

Engineering

Published by the
National Institute
for Engineering
Ethics

Ethics Update

March 2000
Vol. 10, No. 1

NIEE Board of Directors

President
E. D. "Dave" Dorchester, P.E.
Midland, TX

President-Elect
Donald L. Hiatt, P.E.
Jefferson City, MO

Immediate Past President
Philip E. Ulmer, P.E.
Eagle River, AK

Robert L. Nichols, P.E.
Webb City, MO

William A. Cox, Jr., P.E.
Virginia Beach, VA

Walter L. Elden, P.E.
Melbourne, FL

Samuel C. Florman
Scarsdale, NY

Herbert G. Koogle, P.E., L.S.
Albuquerque, NM

E. Walter LeFevre, Ph.D., P.E.
Fayetteville, AR

Andrew Liston, P.E.
Boylston, MA

Michael C. Loui, Ph.D.
Champaign, IL

Margaret N. Maxey, Ph.D.
Austin, TX

Steve Nichols, Ph.D., P.E.
Austin, TX

Arthur E. Schwartz, Esq.
Alexandria, VA

Carl Skooglund
Garland, TX

Jimmy H. Smith, Ph.D., P.E.
Lubbock, TX

L. Preston Wade, P.E.
Lynchburg, VA

Vivian Weil, Ph.D.
Chicago, IL

PARTICIPATING SOCIETY REPRESENTATIVES

*American Society of
Mechanical Engineers*
Ernest B. Gardow, Ph.D., P.E.

*American Society of
Safety Engineers*
William H. Propes, P.E., CSP

ASHRAE
Barton B. Wallace, Jr., P.E.

*National Council of Examiners for
Engineering and Surveying*
R. Larry Greene, L.S.

*National Society of
Professional Engineers*
C. Allen Wortley, P.E.

*Society of American
Military Engineers*
Col. Thomas A. York,
USA, Retired

NIEE Executive Director

William D. Lawson, P.E.

Located at the
Murdoch Center for Engineering
Professionalism
Texas Tech University

NIEE WORKING TO MOVE AHEAD WITH NEW ETHICS VIDEO

Scenario 2 (Draft)

Z-Corp (or another company) Markets One of Their Existing Products in the Third World

Initial Scene: An engineering design/marketing meeting discussing Clean-O, a toxic and corrosive household product for cleaning clogged drains originally designed for a U.S. market. The design/marketing team is assigned to review the packaging for Clean-O because of corrosion of the original metal packaging (particularly the screw-on top). The team has also been asked to examine marketing and design issues for marketing of this product in an emerging country.

History: Clean-O has been used and marketed in the United States for a number of years. The product has been the subject of product liability lawsuits. The design team has identified a number of design changes to the product and its packaging that should increase the product's safe use, but some older design team members are concerned that these product changes (during litigation of the original product design) could be used as evidence of an deceptively unsafe original design.

Brief Story Line: This video would document the design (or redesign) process for Clean-O. As part of the natural flow of engineering design, the story line would address health, safety, and welfare of the public, legal aspects (from product liability to trademark), environmental issues, quality control issues in manufacturing, etc. This scenario would emphasize engineering activities and how issues of professional responsibility can (and should) be openly discussed. The video could include several "stopping points" where the tape could be stopped and issues identified and discussed by the audience.

Editor's Note: The above story line was one of various scenarios the NIEE Board discussed at their meeting last November. No final decision has yet been made, but this and other suggested story lines are currently being developed and refined. NIEE desires to move ahead with this video project this year and we invite your participation, both technically and financially. Please join us in this important project! -Ed.

IN THIS ISSUE...

