



Ethics for Leading Engineering Projects

An Online Continuing Education Course for Engineers

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Ethics for Leading Engineering Projects

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1. Introduction

Maintaining a positive reputation can be as valuable as the bottom line. Ethical conduct is essential for maintaining a positive reputation at the personal level, team level, and organizational level. Project leaders play a key role in representing the team and the organization. Thus, leaders are held to high ethical standards.

Engineering projects, by their very nature, involve high risks, significant funding, and long timelines, creating ample opportunity for ethical challenges that can damage an organization's reputation and lead to legal problems. Ethical conduct is absolutely necessary for project and organizational success. Example ethical dilemmas include information manipulation to avoid looking bad and changing the project scope without required authorization.

This course reviews professional ethics on a broad scale and then focuses on ethics specifically for leading engineering projects. Professional standards covered in this course include:

- *Code of Ethics for Engineers* by the National Society of Professional Engineers (NSPE)
- *Code of Ethics and Professional Conduct* by the Project Management Institute (PMI)
- *Code of Ethics* by the Center for Project Innovation (CPI)

This course examines core ethical values on a practical level when faced with real-world engineering project scenarios. Common ethical dilemmas are presented with reflections on choices and potential consequences.

This course recommends the adoption of an ethical framework to provide transparency, foster stakeholder trust, and achieve lasting project success. An example framework is the five-step Ethical Decision-Making Framework by PMI. It helps in decision-making by evaluating choices in a methodical manner according to ethical principles.

As an example for #1 and #2, U.S. federal government employees (including engineers and project managers working for the government) are subject to the ethical standards in the Code of Federal Regulations:

5 CFR 2635.101 Basic obligation of public service.

(a) Public service is a public trust. Each employee has a responsibility to the United States Government and its citizens to place loyalty to the Constitution, laws, and ethical principles above private gain. To ensure that every citizen can have complete confidence in the integrity of the Federal Government, each employee must respect and adhere to the principles of ethical conduct set forth in this section, as well as the implementing standards contained in this part and in supplemental agency regulations.

As an example for #2, Apple promotes conducting business ethically and has the following ethics statement on its website:



Ethics and Compliance

Apple conducts business ethically, honestly, and in full compliance with the law. We believe that how we conduct ourselves is as critical to Apple's success as making the best products in the world. Our Compliance and Business Conduct policies are foundational to how we do business and how we put our values into practice every day.

"We do the right thing, even when it's not easy."

Tim Cook

As another example for #2, Costco Wholesale Corporation promotes ethical capitalism and has the following Code of Ethics statement:

What is Costco's Mission Statement and Code of Ethics?

Here at Costco, we have a very straightforward, but important mission: to continually provide our members with quality goods and services at the lowest possible prices.

In order to achieve our mission, we will conduct our business with the following Code of Ethics in mind:

- Obey the law.
- Take care of our members.
- Take care of our employees.
- Respect our suppliers.

If we do these four things throughout our organization, then we will achieve our ultimate goal, which is to reward our shareholders.

For #3, this course focuses on (3) widely adopted standards from professional organizations:

- *NSPE Code of Ethics for Engineers*
- *PMI Code of Ethics and Professional Conduct*
- *CPI Code of Ethics*

3. Steps for Applying Ethics

Applying ethical principles when leading engineering projects brings about more long-term success for both the projects and the organization. Unethical and immoral behavior may provide some short-term gains, but introduces several risks that eventually lead to project failures and damaged reputations. So, the question then becomes:

How can I apply ethical principles when managing projects?

This course suggests the following steps:

1. Review applicable policies on the code of conduct
2. Review applicable procedures on project management
3. Review professional ethics standards
4. Apply ethics with a decision-making framework

The following are details on each step:

Step 1: Review of applicable policies on the code of conduct

As laid out in the previous chapter, organizations typically have policies on behavior that apply to all employees. Although they go by different names, examples include:

- Code of Conduct
- Code of Business Conduct
- Rules of Conduct
- Code of Ethics
- Business Ethics and Compliance
- Standards of Conduct
- Ethical Code
- Standards of Behavior

Many companies also have a guidance statement with high-level ethical principles, such as the Apple and Costco statements in the previous section. Often, these statements are referred to as follows:

- Company Values
- Our Guiding Principles
- Co
- Cor
- Mar
- The
- Our C

A PM should p
These policies
usually several

apply to current projects.
n. However, there are

- Honesty
- Accounta
activities
- Anti-discrimi
respect for
- Conflict of i
personal rel
and impartial
- Expense restrictions such as alcohol, entertainment, and per diem.
- Resource management rules that require a project manager to be a responsible steward of company resources (staff, money, and materials) and ensure these are not misused for personal gain.

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Step 2: Review applicable procedures on project management

Organizations often have specific policies and procedures for the management of projects. Sometimes, a Project Management Office (PMO) releases standard procedures, templates, and offers training to project managers. And each department, division, or program may have its own specific procedures.