

Study Guide

NPSE CODE OF ETHICS

Preamble

Engineering is an important and learned profession. As members of this profession, engineers are expected to exhibit the highest standards of honesty and integrity. Engineering has a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness and equity, and must be dedicated to the protection of the public health, safety, and welfare. Engineers must perform under a standard of professional behavior that requires adherence to the highest principles of ethical conduct.

I. Fundamental Canons

Engineers, in the fulfillment of their professional duties, shall:

- 1 Hold paramount the safety, health and welfare of the public.
- 2 Perform services only in areas of their competence.
- 3 Issue public statements only in an objective and truthful manner.
- 4 Act for each employer or client as faithful agents or trustees.
- 5 Avoid deceptive acts.
- 6 Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.

II. Rules of Practice

1. Engineers shall hold paramount the safety, health, and welfare of the public.
 - a. If engineers' judgment is overruled under circumstances that endanger life or property, they shall notify their employer or client and such other authority as may be appropriate.
 - b. Engineers shall approve only those engineering documents that are in conformity with applicable standards.

- c. Engineers shall not reveal facts, data or information without the prior consent of the client or employer except as authorized or required by law or this Code.
 - d. Engineers shall not permit the use of their name or associate in business ventures with any person or firm that they believe are engaged in fraudulent or dishonest enterprise.
 - e. Engineers having knowledge of any alleged violation of this Code shall report thereon to appropriate professional bodies and, when relevant, also to public authorities, and cooperate with the proper authorities in furnishing such information or assistance as may be required.
2. Engineers shall perform services only in the areas of their competence.
 - a. Engineers shall undertake assignments only when qualified by education or experience in the specific technical fields involved.
 - b. Engineers shall not affix their signatures to any plans or documents dealing with subject matter in which they lack competence, nor to any plan or document not prepared under their direction and control.
 - c. Engineers may accept assignments and assume responsibility for coordination of an entire project and sign and seal the engineering documents for the entire project, provided that each technical segment is signed and sealed only by the qualified engineers who prepared the segment.
3. Engineers shall issue public statements only in an objective and truthful manner.
 - a. Engineers shall be objective and truthful in professional reports, statements, or testimony. They shall include all relevant and pertinent information in such reports, statements, or testimony, which should bear the date indicating when it was current.
 - b. Engineers may express publicly technical opinions that are founded upon knowledge of the facts and competence in the subject matter.
 - c. Engineers shall issue no statements, criticisms, or arguments on technical matters that are inspired or paid for by interested parties, unless they have prefaced their comments by explicitly identifying the interested parties on whose behalf they are speaking, and by revealing the existence of any interest the engineers may have in the matters.
4. Engineers shall act for each employer or client as faithful agents or trustees.
 - a. Engineers shall disclose all known or potential conflicts of interest that could influence or appear to influence their judgment or the quality of their services.

- b. Engineers shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to by all interested parties.
 - c. Engineers shall not solicit or accept financial or other valuable consideration, directly or indirectly, from outside agents in connection with the work for which they are responsible.
 - d. Engineers in public service as members, advisors, or employees of a governmental or quasi-governmental body or department shall not participate in decisions with respect to services solicited or provided by them or their organizations in private or public engineering practice.
 - e. Engineers shall not solicit or accept a contract from a governmental body on which a principal or officer of their organization serves as a member.
5. Engineers shall avoid deceptive acts.
- a. Engineers shall not falsify their qualifications or permit misrepresentation of their or their associates' qualifications. They shall not misrepresent or exaggerate their responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint venturers, or past accomplishments.
 - b. Engineers shall not offer, give, solicit or receive, either directly or indirectly, any contribution to influence the award of a contract by public authority, or which may be reasonably construed by the public as having the effect of intent to influencing the awarding of a contract. They shall not offer any gift or other valuable consideration in order to secure work. They shall not pay a commission, percentage, or brokerage fee in order to secure work, except to a bona fide employee or bona fide established commercial or marketing agencies retained by them.

III. Professional Obligations

- 1. Engineers shall be guided in all their relations by the highest standards of honesty and integrity.
 - a. Engineers shall acknowledge their errors and shall not distort or alter the facts.
 - b. Engineers shall advise their clients or employers when they believe a project will not be successful.

- c. Engineers shall not accept outside employment to the detriment of their regular work or interest. Before accepting any outside engineering employment they will notify their employers.
 - d. Engineers shall not attempt to attract an engineer from another employer by false or misleading pretenses.
 - e. Engineers shall not promote their own interest at the expense of the dignity and integrity of the profession.
2. Engineers shall at all times strive to serve the public interest.
- a. Engineers shall seek opportunities to participate in civic affairs; career guidance for youths; and work for the advancement of the safety, health and well-being of their community.
 - b. Engineers shall not complete, sign, or seal plans and/or specifications that are not in conformity with applicable engineering standards. If the client or employer insists on such unprofessional conduct, they shall notify the proper authorities and withdraw from further service on the project.
 - c. Engineers shall endeavor to extend public knowledge and appreciation of engineering and its achievements.
3. Engineers shall avoid all conduct or practice that deceives the public.
- a. Engineers shall avoid the use of statements containing a material misrepresentation of fact or omitting a material fact.
 - b. Consistent with the foregoing, Engineers may advertise for recruitment of personnel.
 - c. Consistent with the foregoing, Engineers may prepare articles for the lay or technical press, but such articles shall not imply credit to the author for work performed by others.
4. Engineers shall not disclose, without consent, confidential information concerning the business affairs or technical processes of any present or former client or employer, or public body on which they serve.
- a. Engineers shall not, without the consent of all interested parties, promote or arrange for new employment or practice in connection with a specific project for which the Engineer has gained particular and specialized knowledge.

