Introduction
This handbook addresses selected topics under the umbrella of professionalism and ethics. Our focus is on issues of proper decision-making and proper conduct in the workplace. We also introduce various legal agreements commonly encountered by engineers.

“Ethics” refers to a moral code that helps guide our decisions and behavior. At times in your career, you may find that right and wrong decisions can lack clear boundaries. Ethical reasoning is a process that helps us determine what we should do in a given situation. There are many well-established theories of ethical reasoning that can shed light on a given situation from different perspectives. This theoretical background is beyond the scope of our handbook. Furthermore, we assume students already have some experience with ethical reasoning as a background for the concepts presented here.

“Professionalism” refers to standards of behavior in the workplace. Because engineers have influential roles and leadership positions, proper conduct is important. It protects you, your company, and the public. Codes of ethics from our professional societies define proper conduct very broadly. Improving the quality of life for all people, respect for diversity of all cultures, and avoiding harm are a common theme in these ethical codes. Avoiding discrimination, honesty and trustworthiness are all prominent as well.

Goals for this Handbook
Our intention for this handbook is to help students prepare for their senior projects, sponsored projects, internships, summer employment and their careers. Ideally, all Cal Poly engineering students will be well prepared for the workplace in terms of proper conduct, safety, security and being able to deal with murky ethical situations.

Are you prepared?
- Can your project be designed, tested, implemented and used safely and securely?
- Do you treat people differently depending on their national origin, appearance or gender?
- Are you ready to sign a confidentiality agreement that gives your employer certain rights to your creative thoughts 24/7?
- Does your company have a business plan founded on shaky intellectual property rights?
- Should that downloaded material be used in the product you're making?
- Is the career position you’re considering a good fit with your own values?
As another gauge of your readiness for the workplace, consider the following learning objectives associated with professionalism. We include two categories: baseline and more advanced abilities.

Baseline minimum abilities:
- Describe why professionalism and ethical reasoning are important
- Cite examples from the Code of Ethics for those working as Software Engineers in some capacity (SE’s, CSC’s and CPE’s often do this)
- Describe common legal agreements encountered by engineers
- Identify appropriate standards of conduct in the workplace
- Critique situations that may present an ethical concern
- Identify unsafe and insecure designs and engineer better approaches
- Identify speech or conduct that may hinder team dynamics and then resolve these conflicts productively

More advanced abilities:
- Assess situations with nuanced ethical concerns
- Critique conditions or bounds associated with various legal agreements
- Employ rigorous theories of ethical reasoning

Fully developing all these abilities is beyond the scope of this handbook. Nevertheless, we hope that it may help fill some gaps or steer you towards additional resources.

**Why should you care about professionalism and ethics?**

Because engineers have such influential roles in society, we should all care that they work in a professional manner. The public must trust in those working as software engineers, they have no other choice (most of them are incapable of analyzing our work). Our innovations need to be safe, secure and beneficial. So, in the interest of public safety and security we should care about professionalism and ethics.

Examples of unethical practices or questionable conduct appear in the news, seemingly every day and sometimes with horrendous consequences. The BP oil spill in 2010 resulted in the largest environmental disaster in U.S. history, for example. The company has since pleaded guilty. More recently, a BP engineer has been found guilty of obstructing justice (punishable by up to 20 years in prison). The engineer had deleted text messages to his supervisor. Prosecutors argued these messages suggested that company officials knew early efforts to stop the leak would likely fail. In considering the BP case, we should appreciate that a complex series of events and decisions occurred, leading to the disaster. It wasn’t an isolated decision made by one individual; rather, group dynamics and behaviors contributed to the spill. However, the responsibility of the individual engineer’s contribution to the cause of the disaster is undiluted.
As another example, closer to campus, we survey employers of our graduates regularly to keep in touch with their priorities. Results in 2008-09, 2010-11 and 2012-13 underscored the importance of ethics and professionalism. In over 400 responses to each survey, “ethical behavior” was either the most important attribute identified by our employers, or it was tied for the top attribute. Thus, employers are ranking ethical behavior above many traditional learning outcomes such as proficiency in design, math, science, use of modern engineering tools and experimental skills. They also ranked it above nontechnical outcomes, including communication and life-long learning. Employers are indicating that how an engineer does things (especially when no one is looking) is more critical than technical proficiencies!

