

Training for New Engineering Managers

Over the last year, Professor Anthony Ambler (an IEEE Fellow and member of EMS) and I conducted several focus groups to understand the needs of engineering companies with respect to their new engineering managers. Their message was clear. Recently appointed engineering managers lack the business skills and interpersonal skills necessary to successfully deliver their engineering projects. They are well-trained as engineers, but they are not receiving the training they need to succeed as managers.

In my own work, I have seen this to be true on a global scale. I have seen the problems that result in China, India, Australia, Canada, Europe and the United States. Projects fail, not because of engineering challenges, but because engineering managers lack communication, collaboration, negotiation and business alignment skills.

To address this need, we have created the **Engineering Leadership Institute (ELI)**, through the Center for Lifelong Engineering Education at the University of Texas at Austin. The Engineering Leadership Institute provides training anywhere in the world to build the skills of people on track to become managers or those who have already become managers.

Participation in ELI is determined by recommendation from an individual's manager. It is an honor to be chosen to attend this program, which includes an initial week-long intensive training, followed by three follow up programs over a two year period, to hone leaders' skills as they advance in their careers. Companies that choose to send individuals to ELI recognize that they are making an investment in their engineering managers; those who have attended this program report that it provides immediate returns on that investment, with skills that the participants use as soon as they are back at work.

Among the competencies mentioned by the focus group participants were:

- Managing collaborative relationships across the organization
- Gaining support for your ideas and projects
- Improving communication skills
- Building high performance teams
- Improving your outcomes through the use of practical negotiation skills
- Managing conflict
- Managing risk
- Acquiring tools for strategic planning and building a roadmap for your department
- Understanding the dynamics of managing innovative projects

The ELI program provides training in each of these skills. We are encouraged by the results and hope to see measurable improvements in the success of those who complete the program.

Submitted by Leslie Martinich, VP Publications, Engineering Management Society