

# **PROFESSIONAL ENGINEERING ETHICS**

- PROFESSIONAL AREAS DISCUSSED :
- TEAMPLAY & LEADERSHIP
- PRODUCT MANAGEMENT
- ORGANIZATION STRUCTURES
- COMMUNICATION

# **PROFESSIONAL ENGINEERING ETHICS**

- ALL INVOLVE BEING AN EFFICIENT ENGINEER
- WORKING EFFECTIVELY IN GROUPS
- WORKING IN COMPANY ORGANIZATIONS
- ACCOMPLISHING TASKS WITHIN THE PERFORMANCE, TIME & COST WINDOW<sup>2</sup>

# **PROFESSIONAL ENGINEERING ETHICS**

- **HIGHER AND NOBLER PRINCIPLE OF  
ENGINEERING PRACTICE**
- TO PRACTICE YOUR TECHNOLOGY AND  
ENGINEERING ORGANIZATIONAL  
STYLE WITHIN A PERSONAL &  
CORPORATE STRUCTURE OF ETHICAL  
PRINCIPLES**

# **INTRODUCTION TO ENGINEERING ETHICS**

## **IMPORTANCE**

**Publicized Trials of Corruption**

**Stories of Conflict of Interest**

**Tragedies of Loss of Life**

**Stories of Whistle Blowing**

**RESULTING IN HUGE CORPORATION  
EXPENSE**

# **INTRODUCTION TO ENGINEERING ETHICS**

## **CORPORATION POLICY**

- **SIGN UP FOR ETHICAL PRACTICE**
- **ADDRESS INVENTION POLICY &  
ETHICAL BEHAVIOR i.e.**
  - GIFTS FROM SUPPLIERS**
  - TRADE SECRETS**
  - ACCESS TO OMBUDSMAN**

# **INTRODUCTION TO ENGINEERING ETHICS**

## **MEDIA ARTICLES**

**“BUSINESS GETS SERIOUS ABOUT  
ETHICS”**

**“BUSINESS ADOPTS TOUGHER  
STANDARDS FOR EMPLOYEES”**

**“CLEVELAND CLINIC DOCTOR CUTS  
TIES WITH HEDGE FUND TO AVOID  
APPEARANCE OF CONFLICT OF  
INTEREST”**

# **INTRODUCTION TO ENGINEERING ETHICS**

## **CONFLICT WITHIN POLICY**

**CLEVELAND CLINIC ANNOUNCES THAT  
CONFLICTS ARE A “PART OF  
EVERYDAY BUSINESS AND OVER  
REGULATION AT THE EXPENSE OF  
INNOVATION IS NOT A GOOD THING IN  
THE LONG RUN”**

# **INTRODUCTION TO ENGINEERING ETHICS**

## **PRACTICAL ISSUE OF ETHICS**

- HOW CONDUCT YOURSELF DAY TO DAY**
- CONSTANT CHOICES TO BE MADE**
- SOME CAN BE DIFFICULT IF YOU TAKE TIME TO THINK**
- MUST TAKE STOCK IN YOUR OWN VALUES**

# **INTRODUCTION TO ENGINEERING ETHICS**

**PROBABLY WON'T RUN INTO LARGE  
CASES LIKE THE CHALLANGER, HYATT  
REGENCY, FORD PINTO**

**WILL SEE ONES LIKE ACTING HONESTLY  
WITH ONES COLLEAGUES OR  
SUPERVISOR**

**EVERYONE HAS THEIR OWN VALUE SET**

# **PROFESSIONAL ENGINEERING ETHICS**

- **EVERY ENGINEERING DISCIPLINE HAS  
A CODE OF ETHICS**
- **IEEE HAS A 10 POINT CODE WITH  
WHICH YOU SHOULD BECOME  
FAMILIAR**

## **SEVERAL OF THE IEEE CODE OF ETHICS**

**“TO ACCEPT RESPONSIBILITY IN  
MAKING ENGINEERING DECISIONS  
CONSISTENT WITH THE SAFETY,  
HEALTH AND WELFARE OF THE  
PUBLIC, AND TO DISCLOSE  
PROMPTLY FACTORS THAT  
MIGHT ENDANGER THE PUBLIC  
OR THE ENVIRONMENT...”**