Professional Societies Set High Standards

Professional societies such as the IEEE and ACM define high expectations for conduct by engineers and those working as “software engineers. “As lead societies, the IEEE and ACM jointly set the tone in the preamble of the Software Engineering Code of Ethics and Professional Practice. 30

Computers have a central and growing role in commerce, industry, government, medicine, education, entertainment and society at large. Software engineers are those who contribute by direct participation or by teaching, to the analysis, specification, design, development, certification, maintenance and testing of software systems. Because of their roles in developing software systems, software engineers have significant opportunities to do good or cause harm, to enable others to do good or cause harm, or to influence others to do good or cause harm. To ensure, as much as possible, that their efforts will be used for good, software engineers must commit themselves to making software engineering a beneficial and respected profession. In accordance with that commitment, software engineers shall adhere to the following Code of Ethics and Professional Practice.

Interestingly, note that this Code, jointly adopted by both the IEEE and ACM in 1999, broadly defines a “software engineer” as any of our majors working in a software engineering capacity, including all of “those who contribute by direct participation or by teaching, to the analysis, specification, design, development, certification, maintenance and testing of software systems.” This Code relates to “the behavior of and decisions made by professional software engineers, including practitioners, educators, managers, supervisors and policy makers, as well as trainees and students of the profession.” Thus, the IEEE/ACM Software Engineering Code of Ethics is directed at software practitioners, be they trained as CSC, CPE, or SE. Further note that both the ACM and the IEEE have their own respective Codes of Ethics, applicable to all members and worth reading. 23,24
In the high level “short version,” of this Code we see the scope of what should be considered proper conduct. Note that the Code not only defines how engineers should work, but also when they should not get involved on a project.

“The short version of the code summarizes aspirations at a high level of the abstraction; the clauses that are included in the full version give examples and details of how these aspirations change the way we act as software engineering professionals. Without the aspirations, the details can become legalistic and tedious; without the details, the aspirations can become high sounding but empty; together, the aspirations and the details form a cohesive code.

Software engineers shall commit themselves to making the analysis, specification, design, development, testing and maintenance of software a beneficial and respected profession. In accordance with their commitment to the health, safety and welfare of the public, software engineers shall adhere to the following Eight Principles:

1. PUBLIC - Software engineers shall act consistently with the public interest.

2. CLIENT AND EMPLOYER - Software engineers shall act in a manner that is in the best interests of their client and employer consistent with the public interest.

3. PRODUCT - Software engineers shall ensure that their products and related modifications meet the highest professional standards possible.

4. JUDGMENT - Software engineers shall maintain integrity and independence in their professional judgment.

5. MANAGEMENT - Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance.

6. PROFESSION - Software engineers shall advance the integrity and reputation of the profession consistent with the public interest.

7. COLLEAGUES - Software engineers shall be fair to and supportive of their colleagues.
8. SELF - Software engineers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession.

This code sets high standards for our profession, but you can’t wait for a career position to embrace these norms since it explicitly covers “students.” Of course, honesty, respect and responsibility are important characteristics for both students and working professionals. Cal Poly has codified these expectations on its own. The Mustang Way\textsuperscript{21} describes personal characteristics that foster a strong Cal Poly community where students, staff and faculty can all excel.

**Licensing of Software Engineers as PE’s**

Software Engineers as well as CSC and CPE graduates who develop critical software may need to be licensed as PE’s for certain projects in at least 40 states now.\textsuperscript{25} Note that not all software developers need to (or want to) become licensed PE’s.\textsuperscript{26} For those interested, there is a PE licensing guide online.\textsuperscript{27}

**Software Systems Safety**

As a member of the software development team, the safety engineer, whether oriented to software, hardware, or both, is a critical member in the design, redesign, integration, deployment, and maintenance of modern safety-critical systems. In such a system, it is this engineer’s responsibility to ensure that an acceptable level of safety risk is achieved and maintained throughout the lifecycle of the system(s) being developed. This responsibility often devolves to the software engineer, computer scientist, or computer engineer working in the capacity of their engineering and development skills.

Software System Safety, an element of the total system safety and software development efforts, cannot function independent of the total effort, nor can it be ignored. Systems, both “simple” and highly integrated with multiple subsystems, are experiencing an extraordinary growth with the use of computers and software to monitor and control safety-critical subsystems and functions. A software specification error, design flaw, or lack of initial safety design requirements can contribute to or cause a system safety failure or erroneous human decision contributing to a system safety failure. Death, injury, loss of the system or other assets, or environmental damage can result. To achieve an acceptable level of safety for software used in safety-critical applications, software safety engineering must be emphasized early in the requirements definition and system conceptual design process. Safety-critical software must then receive continuous emphasis from management and a continuing integrated engineering analysis and testing process throughout the development and operational lifecycles of the system\textsuperscript{28}. 
Software and Systems Security

As computing systems become more essential to our daily lives, it becomes ever more important that the services they provide are available whenever we need them. We must also be able to rely on the integrity of the systems, and thus the information that they hold and provide. What is more, our society and our economy depend upon certain pieces of information being held in confidence.

