



Workplace Ethics & Standards of Professional Conduct for Wisconsin Engineers

Course Number: ET-02-800

PDH: 2

Approved for: Wisconsin

This course may be acceptable for other states, but PDH-Pro makes no guarantee.

State Board Approvals

Florida Provider # 0009553 License #868

Indiana Continuing Education Provider #CE21800088

Maryland Approved Provider of Continuing Professional Competency

New Jersey Professional Competency Approval #24GP00025600

North Carolina Approved Sponsor #S-0695

NYSED Sponsor #274

Course Author: Mathew Holstrom

How Our Written Courses Work

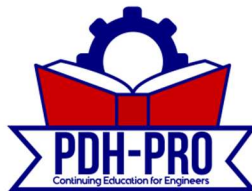
This document is the course text. You may review this material at your leisure before or after you purchase the course.

After the course has been purchased, review the technical material and then complete the quiz at your convenience.

A Certificate of Completion is available once you pass the exam (70% or greater).

If a passing grade is not obtained, you may take the quiz as many times as necessary until a passing grade is obtained).

If you have any questions or technical difficulties, please call (508) 298-4787 or email us at admin@PDH Pro.com.





ET-02-800-Workplace Ethics & Standards of Professional Conduct for Wisconsin Engineers

The Basis of Ethical Behavior and Professional Conduct

Ethics is not a set of rules that a person learns once and never revisits, and it is not the application of an analytical framework to solve a problem, although either of these strategies (use of an ethical code or framework) may be helpful in resolving ethical questions. Confronting ethical questions and choosing to make ethical decisions is an ongoing, often challenging, process that requires self-awareness, sound reasoning, and the ability to evaluate others' opinions without bias.

Ethical considerations are integral to engineering decision-making and are closely linked to the engineer's ethical responsibilities to the public and the profession. Ethical concerns should be handled with the same high standards of accuracy, use of evidence, and practical purpose that characterize other aspects of engineering projects. Many of the elements of good professional judgment that contribute to an engineer's professional competency and technical skills are also useful in:

- Identifying and weighing competing ethical concerns.
- Understanding the issues that underlie those concerns.
- Responding effectively to those concerns.

Engineering is a broad discipline with a potential multitude of ethical challenges, but most benefit by thoughtful consideration and discussion of the disputed facts. Ethical frameworks can help people navigate ethical dilemmas by setting out the main points and clarifying each stakeholder's concerns. Companies can use many different types of analytical frameworks to begin an ethical analysis, but some can more appropriately deconstruct a specific scenario than others. An analysis might begin with the following questions:

1. What are the undisputed facts related to the case?
2. What are the competing ethical concerns or values?
3. How do the competing concerns or values impinge or depend on one another?
4. Can the reasons for taking a particular course of action be explained and defended?
5. Is the proposed course of action consistent with any relevant rules of conduct or official Statements of Ethical Principles associated with a pertinent professional organization or company?

Professional Ethical Codes

Rules of ethics set by professional bodies aim to guide members of the profession through difficult situations, particularly when conflicting pressures or considerations need to be reconciled. The main guiding code of ethics for professional engineers in the United States is the National Society of Professional Engineering's (NSPE) Code of Ethics, which can be found at <http://www.nspe.org/resources/ethics/code-ethics>.

The NSPE Code of Ethics has multiple sections that outline fundamental professional duties required of an engineer, rules of practice, professional obligations, and the "Engineers' Creed," which is a pledge to act honestly and lawfully in the interest of human welfare, putting service and professional reputation



ET-02-800-Workplace Ethics & Standards of Professional Conduct for Wisconsin Engineers

before profit. As stated by the NSPE, engineering services require “honesty, impartiality, fairness, and equity, and must be dedicated to the protection of the public health, safety, and welfare.” [And] “Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.”

The Importance of Ethical Conduct and Business Reputation

Accountability and transparency have become key issues for companies of all sizes, with risk control increasingly including strategies related to ethos, culture, and behaviors within an organization. A good ethical culture is critical to maintaining company and brand reputation, as well as forging relationships with banks, institutional investors, and suppliers, and increasing a company’s attractiveness as an employer.

The culture of an organization is probably the most important aspect of its system of internal control, and it is the foundation for other internal controls. Management may set out the policies and procedures that it wants followed, but the corporate culture ultimately determines whether they are followed, amended, or ignored. Many companies with impressive ethical codes have been revealed to be astonishingly corrupt.

