

# Leadership and Management Development Programs

## Managing in a Technical Environment

- ▶ **Location:** Knoxville, Tennessee
- ▶ **Duration:** One week
- ▶ **Dates:** September 21-25, 2009
- ▶ **Tuition:** \$4,500  
(includes meals and lodging)
- ▶ Program fees are subject to change. Check our web site (<http://TheCenter.utk.edu>) for the latest information.
- ▶ Class size is limited

### Participant Profile

Engineers, scientists and other technical professionals who are taking on new or additional managerial duties will find this *Managing in a Technical Environment* specifically designed for their professional development. The course is also invaluable for anyone responsible for managing technical employees.

### Overview

*Managing in a Technical Environment* presents fundamental tools for effectively supervising the activities of others. The program emphasizes sharpening and building leadership skills and understanding human behavior. The course first presents basic concepts of management and then applies each concept to the unique environments of science and engineering. With extensive opportunities to exchange ideas and assess problems, participants are able to stimulate fresh thinking, expand their own points-of-view and extend their ability to lead.

### Key Objectives

- ▶ Enhance management skills involved in leading individuals, groups and organizations

- ▶ Increase willingness to accept personal responsibility for organizational and individual improvement
- ▶ Develop effectiveness in leadership and an understanding of managerial and professional roles
- ▶ Identify special problems of leading technical professionals, while learning to resolve them effectively
- ▶ Improve understanding of team dynamics and decision-making techniques

### Methods of Instruction

This course places a greater emphasis on practicality and results than on theory. The program effectively uses discussion, exercises, simulations, role-plays and cases taken from real-life technical organizations.

### Course Content

*Managing in a Technical Environment* incorporates five main themes:

#### Theme I: Telling it "Like it is."

Throughout the course, faculty members strive to "tell it like it is." They deal with the realities of life as a manager with several initial sessions describing and exploring the playing field. Why is the field characterized by brevity, variety and fragmentation? What does it take to get promoted? What basic motives or orientations lead to a successful managerial career?

Participants benefit by:

- ▶ Becoming more comfortable with their managerial roles
- ▶ Understanding how to succeed as a manager

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- ▶ Learning how to deal effectively with the classic conflicts between managers and technical professionals

## **Theme II: Developing a philosophy of management grounded in reality.**

Participants are challenged to examine their “philosophy of management.” Everyone has such a philosophy, but, like one’s philosophy of life, it is rarely examined. This philosophy, to a great extent, dictates everything a manager does, including the way he or she communicates; develops and uses power and influence; and manages subordinates, peers and bosses. If new ideas, positive change and renewed enthusiasm for the managerial role are to result, participants must explore, probe and question their philosophies.

Participants benefit by:

- ▶ Examining their core beliefs
- ▶ Considering how those beliefs affect their actions

## **Theme III: Dealing with classic management issues.**

The classic challenges of leadership, motivation and performance appraisal are central to the program. Discussion, role-playing and decision exercises are used to bring excitement and reality to these topics. Also used is a leadership exercise developed explicitly for engineers and scientists to explore delegation decisions in a variety of situations. This allows faculty to provide individual feedback on leadership to each participant. Faculty members present methods of enhancing performance by “making heroes” of those you lead.

Participants benefit by:

- ▶ Learning a leadership model that calls for flexibility in different situations
- ▶ Using their own experience to develop an approach to motivation
- ▶ Receiving feedback on their own leadership/delegation style
- ▶ Practicing performance coaching

- ▶ Learning the keys to developing highly motivated, strongly committed employees

## **Theme IV: Managing teams and networks.**

Groups and teams are important as organizations turn to cross-functional designs. Working with teams places demands on managers to develop power and influence to successfully manage relationships with others whose cooperation is needed.

In dealing with this theme, the course examines what makes groups cohesive and explores the development of norms which influence how well groups and teams perform. Participants work on the management of problem solving teams, discussing the benefits of well-managed group decisions and the pitfalls of inappropriately used and poorly managed decisions.