- b. Engineers shall not, without the consent of all interested parties, participate in or represent an adversary interest in connection with a specific project or proceeding in which the Engineer has gained particular specialized knowledge on behalf of a former client or employer.
5. Engineers shall not be influenced in their professional duties by conflicting interests.
 - a. Engineers shall not accept financial or other considerations, including free engineering designs, from material or equipment suppliers for specifying their product.
 - b. Engineers shall not accept commissions or allowances, directly or indirectly, from contractors or other parties dealing with clients or employers of the Engineer in connection with work for which the Engineer is responsible.
6. Engineers shall not attempt to obtain employment or advancement or professional engagements by untruthfully criticizing other engineers, or by other improper or questionable methods.
 - a. Engineers shall not request, propose, or accept a commission on a contingent basis under circumstances in which their judgment may be compromised.
 - b. Engineers in salaried positions shall accept part-time engineering work only to the extent consistent with policies of the employer and in accordance with ethical considerations.
 - c. Engineers shall not, without consent, use equipment, supplies, laboratory, or office facilities of an employer to carry on outside private practice.
7. Engineers shall not attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice, or employment of other engineers. Engineers who believe others are guilty of unethical or illegal practice shall present such information to the proper authority for action.
 - a. Engineers in private practice shall not review the work of another engineer for the same client, except with the knowledge of such engineer, or unless the connection of such engineer with the work has been terminated.
 - b. Engineers in governmental, industrial, or educational employ are entitled to review and evaluate the work of other engineers when so required by their employment duties.
 - c. Engineers in sales or industrial employ are entitled to make engineering comparisons of represented products with products of other suppliers.

8. Engineers shall accept personal responsibility for their professional activities, provided, however, that Engineers may seek indemnification for services arising out of their practice for other than gross negligence, where the Engineer's interests cannot otherwise be protected.
 - a. Engineers shall conform with state registration laws in the practice of engineering.
 - b. Engineers shall not use association with a non-engineer, a corporation, or partnership as a 'cloak' for unethical acts.

9. Engineers shall give credit for engineering work to those to whom credit is due, and will recognize the proprietary interests of others.
 - a. Engineers shall, whenever possible, name the person or persons who may be individually responsible for designs, inventions, writings, or other accomplishments.
 - b. Engineers using designs supplied by a client recognize that the designs remain the property of the client and may not be duplicated by the Engineer for others without express permission.
 - c. Engineers, before undertaking work for others in connection with which the Engineer may make improvements, plans, designs, inventions, or other records that may justify copyrights or patents, should enter into a positive agreement regarding ownership.
 - d. Engineers' designs, data, records, and notes referring exclusively to an employer's work are the employer's property. Employer should indemnify the Engineer for use of the information for any purpose other than the original purpose.

As Revised February 2001

By order of the United States District Court for the District of Columbia, former Section 11(c) of the NSPE Code of Ethics prohibiting competitive bidding, and all policy statements, opinions, rulings or other guidelines interpreting its scope, have been rescinded as unlawfully interfering with the legal right of engineers, protected under the antitrust laws, to provide price information to prospective clients; accordingly, nothing contained in the NSPE Code of Ethics, policy statements, opinions, rulings or other guidelines prohibits the submission of price quotations or competitive bids for engineering services at any time or in any amount.

Statement by NSPE Executive Committee

In order to correct misunderstandings which have been indicated in some instances since the issuance of the Supreme Court decision and the entry of the Final Judgment, it is noted that in its decision of April 25, 1978, the Supreme Court of the United States declared: 'The Sherman Act does not require competitive bidding.'

It is further noted that as made clear in the Supreme Court decision:

- 1 Engineers and firms may individually refuse to bid for engineering services.
- 2 Clients are not required to seek bids for engineering services.
- 3 Federal, state, and local laws governing procedures to procure engineering services are not affected, and remain in full force and effect.
- 4 State societies and local chapters are free to actively and aggressively seek legislation for professional selection and negotiation procedures by public agencies.
- 5 State registration board rules of professional conduct, including rules prohibiting competitive bidding for engineering services, are not affected and remain in full force and effect. State registration boards with authority to adopt rules of professional conduct may adopt rules governing procedures to obtain engineering services.
- 6 As noted by the Supreme Court, 'nothing in the judgment prevents NSPE and its members from attempting to influence governmental action . . .'

