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NSPE

NATIONAL SOCIETY OF
PROFESSIONAL ENGINEERS

Code of Ethics for Engineers

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 is engaged in fraudulent or dishonest enterprise.

   e. Engineers shall not aid or abet the unlawful practice of engineering by a person or firm.

   f. 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 or intent of 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.

   f. Engineers shall treat all persons with dignity, respect, fairness, and without discrimination.

2. **Engineers shall at all times strive to serve the public interest.**

   a. Engineers are encouraged 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 are encouraged to extend public knowledge and appreciation of engineering and its achievements.

   d. Engineers are encouraged to adhere to the principles of sustainable development[1] in order to protect the environment for future generations.

   e. Engineers shall continue their professional development throughout their careers and should keep current in their specialty fields by engaging in professional practice, participating in continuing education courses, reading in the technical literature, and attending professional meetings and seminar.

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 nonengineer, 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. The employer should indemnify the engineer for use of the information for any purpose other than the original purpose.

Footnote 1 "Sustainable development" is the challenge of meeting human needs for natural resources, industrial products, energy, food, transportation, shelter, and effective waste management while conserving and protecting environmental quality and the natural resource base essential for future development.

"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-a-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 it is incumbent on members of NSPE to endeavor to live up to its provisions. This applies to all pertinent sections of the Code.

Case 1:

ABC Inc. is a firm that helps clients find professional engineers to perform system testing services. ABC Inc. takes an order from a client for a testing job, and passes the order to a professional engineer who does the job.

You are a professional engineer with the expertise in testing electrical devices and systems. ABC contacted you for such a job. You took the job. You performed the work, prepared the report, and submitted the report with an invoice to ABC. You charged ABC half of what you would normally charge a client for the same services if you get the job directly from the client.

You later learned that 1) ABC modified the report without consulting you, and 2) ABC invoiced the client at twice the amount charged by you to ABC.

Questions

1. Is ABC wrong in altering the report?

2. Is ABC wrong in charging the client twice the amount they paid you?

3. What should you do after what has happened?

Case 2

You are a professional civil engineer employed in an engineering consulting firm. The city wants to convert a former dump site into a wetland for reclamation. The city also intends to build a children park, a picnic area, and a bike/jogging trail near the reclaimed area. The city opened for proposals for the research and analysis of the idea. The city made it known in the bid announcement that there could be hazardous and toxic waste in the dump.

You were put in charge by your firm and submitted a proposal. Your proposal won the contract. You were told that you must sign a confidentiality agreement at the outset. The confidentiality agreement precludes you from disclosing any information concerning the project without the city's written permission. You accept the contract including signing the confidentiality agreement.

The preliminary tests which you conducted show that there is a very high level of hazardous and toxic contaminants in the soil. Though you are not entirely certain, you think it is possible that the contaminants could over time, become exposed at the surface and wash into a river that flows near the site.

Upon receiving the initial data from you, the city terminates the contract. You were told about the City's reasons for not continuing, which included the political fallout of revealing the findings and the cost of having to clean up the property.

You told the City administrators of the contract that the city has a responsibility to the public to proceed to remediation. The city refused and reminded you of the confidentiality agreement and the legal consequences of going public with the confidential information.

Questions

1. Were you wrong in signing the confidential agreement?

2. Is the City in the wrong in their actions after receiving the initial data from you?

3. What should you do after your contract was terminated?

Show

Ethical considerations

in AI

reverse
order

Show

AI effects on white

collar jobs

1. Resume link
2. tips for interviewing
3. Don't bring parents link
4. Gen-z problems at work

THE SECTIONS OF A RESUME

RESUME HEADINGS

The top of your resume should highlight your name, email and phone number. Unlike the remainder of your resume, no heading is required for your contact information. All sections that follow should have headings that accurately describe their content. This guide will review the basic headings that you may include in your initial resume. You must evaluate the most important items from your background and determine the most appropriate order for the sections of your resume. Your career consultant can assist you in this process.

CONTACT INFORMATION

You should begin your resume with this information at the top. Be sure that the phone number you list will be answered by YOU and has a professional outgoing voicemail message. You should also list one email address (same rule applies, use one that you check often) and your customized LinkedIn URL in this section. It is optional to include a personal website or online portfolio.