We want to be assured that they will work exactly as expected, and that they will keep working – even in the face of disasters, accidents, or deliberate attempts to interfere with or prevent their function.

Achieving and maintaining security is a complex, interdisciplinary challenge. We must consider not only the software and hardware components of a system, but also the way in which these relate to the human processes and physical constraints of the real world. A modern software engineer trained in any of our computer related fields must understand principles of architecture, design, management, interoperability, and evolution, and be able to apply them effectively in a world of rapidly changing technologies and expectations.29

Professionalism and Standards of Conduct

Proper behavior for a professional includes legal standards that promote a healthy and equitable workplace. For example, these standards include laws against sexual harassment and discrimination. Federal and state laws prohibit both of these kinds of discrimination. Violations could cost you your job.

Sexual harassment refers to unwelcome sexual advances, requests for sexual favors, and other verbal or physical harassment of a sexual nature9. It can include offensive remarks about a person's gender, such as making offensive comments to a female employee about women in general. Parties involved can include either men or women, and mixed groups or all the same sex. The perpetrator could be any employee of a company, a client, or customer. Sexual harassment becomes illegal when it is sufficiently frequent or severe that it creates a hostile work environment.

Harassment is a form of employment discrimination. It includes unwelcome conduct that is based on race, color, religion, sex (including pregnancy), national origin, age, disability, or genetic information10. To be unlawful, the conduct must create a work environment that would be considered intimidating, hostile, or offensive to a reasonable person.

As a new employee you can expect to receive training in these areas, particularly if you'll be working for a larger company or a government agency. At Cal Poly the following policy prohibiting sexual harassment is for student employees11.
Cal Poly is fully committed to creating and maintaining an environment in which faculty, staff, and students work together in an atmosphere of mutual respect and unconstrained academic interchange. All faculty, staff, and administrators are held accountable to maintain a working and learning environment free from sexual harassment for students and employees. Sexual harassment can include, but is not limited to the following:

- Explicit use of derogatory terms of a sexual nature
- Use of images that demean one's sex; obscene gestures
- Unwelcome personal attention or touching of a sexual nature
- Direct physical advances, which are inappropriate and unwanted
- Sexist jokes about one's clothing, body, or sexual activities
- Request for sex in exchange for grades, letters of recommendation, salary increase or promotions, or employment opportunities

If you feel that you may have been the victim of discrimination or have experienced other violations then please report your concerns to the Dean of Students Office or the Equal Opportunity Office.

Professionalism, Teamwork and Inclusivity

Teams are commonplace in industry. A survey examining current issues for corporations found 88% of respondents spent a portion of their day in a team setting.\(^1\) The most frequent team activities reported were handling special projects (84%), and innovations / improvements (74%). Also, for tasks that require consideration from many different angles, or that depend on out-of-the-box thinking, culturally diverse teams are sometimes the best approach.\(^1\)\(^3\)

To be highly effective, teams need a well-defined purpose and they need members with complimentary skills. Effective teams also need to ensure that every member is fully involved. Thus the benefits of teams may not be realized without some effort on the part of the members and leadership. Respect and inclusion for all members is a key requirement for an effective team.\(^1\)\(^3\),\(^1\)\(^4\),\(^1\)\(^5\)

Employers of Cal Poly graduates know that diversity is smart for their business.\(^1\)\(^6\) They need employees who can thrive in an inclusive work setting and can interact effectively with people from different backgrounds. The Career Services office defines the following multicultural competencies for our graduates:

- Demonstrate respect for people from diverse backgrounds
- Keep your own biases in-check
- Seek out and value differences in others
- Function effectively as part of a diverse work group
- Communicate effectively, demonstrating professionalism in a variety of cultural contexts
How do you rate yourself with these abilities?

Sometimes we may not be aware of our more subtle behaviors, but these can impact our work environment. Do you treat men differently than women? Do you address men/women differently? What types of assumptions do you make when seeing someone with an accent, or wearing clothes that are different from the current trend?