NOTE: In regard to the question of application of the Code to corporations vis-...-vis real persons, business form or type should not negate nor influence conformance of individuals to the Code. The Code deals with professional services, which services must be performed by real persons. Real persons in turn establish and implement policies within business structures. The Code is clearly written to apply to the Engineer and items incumbent on members of NSPE to endeavor to live up to its provisions. This applies to all pertinent sections of the Code.

ETHIC CASE STUDIES FOR ENGINEERS

- 1 Outback County requires a minimum centerline radius for all roads. Inland County does not require a minimum centerline radius. ABC Engineering has designed several road projects in both counties. In order to fit another condominium unit in his project, a developer who generally builds in Outback County asks ABC Engineering to design a dangerously sharp curve in a project in Inland County.

- 2 Developer Presarian has a reputation for firing engineering companies who try to change the design of his in-house planning department. Presarian approaches BCD Engineering to design subdivision plans. Upon review of the planner's layout, a junior engineer notices the main entrance road ends at the other side of the subdivision at a cliff. The planning layout is definitely dangerous.
- 3 A developer approaches ABZ Engineering with a sketch of a subdivision. The sketch is out of scale. To make the minimum size lots fit, shorter centerline radii must be used. A junior design engineer at ABZ Engineering is told to show all curve data except for the radii on the preliminary plan.
- 4 AXT Engineering completes a subdivision design with lots having less than the minimum frontage on the cul-de-sacs. The developer's houses will fit but the frontages do not meet standards. The preliminary plans are rejected by the City and the developer refuses to pay for all previous design until the plans are approved by the City. The developer also refuses to pay for the revision of the plans. The president of AXT Engineering blames the architect for the poor planning layout.
- 5 RXQ Engineering offers engineering and surveying services. A developer approaches them to design an industrial park. The topographic survey will be authorized and later the design phase will be authorized. The project engineer at RXQ Engineering offers a package deal to do both surveying and engineering. The topographic survey is itemized at half the cost of nearest competitor's bid. RXQ Engineering use a USGS map having contour intervals of ten feet and completes the topographic map by interpolating the ten-foot contour intervals and placing two-foot contour on the finished topographic maps. Utility lines are drawn from existing city maps. No field work or checks are made. The developer pays for the topographic survey. Later, RXQ Engineering goes out of business. JQZ Engineers complete the design of the industrial park with no checks on the topographic survey. When construction starts, the contractor finds no gas lines in the area. There are severe drainage problems in design of the industrial park tracts. Existing contours are two to six feet different from the completed topographic survey map.
- 6 The newly elected president of the local chapter of the engineering society is an avid environmentalist and has pressed the city council for more parks in future developments. The project engineer at RXZZ Consultants tells the city council the poor local construction economy is due to the environment attitude of the engineering society.
- 7 A junior engineer at QQZ Design Company is asked by his supervisor to use a less costly graphics board which will increase the failure rate by three times.
- 8 An engineer at QQQ Electronics Company is asked design a cathode. He has no prior experience with cathodes.
- 9 An engineer at XQM Chemical Design signs a confidentiality agreement prior to employment. After working a month, he discovers all starting engineers at paid almost twice his salary. He quits and takes computer disks containing significant fusion design processes, and offers them to his new employer as an incentive to hire him.

- 10 A building inspector from the City of Nequity offers to overlook violations at the Bag Manufacturing Company. In exchange, the president of the company, who sits on the Nequity city council, will vote a wage increase for the building inspector.
- 11 A recent graduate engineer working for the Blue Lake Environmental Society tells the city council that all developers are polluting the local rivers. His expertise is structural engineering.
- 12 An project engineer for AQQ Engineering signs all plans for a refinery requiring expertise in structural, chemical, mechanical, and control systems. The project engineer has only experience in civil engineering projects such as subdivision design.
- 13 An engineer at XXQ Design criticizes another company's design in order to take over job.
- 14 An engineer at QXD Limited tells his prospective client that the competitor's engineers are incompetent because they are graduates of XXX University.
- 15 An engineer at YQR Industrial tells a prospective client that all the engineers in the local society are price fixers.
- 16 RYY Engineer's company brochure describes several successful highway design projects for the state. RYY Engineers were fired on their only job with the state highway department. When asked for references by another state highway department, the company president gives them the home telephone number of two ex-highway department employees that now work for RYY.
- 17 AZX Industrial Supply has several toll-free numbers on top of private lines that ring in the marketing department. These toll-free numbers are listed as fictitious out-of-state clients on the company brochures.
- 18 A prospective hire for AQQ Structural lists the addresses of out-of-state relatives as the addresses of previous employers. The new hire has no engineering experience.
- 19 YQF Mechanical advertises for engineers in the local newspaper. The return address in the advertisement is the post office box of the company president's son at a distant out-of-state college. The president is watching his discontented employees that are looking for another job.
- 20 The engineers at the local chapter of the engineering society verbally agree that advertising on the Internet is not professional. The president of JQQ Design set up another company on the Internet and contacts all e-mail leads for prospective work.