**NIEE Working to Move
Ahead with Plans for
New Ethics Video**
Page 1

**Message from NIEE
President Dave
Dorchester**
Page 2

**NIEE Resource Guide
Update**
Page 3

**Online Ethics Center
Help Line**
Page 3

**Ethics for the Real
World: Toward a
Workable Definition of
Ethics for Engineers**
Page 4

Student Pugwash USA
Page 6

Announcements
Page 7

NIEE Dues Renewal
Page 7

About NIEE
Page 8



NIEE Headquarters,
Texas Tech University
Campus, Lubbock, Texas

**MESSAGE FROM NIEE
PRESIDENT E. D. "DAVE"
DORCHESTER, P.E.**



As the presidential primary elections unfold across the nation, our attention is continually directed to thoughts of who will fill the role of president of our country for the next four years – who will serve in this role of leadership? Certainly many challenges await this person, many significant issues call for their attention. In their campaign speeches I often hear these presidential hopefuls speak of yesteryear, of a time when (so it seemed) life was simpler, values were stronger, and people worked together as a community. These candidates ask us to take strength in timeless values and to courageously and unselfishly face the realities of our twenty-first century culture: grid-locked relationships, highly-complex issues, and dizzying demands on our money and our time.

On a much smaller scale, I find a similar situation for the National Institute of Engineering Ethics and our profession of engineering. As I begin my administration as the 7th president of the NIEE, I am aware of many challenges in the area of engineering ethics, and also of leading this organization. While I feel that the engineering community has much in our favor and we perhaps are not embroiled in as many troubles as society in general, there is no doubt that we must face very significant issues.

For example, engineers have a reputation for being trustworthy, but we also have considerable room for improvement. Gallup poll data shows that the United States public consistently ranks engineering in the top 5 to 7 out of 26 professions surveyed as regards our “honesty and ethical standards” for the years 1976 to 1998. The trend is basically flat, with 45% to 53%, average 49%, of the public giving engineers a “high” or “very high” confidence rating. With an expanded list of 45 occupations in 1999, the public ranks engineers 11th on the list with a confidence level of 52%. (Reference: The Gallup Organization “Honesty and Ethics in Professions Poll” www.gallup.com)

That we rank in the top quarter of the professions surveyed as regards our honesty and ethics is gratifying; that we only garner an average 49% public confidence level tells me we have much work left to do.

In particular, I am highly sensitized to the need to pass on to future generations of engineers the professional and ethical values that have made our

profession so rewarding and so strong in the first place. This burden will become the keynote theme for my administration: “passing the baton” of professional and ethical values to our younger generations of engineers. By this I mean that we more experienced engineers (I dare not say older!) must consciously invest in our younger engineers and engineering students.

If, like me, you practiced engineering in the 1950s, 1960s and 1970s, you probably would agree that those times in many ways were simpler times, that professional responsibility was more easily defined, there was less paperwork, and our clients and the public we served granted us more freedom to do our jobs – both financially and technically.

But we know that times change – today’s engineers have technology available to them that my generation barely dreamed of. Their world is fast-paced with no signs of slowing down. They compete in a global marketplace, face the constant threat of a litigious society, must assimilate mountains of regulations, and must do it all with continual and intense focus on generating profit margins “per plan.”

Do not misunderstand – I am not saying today’s world is necessarily worse – in many ways I feel that engineering is more fascinating and exciting now than it has ever been. But today’s world is certainly much more complex. And when it comes to understanding and applying professional and ethical values, it seems that a lot of vagueness and confusion exists out there.

This tells me that we have a weighty challenge before us. We can (and must) pass along to younger generations of engineers sound and clear ethical values – both in *understanding and application* – and in so doing, we will continually strengthen our profession. That NIEE helps me effectively do this is perhaps the main reason I am a member and serve on their Board. And it is probably fair to say that all NIEE members feel this way.

I invite you to join with me by investing in our efforts to promote ethics in engineering education and practice. If you have not renewed your membership, please do not delay doing this any longer -- we need you. And if you are able, please include a donation toward our current major educational initiative – a new ethics video (a sequel to Gilbane Gold).

I am humbled and gratified to lead this organization, to work with many fine people who care very deeply about engineering ethics. As your president, I challenge each of us to strengthen our commitment to diligently promote ethics in engineering education and practice.