Subtleties in how we speak or behave can (unintentionally) communicate hostile, derogatory, negative slights or insults towards others. These are sometimes referred to as micro-aggressions and can hurt team dynamics. Improved awareness and knowledge can help avoid these unintentional offenses.

- **Awareness**: Acknowledge how your life experiences may influence your perceptions about certain types of people or situations. Although it is sometimes an uncomfortable consideration, personal awareness of your own culture and how it has influenced thinking enables a perspective that sees beyond superficial differences between colleagues.

- **Knowledge**: Being knowledgeable of differences among groups of people (e.g. people from different parts of the world) is important. Privilege, racism and oppression have influenced cultures over time, and influence individuals today.

There are many opportunities on campus to improve your multicultural competencies, before you start a career position. Here are some suggestions from the Career Services office:

- Participate in a service project, and consider working in a different country or different part of the US, [www.volunteermatch.org](http://www.volunteermatch.org)
- Participate in Engineers Without Borders, [www.ewb-calpoly.org](http://www.ewb-calpoly.org)
- Study abroad [www.iep.calpoly.edu](http://www.iep.calpoly.edu)
- Take a course from the Women’s and Gender Studies department or the Ethnic Studies department
- Participate in Diversity Advocate training at the Cal Poly Multicultural Center [www.deanofstudents.calpoly.edu/content/multicultural/index](http://www.deanofstudents.calpoly.edu/content/multicultural/index)
- Participate in Ally Training at the Cal Poly Pride Center [www.deanofstudents.calpoly.edu/content/pride/index](http://www.deanofstudents.calpoly.edu/content/pride/index)

**Rights, Responsibilities and Legal Agreements Common in Engineering**

Engineers will often encounter a wide variety of legal agreements. Many types of these agreements are set up to protect creative works and technology developed by engineering teams. This “intellectual property” (IP) of a company can represent considerable value and investment. A company’s future may depend on it. Hence,
companies need to protect their IP from inadvertently (or surreptitiously) being distributed.

Several kinds of common agreements are outlined below. This list is by no means inclusive. When in doubt, consult your supervisor or your company’s legal department. Also note that some of the binding aspects of these agreements vary by state, and internationally.

Any example or suggested remedy below is presented with the intention of further clarifying the associated definitions. The discussion below is not legal advice. *(And this paragraph is an example of a disclaimer.)*

**Rights and Responsibilities — Intellectual Property Rights and Copyrights**

Intellectual property rights are the legally recognized exclusive rights to creations of the mind\(^3\). These include copyrights, patents and trademarks. IP can also include literary and artistic works, and inventions.

Restrictions on IP use by another party can be confusing at times for a number of reasons. For example, much information is highly accessible online, but just because info is readily available, doesn’t mean that you can copy it and use it for your own purposes! Also, many variants on copyrights exist, providing a suite of conditions that affect when works can be freely used or modified\(^4,5\). These variants promote innovation, but also introduce nuances. In some cases, you might be able to incorporate software source code on a project as a student for a class project. However, this usage may not be permitted for a commercial product. Other variations include requirements to attribute original authorship, or to use a work verbatim rather than allowing derived versions\(^4\).

Murky IP rights can impact more than just an individual project. Some companies have founded their business plan on an unsteady IP foundation. For example, the original incarnation of Napster provided peer-to-peer music distribution\(^6\). Multiple lawsuits involving the music industry and artists asserted that Napster was violating copyright laws. Napster countered that their product was a platform only, and its users are the ones violating copyrights. A court order eventually forced Napster to shutdown and pay over $30 million, resulting in bankruptcy.

Another company, Aereo, planned to stream broadcast TV across the Internet as a service. Their system provided an antenna for each user. Antennas were to be located in an Aereo facility, near a TV broadcast transmitter. Aereo’s plan was to receive the broadcast and stream it over the Internet. Their argument was that since each user has their own antenna and subsequent signal routing, they were simply providing a convenience. They offered a well-placed antenna in exchange for a monthly fee\(^7\).
The murky nature of Aereo’s business plan led to a debate over their copyright infringement that went all the way to the U.S. Supreme Court. Unfortunately for these entrepreneurs, the Court ruled against Aereo. One justice described their approach as common theft!

Seeking your first career position? Ready to sign up for employment? **Will you have rights to the creative ideas that you dream up, on your own time?** (Note that transparency is always a good idea when you don't know the answer. Declare what property you consider your own up front and early, so that discussions can resolve the issues before you even agree to your employment contract!)

