

Engineering Leadership for Emerging Leaders

“Leadership skills to accelerate your effectiveness and impact”

Offered by the premier Gordon-MIT Engineering Leadership Program, this five-day course is designed to equip you with the skills and perspectives needed to lead yourself and others in today’s engineering and technology environments. You will improve your leadership skills by learning from the latest breakthroughs in the practice of leadership within a program that draws on a variety of teaching methods, especially hands-on learning. Like the practice of leadership itself, this program will be high-contact, high-energy, and consequential.

The transition to becoming an engineering leader is one of the most promising, yet challenging experiences that engineering professionals can face. The promise comes from becoming a new kind of professional; one who can mobilize sometimes-conflicting individuals around a shared vision, solve problems through “real” teamwork, and motivate people to deliver their best results. The challenge comes from learning to work in an entirely new way; from relying solely on oneself to deliver *individual* results to leading others to deliver *collective* results. Herein lies the nature of the delicate relationship between leadership and followership.

During our five-day program, you will:

- Enhance your understanding of the nature of leadership and followership
- Build a foundation of teaming skills
- Develop and deliver an inspiring and shared vision
- Discover new ways to lead and motivate others in technical environments
- Gain support for your ideas in environments characterized by conflicting stakeholder needs
- Learn to manage conflicts through negotiations and constructive dialogues

Who should attend:

This course is designed for engineering, science, and technology professionals with less than 15 years of experience who are leading others for the first time, or aspiring to do so. Those who attend usually include: engineers, research scientists, managers, project or product managers, directors, crew chiefs, members of technical staffs, and technical leads.

Computer Requirements:

Laptops/devices with word processing capability are recommended. Advance materials may be sent by email or posted to the MIT Stellar system; please expect an email from the course directors with information about how to access these materials.

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July 27-31 2020 • Online Program Schedule

Day One, July 27 — Fundamentals of Leadership for Engineering Professionals

9:00 AM – 9:30 AM: Introduction to program instructors, participants, and learning goals. (Niño and Rahaman)

9:30 AM – 11:00 AM: Fundamentals of engineering leadership: Overview of perspectives on management and leadership and implications for emerging leaders. (Niño and Rahaman)

11:00 AM – 11:15 AM: Break

11:15 AM – 12:00 AM: Fundamentals of engineering leadership (cont). (Niño and Rahaman)

12:00 AM – 1:00 PM: Lunch

1:00 PM – 2:30 PM: Where leadership skills matter in technical career paths. (Rahaman)

2:30 PM - 2:45 PM: Break

2:45 PM – 4:15 PM: Creating a team vision: Review methods for creating a shared team vision and overview of practice exercise. (Niño)

4:15 PM - 4:30 PM: Break

4:30 PM – 4:45 PM: Introduce group project: Discuss how program participants will form groups to address topics of special interest

4:45 PM – 5:30 PM: Learning from reflection: Participants review, assess, and document day's key learning. (Niño)

Day Two, July 28 – Leading in Multi-Stakeholder and Systems Engineering Environments

9:00 AM – 10:15 AM: Achieving collective support in multi-stakeholder environments: Discerning and prioritizing diverse stakeholder needs; Reconciling differences and presenting a unifying vision; Achieving buy-in and support for complex projects and programs. (Magarian)

10:15 AM – 10:30 AM: Break

10:30 AM – 12:00 AM: Achieving collective support in multi-stakeholder environments. (Magarian, cont.)

12:00 AM – 1:00 PM: Lunch

1:00 PM – 2:30 PM: Leading the development of complex systems. (Joel Schindall, Gordon Professor of the Practice of Product Development, Emeritus, MIT, and formerly VP and Chief Technology Officer of Loral Space and Communications, and President of Loral Conic).

2:30 PM – 2:45 PM: Break

2:45 PM – 3:15 PM: Reflection: Participants review, assess, and document day's key learning.

3:15 PM – 5:30 PM: Form special interest groups and begin working on group projects.

Day Three, July 29 — Building Positive Relationships and High Performing Teams

9:00 AM – 10:15 AM: Making an Impact: Setting yourself up for successful career progression. (Rahaman and Schindall).

10:15 AM – 10:30 AM: Break

10:30 AM – 12:00 PM: How leaders create motivating environments in teams. (Niño)

12:00 AM – 12:10 AM: Break

12:10 AM - 1:10 PM Lunch – Joel Schindall on “From Geek to Chief: How did a PhD Geek Engineer from MIT wind up as Chief Engineer for a \$4B constellation of 48 low earth orbit satellites to provide phone communication from almost anywhere on earth? How did it work and what were the challenges?”

1:10 AM – 1:20 AM: Break

1:20 PM – 2:00 PM: Developing high performing teams: Challenges and strategies. (Feiler)

2:00 PM – 3:00 PM: Experiential learning exercise (Schindall and Feiler)

3:00 PM – 3:15 PM: BREAK

3:15 PM – 3:45 PM: Reflection: Participants review, assess, and document day's key learning.

3:45 PM – 5:30 PM: Groups work on projects and final presentations.

Day Four, July 30 — Managing Oneself, Building an Inclusive Environment, and Negotiations

9:00 AM – 10:15 AM: Leadership operating framework. An interactive discussion on leadership, and the skills, characteristics, behaviors, and attitudes forming a framework for effective leaders. (McGonagle)

10:15 AM – 10:30 AM: Break

10:30 AM – 12:00 PM: Leading an inclusive engineering environment: Strategies for developing inclusive and creative cultures in engineering teams. (Rahaman)

12:00 PM – 1:00 PM: Lunch

1:00 PM – 3:15 PM: Managing conflict and negotiations: Evaluating your personal conflict management styles and practice negotiation skills. (Niño)

3:15 PM – 3:30 PM: Break

3:30 PM – 4:00 PM: Reflection: Participants review, assess, and document day's key learning.

4:00 PM – 5:30 PM: Groups work on projects and final presentations.

Day Five, July 31 — Final Presentations

9:00 AM – 10:15 AM: Special topics presentations: Groups will deliver their final presentations on engineering leadership topics of special interest.

10:15 AM – 10:30 AM: Break

10:30 AM – 11:45 AM: Special topics presentations (cont.)

11:45 AM – 12:15 PM: Charting your leadership development journey (Niño)

12:15 PM – 1:00 PM: Course reflection: Participants reflect on week's activities, assess program, and receive program certificates.

Adjourn