E. D. “Dave” Dorchester, P.E., President, NIEE

NIEE Resource Guide Update

by

Jennifer A. Brandt and Michael C. Loui
University of Illinois at Urbana-Champaign

In 1997, the NIEE published the second edition of "Professional Ethics and Engineering: A Resource Guide." This guide is available on the Web at

<http://www.niee.org/resource.htm>

The NIEE plans to keep the resource guide current as worthy new publications appear, and to make the resource guide more useful by including brief annotations. Here are two titles that did not appear in second edition of the resource guide.

Vesilind, P. Aarne, and Alastair S. Gunn. *Engineering, Ethics, and the Environment*. New York, NY: Cambridge University Press, 1998.

Describes engineering as a people-serving profession using engineering and the public's perspectives. Discusses the search for environmental ethics in spirituality and the moral community. Provides cases and articles by various authors.

Harris, Jr., Charles E., Michael S. Pritchard, and Michael J. Rabins. *Engineering Ethics: Concepts and Cases*. 2nd ed. Belmont, CA: Wadsworth, 2000.

A textbook. Discusses professional ethics, morality, and methods for moral problem solving. Addresses being a responsible engineer; impediments to responsibility; and honesty, integrity, and reliability. Examines risk, safety, and reliability; engineers and the environment; international engineering professionalism; and modern topics such as gender and minority issues. Includes fifty-seven cases.

Online Ethics Center Help-Line

Editor's Note: NIEE is co-sponsoring the Online Ethics Center Help-Line with Carolyn Whitbeck at Case Western Reserve University. This brief article provides details about the help-line, taken directly from the website. The URL for the Help-Line is

<http://www.onlineethics.org/helpline/>

Online Ethics Center Help-Line Ethical Support for Engineers and Scientists

The Help-Line is intended to provide advice for engineers, scientists, and trainees encountering ethical problems in their work. Principal goals of this Help-Line are to support scientists and engineers to maintain high ethical standards and to act wisely

when confronted with multiple and potentially conflicting responsibilities.

The Ethics Help-Line is sponsored by the Online Ethics Center for Engineering and Science and is cosponsored by the National Institute for Engineering Ethics (NIEE).



How the Help-Line Works

An engineer or scientist can initiate contact with the Help-Line by sending an email message briefly indicating the nature of the problem to:

helpline@onlineethics.org

This message will be read by the Director of the Online Ethics Center, Caroline Whitbeck, or her administrative assistant, Renee Agnew, and routed to an appropriate Help-Line responder, who will try to respond within three days.

The Help-Line responders are experienced engineers, scientists and ethicists knowledgeable about the ethical problems faced by engineers and scientists. These include the people who were the principal responders for the ethics hotline operated successfully for a year by the Institute of Electrical and Electronic Engineers (IEEE).

It should be understood both that difficult situations may arise in which intelligent, knowledgeable, people of goodwill may disagree as to the best course of action, and that the Help-Line can only offer information and advice; it cannot guarantee a good outcome in every case.

Note also that the Help-Line is not intended to deal with employee grievances unrelated to ethics, and that the Help-Line will not give legal advice.

The wishes of Help-Line callers with respect to confidentiality will be respected. An important rule of the Help-Line is to protect the interests of the caller to the greatest extent consistent with our adherence to ethical practices. However, although every effort will be made to preserve confidentiality, it must be recognized that confidentiality might be breached due to imperfect electronic security or to special legal circumstances.

We do not intend to replace other sources of help, such as, perhaps, an ombudsperson or ethics office in the scientist or engineer's own organization.

ETHICS FOR THE REAL WORLD

Toward a Workable Definition of "Ethics" for Engineers
By William D. Lawson, P.E.

Have you ever tried to define *ethics*? I mean really tie it down in meaningful, understandable terms? As engineers, we recognize the importance of the topic. Yet when we survey the oceans of ink that have flowed concerning ethics, we are often left with the bewildered sense that defining *ethics* is sort of like nailing Jell-O to a tree – it is done neither easily, *nor cleanly*, if at all.