Engineers must take potential risks very seriously, and ensure a crisis does not become a catastrophe, especially as unsafe conditions or lack of rigor in engineering projects can be particularly devastating. The risks of negative consequences in the form of declining share prices or loss of customers can be substantial, but pale in comparison to the type of emotional and financial repercussions associated with project-related injuries or deaths. Engineers who put economic considerations and competition before health and safety not only put their own and their company’s professional reputation at risk, they undermine the discipline as a whole.

Managers often struggle to balance the needs of ethical practice with company culture, especially when markets face increasing competition and growth, and at the same time, demand greater regulatory scrutiny and a degree of transparency. Employees and companies may feel torn trying to implement best practices given these dual, sometimes conflicting, messages. This issue crops up most often in engineering in the form of managing a balance between safety and financial cost. How much should a company spend in order to avoid death or injury to a member of the public?

Even the most ethically aware companies can find their standards challenged on a daily basis. For many, the greatest hurdles to establishing or enforcing strict ethical standards are the time and effort involved

to implement and monitor them. Companies in the US have seen a proliferation of new policies and procedures. Grievances about the cost of compliance – in terms of staff numbers, time, and focus – are widely documented. There is too much red tape, executives say, and too many distractions from other business imperatives. Employees who feel overwhelmed or frustrated about the number or complexity of new rules may feel more inclined to ignore the ones they see as unhelpful to getting the job done.



ET-02-800-Workplace Ethics & Standards of Professional Conduct for Wisconsin Engineers

Laws and policies enacted and implemented in the past decades reflect an increased awareness of the potentially damaging effects of engineering projects on the local landscape and the global environment. The engineering profession has a responsibility to protect natural resources and ensure their safe and appropriate use. Now more than ever, engineers have a duty to mitigate the negative effects of human wear and tear on the planet's ecosystem.

Ethical Qualities

Professional engineers have a duty to adopt the highest standards of professional conduct, openness, fairness, and honesty in their work, performing tasks to appropriate standards of accuracy and precision. They are responsible for performing their tasks with honesty and integrity, protecting public health and safety, obeying the law, respecting and protecting the natural environment, and upholding the reputation and dignity of the engineering profession.

Not everyone is able to maintain a moral "compass," unmoved by a workplace culture that encourages going along with the crowd. The set of skills, abilities, and character traits that help engineers identify and resolve conflicts ethically comes more naturally to some than others, but can, and should, be learned by everyone. The following qualities form the foundation of ethical behavior in professional engineering.

Honesty and Integrity

Honesty and integrity are two separate but closely related concepts. While they have different meanings, they are so closely linked that it is hard to imagine a person exhibiting one without the other.

Honesty is not simply a matter of not lying: The public trusts professionals to provide information that is as complete and accurate as possible. Engineers are likely to work for the benefit of a number of different groups of people, and in many cases, will have a duty to keep these people informed of relevant facts. In other cases, such as where there is a duty to maintain confidentiality, for example to a client, it may be unethical to disclose information that would jeopardize that confidentiality. In these cases, failure to disclose would not necessarily be dishonest.

Integrity is a more difficult concept to define. It has to do with acting ethically, even when there is no personal advantage to doing so. A person of integrity will resist pressure to compromise their ethical values and principles, whether that pressure comes from employers, clients, or anywhere else. They will take steps to avoid conflicts of interest, or, where this is not possible, declare these conflicts clearly, and do their utmost to avoid improper influence. People with integrity are consistent and reliable, and their actions match up to their words.

For some, integrity may also mean 'standing for something,' trying to change practices and attitudes that seem less than ethical; it might mean trying to influence for the better the practices of an employer, the engineering profession, or even society at large. Ethical obligations require engineers not just to avoid dishonest or unethical practices individually, but also to take steps against corrupt practices or professional misconduct in others.



ET-02-800-Workplace Ethics & Standards of Professional Conduct for Wisconsin Engineers

Truthful Representation

Truthful representation is an important aspect of honesty and integrity regarding public presentation of one's level of ability and areas of competence or expertise. Truthful representation means that engineers agree to work only in areas of the field in which they have received professional certification from an appropriate educational institution.