For example:

Firstname M. Lastname
xxx1234@andrew.cmu.edu ♦ (412) 555-5555 ♦ www.linkedin.com/firstlast

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You SHOULD NOT include:
- Personal information: birth date, marital status, height, weight, personal identity information (social security number, passport info), etc.
- Any pictures.
- References: It is not necessary to indicate references are available upon request. You should have contact information for your references, on a separate document, as some companies may require them. You should request permission from references (to serve as a reference) prior to sharing their information.

EDUCATION

Education should appear as the first section of a graduate resume. Start with your most recent educational experience: Carnegie Mellon University. Bold university names and spell them out completely. List your **Degree** (Complete and Proper Degree Name as it appears on your records) and **Graduation Date**.

Must include:
Name of Institution and location   Month & Year of graduation OR anticipated graduation date
Major and Minors/Field of study   Degree awarded or to be awarded

Optional to Include:
GPA   Foreign Study and Exchange Programs
Selected Coursework   Name and brief descricption of thesis topic (if applicable)

Below is an example of the education section:

EDUCATION
Carnegie Mellon University   Pittsburgh, PA
Master of Science in Electrical and Computer Engineering   May 2021
GPA: 3.71/4.00

Indian Institute of Technology   Mumbai, India
Bachelor of Science in Electrical and Computer Engineering   June 2019
GPA: 9.0/10.0

- **GPA**: If you include your GPA, make sure you include the scale (ex. 3.3/4.0 or 8.7/10.0). See your Career Consultant to discuss if you have questions.

COURSEWORK

Any relevant coursework that you include is recommended to be listed under a separate heading or subheading (within Education), as "Relevant Coursework" or "Selected Coursework." Do NOT simply list every course you've taken. Only highlight those courses that are most relevant to the positions/field that you plan to pursue. If listing both undergraduate and graduate courses, labels should be included.

For Example:

GRADUATE COURSEWORK
Energy (Conversion and Utilization)   Energy (Policy and Economics)
Combustion and Air Pollution   Energy System Modeling
Advanced Thermodynamics   Industrial Ecology

It is sometimes of greater value to, instead, include the skills you learned in the courses in a more robust "Skills" section and/or projects from the courses in your "Academic Projects" section.

The location of the "coursework" section varies depending upon the contents of your other sections. Contact your career consultant for advice on the order of your resume content.

EXPERIENCE

As you gain experience you may have more narrowly focused sections such as "Academic Research Experience," "Professional Experience," etc. "Experience" as a standalone title implies employment. If the information you have included in an "Experience" section is not in fact employment, then you should rename that section to more accurately reflect the nature of the entry and/or move the entry to a more appropriately titled section.

A header for each employment experience entry should include:
Job/Position Title
Organization name
Location (city and state or equivalent) – if remote, include the city, state for the location to which you reported remote or virtual (ex: City, State- Virtual)
Dates (month and year format, or term and year for academic year related experiences)

Bold the most important piece of information which is typically your **job title or the company.**

For Example:

EXPERIENCE
Best Engineering Company   Palo Alto, CA
Hardware Engineering Intern   June-August 2020
- Led a four-week project evaluating the design of a product in development identifying a cost reduction of 10%
- Developed factory test requirements and participated in factory site visits to oversee successful testing
- Presented project proposal and findings to senior leadership, resulting in favorable feedback and recommendation for inclusion in the new product's design

After the header, describe your experience and results using action-oriented statements. Start each statement with an action verb. You should use consistent punctuation for your bullets (remember, these bullet points do not require periods, semi-colons, etc.).

Try to write one key idea per bullet point, with no more than two lines per bullet point when possible. Use bullets to seperate / organize information (see above). Review the **Action Verbs List** (page 6) for assistance in selecting a variety of strong verbs for your resume.

PROJECTS

We also suggest that you select a number of academic and/or research projects to highlight on your resume. This serves to further provide examples of your experience and to illustrate practical applications of your skillset.