LOST AT SEA

Why should getting a handle on *ethics* be such a problem, especially since there seems to be so much "help" out there? Well, it can't be that no one has tried. Definitions for *ethics* abound, and their variety and range of content are impressive. As we wade in the shallow end of the ethics pool, immediately we encounter the one-liners, *minnows* if you will, such as "*live life well*" or "*do the right thing*." Notable primarily for their brevity, these otherwise catchy and appealing slogans regrettably provide little nourishment to the true seeker of ethical insight – substance is what we want – so we must wade in further. But to enter deeper ethical waters is to encounter ethics in its classic form, that is, *moral philosophy*. Quite suddenly we stumble over this subterranean precipice and realize that we are in way over our heads. The big fish are all there – the philosophers of the ages surround us – Socrates, Aristotle, Aquinas, Kant, Kierkegaard, Locke, Kohlberg, Rousseau, Sartre – to name a few. A class unto themselves, the considerable intellect of these philosophers is, well, considerable. But, unfortunately, we do not know how to appreciate their perspectives and this only leaves us disoriented and floundering.

“When it comes to ethics as moral philosophy, it is common for us to not really get the big picture.”

the elephant and

This suggests our first problem, *myopia*. When it comes to ethics as moral philosophy, it is common for us to not really get the big picture. Perhaps you have read the famous poem, "The Blind Men and the Elephant," by the nineteenth century poet John Godfrey Saxe. It tells of six *blind men* from Asia who go to "see" an elephant in order to determine what an elephant is like. The first blind man encounters the broad *side* of immediately concludes the

elephant "is very like a wall." The second happens to feel a tusk and becomes clearly convinced that the elephant is like "a spear." The third blind man grabs hold of the elephant's trunk and boldly proclaims that the elephant is really just another type of snake. And on they go. You get the idea. Well, regarding ethics and moral philosophy, we engineers are not unlike those visually challenged men. As we grope around for insight, moral philosophers take us so close to the topic that at best we find it difficult to appreciate what they have to show us. From a distance it may be elephant hide but up this close, we only see mud and hair and flies.

This brings us to our second problem, which is *jargon*. We engineers use ethical jargon. I once heard a highly-educated electrical engineer describe the concrete lining of a drainage trench as "riffraff." Moral philosophers are no different from engineers when it comes to jargon (they drive on cement roads), yet we tend to subconsciously forget that our engineering jargon makes plenty of sense *to us*. Moral philosophers commonly use words we rarely if ever even think about. So when we swim in their pond we encounter the abstract and the unfamiliar: terms such as "metaphysics," "ontology," "epistemology," and "post-conventional morality." This might as well be Sanskrit. Understanding gets lost in the jargon.

“Defining *ethics* is sort of like nailing Jell-O to a tree.”

Of course our third problem is *change*. We should have expected this: the elephant is *moving*. Our basic grasp of ethics is strong enough to tell us that ethics has something to do with moral standards. But when was the last time anyone agreed on *that topic* in this country? Even if we get past the other obstacles, what constitutes "good" and "right" is all relative, or so many would have us believe. This is incredibly demoralizing. If ethics is truly this slippery and subjective, why bother?

In view of these problems, many an engineer concludes that the better part of valor is retreat and we hastily turn and head for shore. Gasping and sputtering, thankful to be once again safe in our domain, we console ourselves that after all, we are engineers, not moral philosophers. Not enlightened, but alive. Perhaps we should try again... sometime.

GAINING A FOOTING

Maybe that is how you feel about *ethics* - in particular, engineering ethics. But there is help for us. Ethics need not be overly abstract or trivially simple. But to get past the myopia, the jargon and

the change what we need is *context*, the big picture in terms we can understand.

Sociology (almost as abstract as moral philosophy, but not quite) provides this type of historical and social context for us. According to sociologists, ethics lies within the larger topic of *professionalism*. Simply stated, “a *profession* is a dignified occupation espousing an ethic of service, organized into an association, and practicing functional science,” (Kimball 1992, p16). From this definition, we learn that ethics, also known as “the professional service ideal,” “the service ethic,” “the ethic of professional service” and by other similar terms, is a vital element of professionalism. This context is a benchmark for understanding ethics.