There is often temptation to misrepresent an individual or company's abilities. For example, a young company might "stretch the truth" about its capabilities when bidding against a more established or well-known company to improve its competitive edge. This seemingly benign act is potentially quite risky. Even the most experienced engineers can make mistakes, and mistakes in engineering projects have the potential to be catastrophic. Engineers who lack the requisite level of skill or technical knowledge required by a position not only risk their careers, but they also risk facing serious legal penalties—even if nothing goes wrong.

Truthful representation also applies to honest communication about project details even if they might be unflattering to the company. An engineer may need to disclose information that has not been requested directly, and which people may not be anxious to hear. In cases of engineering projects with novel designs that require previously untested skills and methods, it is an engineer's duty to ensure that they manage potential risks.. This includes providing a non-punitive environment to reveal skill gaps, and take the steps and time for teams to acquire the appropriate skills.

In some cases, people communicate misinformation intentionally, as a way to deceive others. Engineers should be self-monitoring and vigilant of others to ensure no professional engineer knowingly misleads or allows others to be misled about their work. A qualified professional engineer that unwittingly uses inaccurate information or provides a mistaken opinion may be responsible for any negative consequences that result from actions based on the information.

Engineers have a professional duty to learn and incorporate new information and methods into their ideologies by remaining students in their fields of expertise. They must consider if a decision is correct in light of the engineering field's most up-to-date understanding of the issue, and based on the all the available evidence. Engineers should understand the value that their professional opinion holds, and never offer it lightly or on the basis of insufficient evidence.

The influence of conflicting interests on decision makers is often subtle and not discovered until the project is already underway or complete. Engineers should consider whether a given opinion is objective, or if other considerations (such as fear of losing a client or loyalty to an employer) might be swaying their judgement. Poor decision-making, errors in technical skill or judgment, or preferential treatment toward one party or another not only fail clients and the larger public, it damages the reputation of engineers and engineering, as a whole.



ET-02-800-Workplace Ethics & Standards of Professional Conduct for Wisconsin Engineers

Safety and Welfare

While all members of civil societies have general responsibilities to maintain law and the public good, professional engineering is closely associated with the ethical principles of protecting public safety and welfare. Many discussions of engineering ethics focus on major accidents that involved injury and death, and particularly, cases in which some level of negligence was involved.

Professional engineers have a duty to obtain and use their knowledge and engineering skills judiciously and for the welfare of others. Ensuring public safety is integral to the role of an engineer and a significant part of professional training. To fulfill this ethical obligation, engineers have a responsibility to address projects and problems with accuracy and attention to detail. Inaccuracies and carelessness increase the potential risk of project failure; the possibility of accidents, injuries, and deaths; and the chance of financial ruin for a company or individual.

The extent to which an engineer is required to protect public safety and welfare, like many ethical standards, constantly evolves to reflect changing social and political standards and expectations. The steps engineers are expected to take to protect others have changed over time, and vary across the world. Engineering activities are rarely 100 percent safe. Often, individuals, society, politicians, scientists, or lawyers must determine whether an activity is “safe enough.”

Engineering decisions can affect the health and safety of very large numbers of people. This means that the public expects engineers to consider the ways in which their activities might put people in danger, and to remove or mitigate those dangers. It is easy to say that the health and safety of employees and the public should take priority, but issues arise in identifying an appropriate level of safety.

Holding health and safety paramount does not just mean ensuring that one is not directly responsible for harm to the public, but that they also have some responsibility to help others improve their health and safety, for example, by warning them of dangers of which they may not yet be aware. Even in situations where no injury to life, property, or the environment has yet occurred, an engineer who perceives that a significant risk is not being addressed has a responsibility to inform others. Those who “blow the whistle,” however, can face significant repercussions, including loss of the job.

Workplace Corruption and the Culture of Silence

Professional engineers not only have a duty to act without deception and declare conflicts of interest, they also must actively work to reduce the possibility that corrupt practices or professional misconduct might occur in their work environment. Discussing ethics in a theoretical environment, it is easy to imagine one will know right from wrong at a crucial time and take a stand or action against unsound ethical decisions. However, this is only a small part of what is required to act ethically.

Dishonesty can be tied to corporate or team culture, particularly if incentives are high and potential for punishment or discovery is minimal. A “conspiracy (or code) of silence” refers to a characteristic of groups of individuals with a common bond who do not mention, discuss, or acknowledge a particular



Purchase this course to
see the remainder of
the technical materials.