For Example:

ACADEMIC PROJECTS
Robot Design and Build   Fall 2020
Carnegie Mellon University   Pittsburgh, PA
- Designed and constructed circuits using a protoboard to power a beeper, LED, clock, memory chip, and two motors
- Combined circuits to create a mini programmable robot and successfully programmed the robot to complete a test course with zero failures or errors

WRITING STRONG BULLET POINTS – FOCUS ON RESULTS

Resumes are assessed to determine if candidates have the appropriate proven results and experience for the given organization/position. List your key achievements and add details which show your demonstrated results.

Begin sentences with action verbs (past tense unless it's a current activity/project) and be specific when detailing your results and the value you added to each experience.

Use this formula to get started:
Action Verb + Context (tell the what and the how) + Result (Metrics, Outcome, and/or Impact)
Review the following samples:
- Developed UI feature enhancements with C++ to extract user inputs, transfer data to simulation engine, and visualize results in 2D and 3D plots
- Created MEP 3D model using Revit and collaborated with cross-functional team to integrate models in Solibri; performed clash detection to overcome discrepancies in design and model
- Formulated traditional machine learning and neural network models using pytorch library to predict multi-pedestrian behavior and evaluate AV-pedestrian interaction scenarios
- Developed a proprietary algorithm that automated the post-operation assessment of drilling data and identified costs of $100,000+ per well pad were mitigatable through identified best practices
- Researched and analyzed the data of various fuel cells to determine the optimal experimental parameters and to understand the diameter-dependent lithium storage performance
- Led agile sprints, feature prioritization, and roadmap development to ensure timely delivery of new fintech software product

When constructing the detail of this section, as a graduate student, your resume should encompass the most relevant experience from your undergraduate work to present day. The more current/recent and relevant (to your job/internship search) an experience is, the more detail you should provide.

SKILLS

List any relevant skills specific to your field including technical, lab, and knowledge-based skills you can apply to your field. Sub-categorize your skills whenever possible. List/label skills and foreign language proficiencies (if your proficiency levels vary). Do not include soft skills such as "teamwork" or "leadership" in this section.

For example:

SKILLS
Application Software: *Advanced* - MATLAB, SolidWorks
Programming Languages: *Advanced* - C/C++; *Intermediate* - Java, Python
Languages: English (Fluent), French (Conversational), Hindi (Native Speaker)

ACTIVITIES, HONORS, PUBLICATIONS, CONFERENCES & PATENTS

Activities

List memberships in campus and professional organizations or other activities that show involvement in your academic community or profession. Especially include those in which you had a leadership position.

Honors

Honors, Scholarships, Fellowships, and Awards should be listed, if received. Depending on the type of honor, these honors may be embedded within other sections or experiences OR if robust/varied enough, included as a standalone section. Select only those awards or honors that represent your strengths and are timely (i.e. you will not include high school honors).

Publications

Publications can be listed in a separate section if multiple, or under the relevant research/work experience.

Conference Presentations

Conference presentations can be listed in a separate section if multiple, or under the relevant research/work experience section to which they apply.

For example:

LEADERSHIP
Department Representative, Graduate Student Association- CMU   Fall 2019-Spring 2020
Chapter President, Society of Women Engineers- CMU   Fall 2018-Spring 2019

OBJECTIVE/SUMMARY

The use of an objective/summary is optional.

If you decide to include an objective or summary, describe the career path that you are pursuing, and your skills/experiences that will enable you to add value to an organization. If your objective/summary isn't adding clarity and advancing your purpose and resume, remove it.

WHY INCLUDE A CAREER OBJECTIVE OR SUMMARY ON YOUR RESUME? If you have a diverse or varied background, it may help to focus your resume and provide clarity to an employer on your career goals, your related skills and the value you can add to the prospective organization.

Consider the following when writing an objective/summary:
- Focus on what skills, experiences and abilities that you possess that would bring value to the employer and position to which you intend to apply.
- Avoid broad/generalized statements such as, "To pursue the computer engineering field."
- Avoid listing several fields or positions.
- It is acceptable to have two resumes with two different objectives or summaries and to tailor resumes to different job searches.

