THE OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING

# **Leading in Engineering Organizations**

# ENGR 5680

## **Credit Hours:**

1.50 - 1.50

## **Course Levels:**

Undergraduate (1000-5000 level)

#### **Course Components:**

Lecture

#### **Course Description:**

Understanding and utilizing keys to leading in engineering. Exposure to the underpinning of leadership in engineering environments including tenets, theories, debates, strategies, and innovation techniques.

#### **Course Goals / Objectives:**

- Have definitional understanding of leadership and its application in engineering organizations
- Recognize the difference between management and leadership in engineering
- Be able to apply the six leadership tenets
- · Distinguish among leadership styles in engineering organizations
- Have a working knowledge of collaborative leadership in an engineering organizations
- Appreciate the leadership implications of a multi-generational workforce
- Be exposed to leaders in engineering organizations
- Become more proficient leaders in engineering organizations

#### **Course Topics:**

- Why Study Leadership in Engineering Organizations? Are Leaders Born or Made? Leading in Technical/Engineering Organizations Behavior Realities of Technical/Engineering Organizations
- Leadership Tenets for Engineers\* -Start with the Heart -Create Trust -Equip People to Excel -Use the Word Why -Have Fun! -Cast a Splendid Shadow
- Essence of Engineering Leaders\* -Self-Awareness -Self-Management -Self-Motivation -Interpersonal Expertise -Relationship Building
- Life Balance
- Engineering Leaders vs Managers
- Multi-Generational Workforce Implications
- Networking
- Mentoring Engineering Professionals

#### **Designation:**

Elective