Participants benefit by:

- ▶ Developing a clear understanding of what makes groups and teams effective
- ▶ Learning to manage problem solving groups
- ▶ Practicing team decision making and receiving feedback on team skills
- ▶ Learning to avoid the ever-present dangers of groupthink and “trips to Abilene”
- ▶ Developing methods to better manage relationships with peers and bosses

## **Theme V: Focus on special problems in managing scientists and engineers.**

Two special problems are addressed: (1) managing young, inexperienced professionals and (2) managing mature, plateaued professionals.

Young engineers and scientists’ initial assignments and early treatment are important predictors of their long-term success, yet these two critical areas are, more often than not, mismanaged. A case is used to encourage discussion and to illustrate successful management of young technical employees. Ways to help professionals through their inevitable period of early adjustment are presented.

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Mature professionals who have reached a career plateau are the backbone of most technology-based organizations. Course instructors again use a case to explore ways to create a challenging and motivating climate for the seasoned professional.

To ensure that participants develop ways to manage special problems they face in their own organizations, instructors ask that they (individually or in small groups) prepare a short case for the class to discuss. Participant cases provide lively discussion and help participants to learn from their peers.

Participants benefit by:

- ▶ Understanding the “period of adjustment” which new engineers and scientists experience and developing ways to help newcomers become contributors more quickly
- ▶ Learning how to keep plateaued employees productive
- ▶ Working on issues of importance in their own organizations

## Faculty

*Managing in a Technical Environment* is taught by nationally recognized faculty members of The University of Tennessee and other universities, including:

- ▶ **H. Dudley Dewhirst**, professor emeritus of management at The University of Tennessee. Dr. Dewhirst’s background includes ten years engineering/management experience with Exxon USA and the U.S. Army Corps of Engineers. Dr. Dewhirst has extensive experience consulting with technical organizations such as Oak Ridge National Laboratory, Edwards Air Force Base, and Textron.
- ▶ **Gary B. Roberts**, professor of management and entrepreneurship in the Coles College of Business at Kennesaw State University in Marietta, Georgia. Dr. Roberts has consulted with such companies as IBM, AT&T, McDonald’s, Lockheed-Martin, Oak Ridge National Laboratory, and many federal and state agencies.

## Facilities

Classes are held in the executive classrooms of The University of Tennessee Center for Executive Education. These facilities are specifically designed for group-interaction programs.

Accommodations are single-occupancy rooms at a nearby hotel.

## Special Features

The program, like all Center for Executive Education public programs, is available as a customized, in-house program for organizations.

## Contact

For more information on *Managing in a Technical Environment*, please contact:

**Kimberly Mallory, Director**  
**Beth Maples, Program Coordinator**  
Center for Executive Education  
College of Business Administration  
The University of Tennessee  
603 Haslam Business Building  
Knoxville, TN 37996-4160

Phone (865) 974-5001

FAX (865) 974-4989

E-mail: [TheCenter@utk.edu](mailto:TheCenter@utk.edu)

## Related Courses

- ▶ Executive Development Program
- ▶ Finance for Non-Financial Managers
- ▶ Strategies for Effective Leadership

For current news of the Center for Executive Education and its offerings, please visit our web site at <http://TheCenter.utk.edu>

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## MANAGING IN A TECHNICAL ENVIRONMENT

	Morning Sessions	Early Afternoon	Late Afternoon
<b>M</b>	Managing and Professional Motivation	Effective Use of Power and Authority	Management Decision Exercise
<b>T</b>	Leadership Model Technical Managers' Leadership Exercises	Motivation	Communication and Performance Performance Appraisal Exercise
<b>W</b>	Group Dynamics	Leading Problem Solving Groups	Group Decisions Free Evening
<b>T</b>	Special Problems Young Engineer/Plateaued Performer	Live Case Discussion	Managing the Boss
<b>F</b>	Creativity & Innovation	Integrative Exercise	