“Originally and fundamentally, ethics was an *internalized* standard of conduct, behavior or self-regulation.”

Taking it a step further, the roots of the professional service ideal can be traced through the eighteenth and seventeenth centuries to the respected vocation of theology. Theology was one of the four classic professions of the time, the other three being law, medicine, and university education (Larson 1977, p4-5) (Hughes/Lynn 1965, p2). As an occupation theology dominated colonial America during the period 1600 to 1760 (the word “profession” itself is religious in origin) and contributed developmentally to the meaning of profession. Dignified work began to be known as a “calling,” and the spirit in which professionals did their work – putting other’s interests before their own – became associated with professionalism as *the ethic of selfless service* (Kimball 1992, p105).

In the mid-nineteenth century, the professional service ideal was commonly expressed as “to be professional [is] to be ethical” (Adams 1993). This highlights that originally and fundamentally, ethics was an *internalized* standard of conduct, behavior or self-regulation. The basis for this standard derives from the fact that professionals operate in areas that are generally immune to a client’s oversight (Bachner 1991, p xii). Accordingly, professionals are in a position to exploit their clients, and clients must *trust* professionals to not take advantage of them. In the words of Greenwood (1957):

The client’s subordination to professional authority invests the professional with a monopoly of judgment. As the recipient of this privileged position, the professional in turn must not exploit the client for purposes of personal gratification...This accounts for the frequent synonymous use of the terms

“professional” and “ethical” when applied to occupational behavior.

This relational characteristic has been said to constitute “the core of professionalism” (Kennedy 1986).

HIGHER GROUND

If you have read this far, you already have my basic point – a clear, meaningful expression of ethics for the engineer is that, as professionals, *we must not exploit or take advantage of those who put their trust in us*. Stated positively, we professionals must treat those with whom we have to do (society, clients, our colleagues) as we want to be treated. This is an excellent rule – a *golden rule* – to follow.

Of course, some of us want more input, more guidance. Here is where the codes of ethics come in. Most professions adopted written codes of ethics between 1904 and 1922, long after the professions’ organized into professional societies (Adams 1993). For example, the American Society of Civil Engineers was created in 1852, but ASCE’s code of ethics was not added until circa 1914 (Wilenski 1964) (ASCE Website). Perhaps the codes were written in response to a perceived decline in morality brought on by the Industrial Age. In any event, codes of ethics attempt to represent the key values of the professional group. Ethical codes provide inspiration and guidance concerning the main obligations of the professional. Among other things they support those who seek to act ethically, they facilitate education and mutual understanding, and they contribute to the profession’s public image (Martin and Schinzinger 1996, p106-107).

Codes of ethics may be general, but unlike the writings of high-level moral philosophers, they are not overly abstract. The engineers who wrote them have distilled things for us. The next time you read your code of ethics, rather than thinking of the code as lifeless words on a page, imagine that you are in a room with the keenest, most accomplished, most respected colleagues in your entire profession. They are sharing their wisdom with us; it is worth listening to.

“The next time you read your code of ethics ... imagine that you are in a room with the keenest, most accomplished, most respected colleagues in your entire profession.”

THE CHALLENGE TO ENGINEERS

Many would say that ethics has not fared well in this day and time. It is common to view motives with suspicion. But we are not powerless in this regard. We *can* do something.

“The professional ... must not exploit the client for purposes of personal gratification.”

We must first recognize that a fundamental fracture has appeared in the professional client relationship. This critical flaw takes the form of *mistrust*, the perception that today’s client can no longer totally trust professionals to “put their client’s needs above their own.” Fortunately, engineers know how to deal with this type of failure. We must re-enter the relationship at the point of departure; we *must build trust with clients and society*.

This is our challenge. If we build trust, if we do our work appropriately and wisely and *ethically* – we will fulfill our profession of service to society, today and into the twenty-first century.