## **SEVERAL OF THE IEEE CODE OF ETHICS**

**“TO BE HONEST AND REALISTIC IN  
STATING CLAIMS OR ESTIMATES  
BASED ON AVAILABLE DATA...”**

## **SEVERAL OF THE IEEE CODE OF ETHICS**

**“TO SEEK, ACCEPT, AND OFFER HONEST CRITICISM OF TECHNICAL WORK, TO ACKNOWLEDGE AND CORRECT ERRORS, AND TO CREDIT PROPERLY THE CONTRIBUTIONS OF OTHERS...”**

## **SEVERAL OF THE IEEE CODE OF ETHICS**

- THESE CODES ARE STATEMENTS;
- TO DO NO HARM
- TO BE HONEST
- TO ACCEPT RESPONSIBILITY
- TO NOT ABUSE WORK OF OTHERS

# **IMPORTANCE OF ETHICAL BEHAVIOR**

**WE HAVE DISCUSSED THE  
METHODOLOGY OF PERSONAL  
PERFORMANCE TO BECOME  
SUCCESSFUL ENGINEERS**

# **IMPORTANCE OF ETHICAL BEHAVIOR**

**BUT UNLESS WE AIM HIGH WITH LOFTY IDEALS AND STRIVE FOR WHAT IS BEST**

**IT IS UNLIKELY THAT OUR LIFE WILL AMOUNT TO VERY MUCH OR THAT WE WILL REALLY MAKE A DIFFERENCE IN THE LIVES OF OTHERS**

# **IMPORTANCE OF ETHICAL BEHAVIOR**

**SUCCESSFUL LEADERSHIP AND  
STRONG PERSONAL MOTIVATION  
DICTATE SHOOTING FOR THE  
HIGHEST STANDARDS**

# **IMPORTANCE OF ETHICAL BEHAVIOR**

**HIGH IDEALS ARE ESPECIALLY  
REQUIRED DURING TIMES OF FAILURE  
AND MISTAKES, IN ORDER TO MAKE  
THE RIGHT DECISIONS TECHNICALLY  
AND ETHICALLY**

# **IMPORTANCE OF ETHICAL PERFORMANCE**

**OF ALL THE AREAS DISCUSSED,  
CONDUCT WITH ETHICAL  
PRINCIPLES MAY BE THE MOST  
IMPORTANT BECAUSE IT INVOLVES  
YOUR REPUTATION AND PERSONAL  
INTEGRITY - ITEMS THAT YOU  
SHOULD CHARISH THE MOST**

# **ETHICAL BEHAVIOR**

- **LIFE IS FULL OF CHOICES**
- **ETHICAL THOUGHT SHOULD DRIVE THOSE CHOICES**
- **TOO OFTEN CHOICES ARE MADE BY:**
  - **WHAT YOU CAN GET AWAY WITH**
  - **DOING THE LEAST AMOUNT OF WORK**
  - **ALLOWING THE END TO JUSTIFY THE MEANS**

# **ETHICAL BEHAVIOR GUIDELINES**

## **1. BE HONEST**

- a) RELATE INFORMATION ACCURATELY  
& TIMELY**
  
- b) NEVER LEAVE OUT INFORMATION  
THAT COULD END UP MISLEADING**

## **ETHICAL BEHAVIOR GUIDELINES**

- c) COMMUNICATE AS YOU WOULD EXPECT OTHERS TO DO FOR YOU**
  
- d) BECOME KNOWN AS A GOOD SOURCE**

## **ETHICAL BEHAVIOR GUIDELINES**

- 2. DO NO HARM**
  - a) A CONSTRUCTIVE WORKPLACE IS A PLEASURE TO BE PART OF**
  - b) AVOID NEGATIVE RUMOR-LADEN CONVERSATIONS THAT HURT PEOPLE**
  - c) AVOID SPREADING UNSUPPORTED INFORMATION**

# **ETHICAL BEHAVIOR GUIDELINES**

## **3. KEEP YOUR COMMITMENTS**

- a) DO WHAT YOU SAID YOU WOULD DO**
- b) BECOME DEPENDABLE**
- c) KEEP YOUR WORD**

## **ETHICAL BEHAVIOR GUIDELINES**

- 4) BE A TEAM PERFORMER BUT STILL INDEPENDENT OF THOUGHT**
  - a) TEAMWORK IS ESSENTIAL**
  - b) BUT GROUP EFFORTS DO NOT RELIEVE RESPONSIBILITY**

## **ETHICAL BEHAVIOR GUIDELINES**

- c) **MUST NOT GO WITH GROUP THINK THAT IS UNETHICAL**
- d) **EFFECTIVE TEAMWORK IS ONLY AS VALID AS THE STRENGTH OF INDIVIDUALS**