Strong Verbs List

accomplished	collected	elevated	increased	performed	salvaged
achieved	communicated	eliminated	inferred	persuaded	saved
Adapted	compared	empathized	influenced	pioneered	schedule
addressed	compiled	empowered	informed	pioneered	screened
administered	completed	enabled	initiated	planned	searched
administrated	composed	encouraged	innovated	prepared	secured
Advised	compromised	enforced	inspected	presented	selected
Aided	computed	engineered	inspired	prioritized	served
allocated	conceptualized	enhanced	installed	processed	shaped
Altered	concluded	enlisted	instilled	procured	sold
analyzed	conducted	ensured	instituted	produced	solicited
Applied	confronted	established	instructed	programmed	solved
appraised	consolidated	estimated	integrated	projected	spearheaded
approved	constructed	evaluated	interpreted	promoted	specified
approximated	consulted	examined	interviewed	provided	spoke
arbitrated	contacted	exceeded	introduced	publicized	sponsored
arranged	contributed	excelled	invented	published	started
ascertained	converted	executed	investigated	purchased	stimulated
assembled	convinced	expanded			strengthened
assessed	cooperated	expedited	justified	rated	suggested
assigned	coordinated	explained		recommended	summarized
Assisted	counseled	extended	launched	reconciled	supervised
Attained	created	extracted	Lectured	recorded	supplemented
Attended	critiqued		Led	recruited	supported
Audited	customized	fabricated	Listened	reduced	surveyed
augmented		facilitated		referred	synthesized
authored	debugged	finalized	maintained	refined	systematized
automated	deciphered	forecasted	managed	reflected	
	decreased	formalized	Marketed	reformed	taught
balanced	delegated	formed	Mastered	remedied	tested
Boosted	delivered	formulated	Measured	remodeled	traced
Briefed	demonstrated	fostered	Mediated	reorganized	trained
broadened	designed	founded	Mentored	repaired	transformed
budgeted	determined	fulfilled	Minimized	reported	translated
Built	developed		Modeled	represented	troubleshot
	devised	gained	Moderated	researched	tutored
calculated	diagnosed	gathered	Modernized	resolved	
Captured	directed	generated	monitored	responded	uncovered
catalogued	disassembled	grew	motivated	restored	updated
centralized	discovered	guided		retrieved	upgraded
Chaired	dissuaded		negotiated	revamped	utilized
Charted	distributed	helped		reviewed	
Clarified	documented		operated	revolutionized	validated
classified	drafted	identified	orchestrated		verified
Coached	educated	illustrated	organized		
collaborated	elaborated	implemented	overhauled		wrote
			oversaw		

6

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The Engineering Interview: 15 Tips for Engineer Candidates

indeed

Updated February 3, 2023 – Author Indeed Editorial Team – Article from Indeed.

When applying to engineering jobs, you need to show employers you're the right fit for their company. Your job interview may vary based on where you're applying and for what engineering role, whether that be electrical, computer, civil, mechanical or another kind of engineering. Regardless, though, what's important for engineering interviews is you have the ability to showcase your skills and relevant experiences.

In this article, we'll discuss what engineering candidates should do before, during and after their engineering job interview.

Preparing for engineering interviews

Like any other interview, ==it's important to prepare for engineering interviews because employers may take notice of your confidence and level of preparation.== An engineer is someone who always needs to be on top of their tasks, which is why many employers are looking for a candidate who is both skilled and intelligent.

Since engineers often work on a team, your interview is also an opportunity to show that you can effectively communicate with others. By preparing for your engineering interview, you can be a more personable candidate. Anticipating what kind of questions an employer may ask you can help you come up with better responses.

Tips for the engineering interview

While your application materials may prove you are the perfect fit for the job, your interview is the final step in securing your job offer. You need to prove that you are going to be a good person to work with. Follow these tips to show you are the top candidate for an engineering position:

Before the interview

Here are some tips for what to do before your engineering interview:

1. Reflect on your skills

Engineers need to be intelligent, technically savvy, curious, attentive to detail and clear communicators. Before your interview, think about what specific skills you want to highlight during your interview. Read through the job description to learn what kind of candidate the employer is looking for. You should tailor your responses to this particular position.

2. Research the company

Learn what kind of engineering work this company does. Get to know all about the products and services it offers. Get to know who its clients are and past projects the team has done. If you want even more talking points, you should see who its top competitors are.

