  Graduates, PhD’s, Professors - Iris
✓ The Governing Board Progress – Iris
✓ Opportunities to get involved - Iris
✓ IE BoK Future - Diana
IE Body of Knowledge Overview

Where to find the document?

How to submit updates?

bok.changes@iise.org
Industry Application
Supply Chain Management (SCM)

• Rapid changes occurring in SCM

• Third Party (3PL) and fourth party (4PL) providers have increased in popularity

• Partnering with 3PL’s saves cost and time

• Factors to consider when selecting 3PL and 4PL providers
Recent Graduates and Young Professionals

- Multidisciplinary Science – how can you bring multiple approaches to solve the problem
- Reference for identifying topics of applicability
- Coursework snapshot to identify certifications you might want to pursue
- Future growth opportunities in ever evolving industry trends
- Moving across Industries
Job Searchers Application

• Multiple “job titles”

• Customize resume to the position that you are seeking out

• Industrial engineering influence on current trends in certain industries
Applications in Academia
Graduates (BS, MS, PhDs)

BS
- Identifying career paths
- Industry vs. Graduate School

MS/PhD
- Research area for thesis/dissertation
  Define jobs (interests)
- Tailor career path after PhD
  Academia
  Research Laboratory
  Consulting/Entrepreneurship

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Applications in Academia

Curriculum
• ABET accreditation

• Continuous improvement of IE curriculum
  Proposal of new courses
  Removal of courses

• Industry outreach
  Permanent positions, summer internships, co-ops
  Documented awareness to potential employers
Applications in Academia

Research

• Definition of research path for faculty
  
  New faculty
  
  Faculty searching change in research path (i.e. sabbaticals)

• New faculty hires projections and field area justifications
Governing Board Progress

Established in 2016

- Development of Policies and Procedures for the IE BoK

10. Safety
11. Information Engineering
12. Design and Manufacturing Engineering
13. Related Topics:
   13.1. Product Design & Development
   13.2. System Design & Engineering

What is the process for updating the IIEBoK?

The IIEBoK is an evolving document and there are defined windows of opportunity to make edits to the content for each knowledge area and its structure as well as the possibility of adding new knowledge areas. Policies and procedures are now available to submit recommendations for modifications or changes, please review these in the link below.

IIEBoK Policies and Procedures

To propose changes to the Body of knowledge, please complete the BoK Change Proposal Form and submit it to bokchange@iise.org.

Board Members:
- The Governing Board
- Content Review Board

Please click here to share your comments.
Governing Board Progress

IE BoK Changes (from received proposals)

2016 IE BoK – Knowledge Areas

1) Work Design & Measurement
2) Operations Research & Analysis
3) Engineering Economic Analysis
4) Facilities Engineering & Energy Management
5) Quality & Reliability Engineering
6) Ergonomics and Human Factors
7) Operations Engineering & Management
8) Supply Chain Management
9) Engineering Management
10) Safety
11) Information Engineering
12) Related Topics
   12.1) Product Design & Development
   12.2) Systems Design & Engineering

2019
Governing Board Progress

Dissemination - Activities Completed

- 1st Article in IE Magazine – 2018
- Presentation updates @ Annual Meetings
  - General Membership
  - CIEADH
  - Council of Fellows
IISE Magazine Forum & Dissemination – Moving Forward

- Bimonthly articles highlighting 13 areas of knowledge
- Academia and Industry applications
- First article released April 2019
2019 IE BoK Conference Activities

- Town Hall Meeting
- IE BoK Presentations during ISE leadership meetings
- Information session
IE BoK Future

- Reinforce policies and procedures
- IISE connect
- Encourage Divisions and Societies involvement
- New IE BoK Governing Board leadership
Questions?