Anticipate that your employer will require you to assign any and all IP that you develop for the exclusive benefit of your employer. They are paying your salary and providing you with equipment to perform your job. Typically they will expect (and require) that you assign all IP developed within the course of your job for the employer's exclusive ownership. Additionally, expect your employer to take full ownership of any IP that you create (even unrelated to your job)

- if the IP relates to your employer's business activities, or
- if you use ANY information or equipment of your employer (such as the internet service or a laptop computer), or
- if you invent the IP during any work time.

The law heavily favors employers in these circumstances, so if you are launching your own creative activities, you will have to avoid any use of employer (or third party) confidential information, and any use of employer equipment, resources, or time.

Laws vary from state to state, so check before you assume anything, but California Labor Code Section 2870 prohibits employers from requiring that you assign inventions "that the employee developed entirely on his or her own time without using the employer’s equipment, supplies, facilities, or trade secret information" but the employer is allowed to require that you assign and transfer "those inventions that either: (1) Relate at the time of conception or reduction to practice of the invention to the employer's business, or actual or demonstrably anticipated research or development of the employer; or (2) Result from any work performed by the employee for the employer."

**Do you own the IP rights to your senior project?** If an industry sponsor funded your project, then IP ownership will depend on the terms of the contract established with the company. If no external funding is associated with your project then you may retain IP ownership. However the university may also claim rights to it, if “extraordinary resources” are utilized. Check the university IP Policy for further information.

**Rights and Responsibilities – Confidentiality Agreements and Non-Disclosure Agreements**
Confidentiality agreements and non-disclosure agreements ("NDA") limit dissemination and use of confidential, non-public information. Your employer may require you to sign an NDA to protect the company's information, and also may require them to protect the information received from third parties. These agreements typically prohibit you from any disclosure of confidential information, and from discussing confidential information with any person except those expressly approved by the owner of the information (e.g. approved colleagues who may be working on the same project).

When agreeing to the terms of an NDA, you are providing your own personal assurance. Thus violation of the NDA can subject you to criminal and civil penalties (e.g. California Uniform Trade Secrets Act, Civil Code Section 3426). Penalties can include payment of damages associated with the disclosure and loss of your job. The NDA also requires you to use care in securing and protecting the confidential information.

**Rights and Responsibilities — Non-Compete Agreement**

A non-compete agreement is a contract under which one party agrees to not compete with the other for a specified period of time and in a specified geographic area. This style of agreement is also referred to as a non-compete clause.

For employees located within California, with only a few exceptions (e.g. sale of a business), non-compete agreements are generally NOT enforceable and NOT allowed.\(^\text{20}\) Non-compete agreements are typically signed when starting employment. These may be somewhat more common for industries that do not require large capital investments to get started — software companies, for example. In these situations, the company relies heavily on its IP and must guard it closely.

In other words, when a company hires you — enthusiastic and innovative young professional that you are — and then invests years of experience, collaboration and training into you, they don't want you to quit and start a competing company!

**Rights and Responsibilities — Conflict of Interest**

A conflict of interest can arise when your professional judgment risks being unduly influenced by a secondary interest. For example, a conflict of interest may exist if you are in a decision-making role at work (your primary interest), and the outcome of that decision might personally benefit you (via a secondary interest). The benefit could also involve a close family member.
As a scenario, imagine you are on a committee that will decide which vendor to use when buying pencils for your company. During the selection process you discover that your brother’s company made it to the final round. Clearly, this might be perceived as a conflict of interest because a close family member could stand to benefit from the result of the committee decision.

A possible remedy for this situation is to announce the family connection to the committee and recuse yourself from the discussion of your brother’s bid. This would help avoid the risk of any corrupted judgment. Identifying and avoiding conflicts of interest helps protect you from potential legal and/or employment consequences.

**Professionalism and Thriving in the Workplace**

Many of the topics in this handbook have addressed do’s and don’ts for the workplace. To round out the discussion on professionalism, we include a broader perspective: thriving in your new job.

The Polk-Lepson Research Group\(^8\) at York College in Pennsylvania studies behavior in the workplace. Their reports describe qualities of “professional” versus “unprofessional” employees. They also cite common problem areas, particularly those involving new college graduates.

