Skill-Builders for Engineering Leaders

Professional Credibility Module

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<table>
<thead>
<tr>
<th>Contact Hours</th>
<th>2 hours consisting of two 50-minute sessions</th>
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<tbody>
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<td>Target Audience</td>
<td>Graduate and undergraduate engineering students</td>
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Learning Objectives

Students will be able to:
1. Summarize the concept of credibility and identify its foundations;
2. Describe the importance of values and ethics in terms of personal credibility and responsibilities as engineers and engineering leaders;
3. Evaluate key aspects of technical competence and disciplined execution as credibility factors in engineering-based businesses;
4. Assess the consequences of poor engineering;

Session Overview

Credibility is a critical factor of success for engineers and leaders and is a function of many variables, including time. This module explores the concept of professional credibility, key factors that form or impact it, and implications when foundational components of credibility are shaken from an engineering context. The module will consist of instructor-provided topical overviews, and participant discussions related to examples and exercises that will assist in accomplishing the learning objectives.

| Session One
| Introduction and pre-assessment |

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<tr>
<th>Key Content</th>
<th>Approach</th>
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| The concept of credibility and the character component | • Brief introductory statements during the first part of the session
• Video presentation regarding credibility and brief overview presentation and defining what research indicates are its key components
• The 4 cores of credibility (brief overview presentation and video summary) |
| The character component of credibility | • Discussion and brief overview (presentation) about key concepts |
| Values, morals and ethics in engineering | • Discussion and brief overview (presentation) about characteristics and differentiators of professions vs. occupations, and societal implications with respect to engineering in terms of values, morals and ethics
• Discussion and brief overview (presentation) about the concept of the virtuous engineer |

For more information, contact Bill McElroy (mcelrowj@eng.ufl.edu) at 352-294-7383.
### Key Content

**Values and ethics in a global business world**

- Brief introductory overview (presentation) and discussion of key information sources and implications:
  - the world through the lens of Transparency International
  - the Global Ethics Business Survey
  - Project GLOBE

### Resources Provided:

- Module presentation materials
- National Society of Professional Engineers Code of Ethics

### Session Two

#### Key Content

**The competence component of credibility beginning with the capabilities aspect**

- Brief overview (presentation) about evolution of technical competence via the NSPE “body of knowledge” concept
- Brief overview (presentation) about the concept of the standard of care in engineering and technology development
- Brief summary (presentation) about desirable leadership competencies

**The execution aspect of competence**

- Brief overview (presentations) summarizing excellence in execution with respect to:
  - organizations
  - leaders
  - aspiring leaders

**The consequences of poor engineering**

- Summary presentation about impacts
- Class activity, mini case-study

### Close-out remarks and post-assessment

#### Resources Provided

- Module presentation materials
- Covey, S.M.R., 2007. The Four Cores of Credibility – Excerpted from *The Speed of Trust*
  [www.onlinethics.org/Topics/ProfPractice/PPEssays/designnichols.aspx](http://www.onlinethics.org/Topics/ProfPractice/PPEssays/designnichols.aspx)

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