REFERENCES

- Adams, Guy B., “Ethics and The Chimera of Professionalism: The Historical Context of an Oxymoronic Relationship,” *American Review of Public Administration*, June 1993, V23N2, pp. 117-139.
- ASCE Ethics, www.asce.org/aboutasce/ethics.html
- Bachner, John Phillip, *Practice Management for Design Professionals, A Practical Guide to Avoiding Liability and Enhancing Profitability*, John Wiley & Sons, Inc., New York, NY, 1991, 371pp.
- Greenwood, Ernest, “Attributes of a Profession,” *Social Work*, July 1957, pp.45-55
- Hughes, Everett C. “Professions,” *The Professions in America*, edited by Kenneth S. Lynn, Houghton Mifflin Company, Boston, MA, 1965, 273pp.
- Kennedy, R. Evan, “Professionalism. Is it Going or Coming?,” *Journal of Professional Issues in Engineering Education and Practice*, Vol 112, No. 1, January 1986, pp. 49-52.
- Kimball, Bruce A., *The “True Professional Ideal” in America, A History*, Blackwell Publishers, Cambridge MA, 1992, 429pp.
- Larson, Magali Sarfatti, *The Rise of Professionalism, A Sociological Analysis*, University of California Press, Berkeley, CA, 1977, 309pp.
- Martin, Mike W. and Schinzinger, Roland, *Ethics in Engineering, Third Edition*, The McGraw-Hill Companies, Inc., New York, NY, 1996, 439pp.
- Saxe, John Godfrey, “The Blind Men and the Elephant,” www.wordfocus.com/word-act-blindmen.html
- Wilensky, Harold, “The Professionalization of Everyone?” *American Journal of Sociology*, Vol. 70, 1964, pp. 137-158.

Editor’s Note: “Ethics for the Real World” was originally published in the May/June 1999 issue of the Texas Professional Engineer.

STUDENT PUGWASH USA

NIEE Referenced in German Science Magazine

The March 2000 issue of the German science magazine, *bild der wissenschaft* (somewhat like the English magazine, *Scientific American*), carries an article discussing ethics in science and technology and noting a growing trend toward scientists and other technology professionals taking oaths or signing pledges of ethical behavior in their profession.



The article entitled “Nur noch Gutes tun” (translated: “Do Good From Now On”) highlights the organization **Student Pugwash USA** which is the US student affiliate of the Pugwash Conferences on Science and World Affairs, recipients of the 1995 Nobel Peace Prize. Student Pugwash USA’s mission is to promote the socially responsible application of science and technology in the 21st century.

This article quotes NIEE Executive Director Bill Lawson who observes that applied ethics in engineering and science is a growing discipline, and that students increasingly have become interested in the ethical aspects of their profession.

As a student organization, Student Pugwash USA encourages young people to examine the ethical, social, and global implications of science and technology, and to make these concerns a guiding focus of their academic and professional endeavors. Part of this involves signing a pledge of ethical behavior. The pledge is as follows:

“I promise to work for a better world, where science and technology are used in socially responsible ways. I will not use my education for any purpose intended to harm human beings or the environment. Throughout my career, I will consider the ethical implications of my work before I take action. While the demands placed upon me may be great, I sign this declaration because I recognize that individual responsibility is the first step in the path to peace.”

The Student Pugwash USA website provides more information: www.spusa.org/pugwash/

Editor’s Note: Engineers may be more familiar with the organization, “The Order of the Engineer,” which like Student Pugwash USA provides a meaningful way for engineers to voice their commitment to serve the public with their education and training. For details on “The Order of the Engineer,” visit their website at www.order-of-the-engineer.org/.

ANNOUNCEMENTS

University Position Available

Loyola Marymount University, a Catholic comprehensive university in the Jesuit and Marymount traditions and located in coastal Southern California, invites nominations and applications for the newly-endowed **Sir Thomas More Chair in Engineering Ethics**. The University's goal is to fill this position for the 2000-01 academic year. For more information and a complete description of the position, please contact Dr. Gerald S. Jakubowski, Dean, College of Science and Engineering, at 310-338-2834, or visit the NIEE website at www.niee.org.