Recent findings indicate a worsening state of professionalism, including:

- **Entitlement.** New employees demonstrate a sense of entitlement, for example feeling that they deserve their position. This has been a recurring theme in yearly findings.
- **IT Abuses.** This is continuing theme that York describes as increasing. Abuse includes text messaging at inappropriate times or for inappropriate purposes. Excessive use of Twitter or Facebook were also common complaints.
- **Unfocused.** Respondents to the study indicated employees were often unfocused due to technology-related interruptions. Too much multitasking was another commonly cited reason.
- **Work ethic.** The virtue of hard work and diligence appears to be worsening according to York.
  - Too casual of an attitude towards work (86.6%)
  - Not being self-driven (71.5%)
  - Lack of ownership of one’s work (69.3%)
  - Not understanding what hard work is (65.9%)
  - Willingness to do work lacking professional quality (59.8%)

Also in their study, researchers at York identified traits that are commonly associated with “professional” behavior in the workplace.

- Work until a task is fully completed
• Interpersonal skills including civility
• Appropriate appearance
• Punctuality and regular attendance
• Communication skills
• Honesty
• Focused/attentive

York researchers also identified characteristics commonly associated with "unprofessional" employees:
• Inappropriate appearance
• Poor work ethic
• Unfocused
• Apathetic
• Sense of entitlement
• Disrespectful and rude
• Lack of time management

Consider changing any of your bad habits now, while still a student. With some focused attention better practices will become second nature to you. Recreate yourself to thrive at your first career position!

How we address others in the workplace, and whom we address are also common faux pas for students and inexperienced engineers.

The culture in the US tends to be more familiar than many others. In most European and Asian cultures use of first name is considered highly offensive. Title and family name is the proper way to address those who are older, have higher rank, or more schooling. In these cultures "Hello Mr. Smith", "Hello Dr. Smith ", "Hello Professor Smith" are all O.K. "Hello Smith " is not appropriate. And "Hi Jane" is completely unacceptable. When in doubt its best to start more formally. The person will let you know if a less formal address is preferred. The same rules apply to e-mails. Not including salutation (e.g. Ms., Dr., Prof.) in an email is considered disrespectful.

As a student working on a sponsored project you may get access to industry contacts in relatively high positions. You should always consult with your professor before contacting industry representatives directly. And if contacts are made, your professor will need to be kept in the loop. CC your professor on an email, for example. Industry partnerships are vital for Cal Poly. Hence the sponsor – university relationship needs to be handled with care.

Getting Help — At Cal Poly
The following offices may be able to help with a wide variety of concerns. They can also redirect you to other more appropriate services, as needed.

• For a first step with any concern: Consider going to your residence hall assistant, an advising center or your department chair.
• For confidential advice and advocacy: Ombuds Services, 805-756-1380
• For concerns or questions regarding university policies and procedures, your rights and obligations as a student or conduct issues involving students: Dean of Students, 805-756-0327
• For discrimination, harassment or conduct issues involving a staff/faculty member: Equal Opportunity, 805-756-6770
• For concerns with sexual violence, dating violence, domestic violence, and stalking: SAFER, 805-756-2282
• For more serious concerns: University Police, 805-756-2281 or 911
• For guidance on safe facilities and practices: Environmental Health & Safety, 805-756-5555
• To help find employment and for the transition into a career position: Career Services 805-756-2501

Getting Help — In a Career Position

If you witness or experience some kind of inappropriate behavior you should do or say something. Don’t ignore it. If a situation doesn’t “feel” right, don’t ignore it. Sometimes identifying an issue can be the most challenging step. Hopefully your employer will provide training on how to to recognize problems and follow through appropriately.

If you’re unsure what to do or lack training, a reasonable first step is to contact your supervisor or your human resources (HR) department.

When deliberating whether a particular situation might have ethical concerns a common litmus test is to consider details appearing in a newspaper story. Would a fully public disclosure of the circumstances bring any disgrace to you or your company?

Learning More — At Cal Poly

• Senior seminar or similar course in your major
• PHIL 230, 231 within your general education requirements
• PHIL 336, 337, 339, 340, 341 and other courses
• Senior project advisor or supervisor for a research project

Learning More — Independently


This handbook was a team effort

Fred DePiero, associate dean and professor of electrical engineering began this handbook with the College of Engineering ABET Leadership Committee. We wish to extend a sincere thanks to our many reviewers and contributors who helped evolve and broaden the scope of this effort far beyond the original concept.

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This handbook is a living document that will continue to evolve and renew, as our students, staff, faculty, and our disciplines, all do. It has been modified especially for CSC, SE and CPE by Clark S. Turner in October of 2014.

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