Note: This announcement posted as a service to Loyola Marymount University, an Institutional Member of NIEE.

Call for Papers

You are cordially invited to submit a forum article or paper to the **ASCE Journal of Professional Issues in Engineering Education and Practice**.

The Journal of Professional Issues (JPI) seeks papers on a wide range of issues affecting Civil Engineering practice and education. Questions about potential submittals can be directed to Brian R. Brenner, Editor, phone 617-951-6276 or email: brbrenne@bigdig.com.

For more information please visit the ASCE JPI website at <http://ojps.aip.org/epo/>

Note: This announcement posted as a service to the American Society of Civil Engineers, a Participating Society (pending) of NIEE.



NIEE MEMBERSHIP DUES RENEWAL

The National Institute for Engineering Ethics invites you to **renew your annual membership!**

In past years the standard procedure to join NIEE or renew membership involved checking off a dues payment box on your National Society of Professional Engineers (NSPE) membership dues invoice, and you simply included the NIEE dues amount with your NSPE payment.



NOT ANY LONGER! With NIEE's relocation to the Murdough Center, NSPE no longer provides dues collection service for NIEE. This is yet another step in NIEE's growth toward independence as a professional society.

Please renew your individual, corporate or institutional membership to NIEE today!

NIEE Membership Application

Membership Status (01/01/2000-12/31/2000)

- New
 Renewing

Member Information

Name _____ PE ?

Firm _____

Address _____

Phone _____

Fax _____

Email _____

Other Professional Memberships _____

Engineering Discipline _____

Alma Mater _____

Member Dues Type (Check One)

- Individual (\$30/year)
 Corporate (\$100/year)
 Institutional (\$100/year)
 Student (\$10/year)
 Participating Society – contact NIEE headquarters for information regarding Participating Society Membership

Payment Method

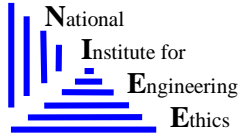
- Check Enclosed
 Visa Mastercard Discover
Credit Card No. _____
Expiration Date _____
Signature _____

Return to

National Institute for Engineering Ethics
Box 41023
Lubbock, TX 79409-1023
Fax 806-742-0444
Phone 806-742-NIEE (6433)
Email ethics@niee.org

Please join NIEE or renew your membership by mailing this application along with your dues payment to the above address.

As an IRS 501(c)(3) not-for-profit educational corporation, your membership dues and donations to NIEE are fully tax deductible.



**Box 41023
Lubbock, Texas 79409-1023**

NON-PROFIT ORG.
U.S. POSTAGE
PAID
LUBBOCK, TX
PERMIT NO.
719

Visit the NIEE web site at:
www.niee.org

National Institute for Engineering Ethics Headquarters
Located at Murdough Center for Engineering Professionalism



ABOUT NIEE

Established in 1988 by the National Society of Professional Engineers, NIEE is an independent not-for-profit [IRS 501(c)(3)] educational corporation whose mission is to promote the study and application of ethics in our nation's engineering schools and throughout the engineering profession.

The principal thrusts of NIEE are communication, program development, education, and practice applications in the area of engineering ethics. A primary role of the Institute is to encourage cooperation among individuals, universities, professional and technical societies and business organizations with regard to engineering ethics and professionalism issues.

NIEE developed the highly successful engineering ethics video, Gilbane Gold, which has been used at most engineering colleges in the nation as well as in industry and society presentations. Other activities include co-sponsorship of the On-Line Ethics Center Help Line, publishing our Ethics

Resource Guide and quarterly newsletter, and sponsoring ethics workshops/ symposia.

NIEE is structured to serve as an independent liaison organization to promote engineering ethics among all engineering disciplines. Viewed as a cooperative effort among many engineering organizations with potential for far-reaching influence and impact, NIEE can and should bridge the various disciplines within the engineering profession.

NIEE currently has about 800 individual members and some 30 institutional and corporate members. The goal is to grow and serve the engineering profession in the area of engineering ethics.

NATIONAL INSTITUTE FOR ENGINEERING ETHICS

www.niee.org