3. Practice with another engineer

Find a fellow engineer to help you practice for your interview. Have them ask you common interview questions. See if they would be willing to provide you with feedback on your answers. Finding someone who is in a similar position as you can be helpful. See if any of your engineering peers would be willing to give you advice or insights.

4. Prepare for common engineering interview questions

Employers looking to hire an engineer tend to ask similar questions. When looking up interview questions, search for your specific type of engineering. The questions will likely vary based on your field. Here are some general engineering questions to prepare for:

- *What is the most challenging engineering project you have worked on?*
- *Tell me about a time you had to present a project to a client.*
- *How would you describe your working style?*
- *How would you adapt to a limited budget when working on a project?*
- *What is your thought process when troubleshooting a problem?*

Related: 8 Common Interview Questions for Engineering Jobs

(handwritten: On next pg !!)

5. Dress for success

While the dress code can vary by engineering companies, you should always look your very best during an engineering job interview. You should wear formal business attire, even if you suspect you'll look more dressed up than your interviewer.

Dressing nicely and grooming yourself shows that you know how to act in professional settings. Having a clean appearance shows employers that you're taking this opportunity seriously. It also indicates that you have the ability to dress up for important meetings or clients if you were to get the job.

6. Bring your resume

An employer may want you to guide them through your resume. Bringing a copy for yourself and the employer makes this process much easier for you. It also shows your interviewer that you are prepared. When describing your resume to them, elaborate on your experiences that are directly related to the role you're applying to.

Related: 12 Essential Engineering Skills for Your Resume

During the interview

Here are some tips for what to do during your engineering interview:

1. Show your social skills

While engineers need to be smart, they also need to be sociable. This is especially true if you're working with a team or have a client-facing position. Prove you can make positive connections with others with your demeanor and nonverbal communication. Walk into the interview looking confident and eager to meet your interviewer.

- What is the most challenging engineering project you have worked on?
- Tell me about a time you had to present a project to a client.
- How would you describe your working style?
- How would you adapt to a limited budget when working on a project?
- What is your thought process when troubleshooting a problem?

Throughout the meeting, remain attentive. While you should answer all of your interviewer's questions, you should also show you're a good listener by giving them a chance to speak.

Related: **12 Essential Engineering Skills for Your Resume**

2. Bring up previous projects

When an employer asks you about previous accomplishments, try to highlight your project work. Explain what role you had when working with a team. Talk about some challenges you needed to overcome along the way and point out your major successes. Employers want to hear about the actual work you have done that is relevant to their job opening.

3. Leave your electronics behind

Either leave your phone in the car or completely turn it off and put it away during your interview. Along with it being a common courtesy, many engineering firms ban the use of personal devices due to security concerns.

4. Be thoughtful about your response

If an employer asks you a challenging question, take a moment to gather your main ideas. Rather than rushing into your answer, show employers that you are a conscientious and thoughtful person. Engineers need to be considerate of what they do and say, which is why having clear and concise answers is so important.

Related: **How To Get Experience in Engineering (With Tips)**

5. Show your thought process

Employers might ask you a brain teaser to see if you're a quick thinker. When answering such questions, feel free to talk through your thinking process. This can show employers how you come to your conclusions.

6. Ask the right questions

Show your employer you care about the role by asking thoughtful questions at the end of the interview. Here are a few quality questions engineering candidates can ask:

- *On what kind of projects will I be working?*
- *What is the work environment here?*
- *Who would I be working with?*
- *Which clients would I be working for?*
- *Is this a client-facing position?*
- *What programs does your team use?*

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Related: [40 Engineering Interview Questions (Plus Sample Answers)](#)

After the interview

Here are some tips for what to do after your engineering interview:

1. Send a thank-you note

You can either send this letter by hand or via email. In your note, highlight some parts of the interview. Reiterate why you are a qualified engineer and what value you can add to their team. Thank the employer for their time and for meeting with you.

2. Reflect on how it went

If you are actively searching for engineering jobs, think of each interview as your chance to further develop your interviewing skills. Think about what went well and what you could improve upon. Taking a moment to review how your engineering interview went can help you do even better on your next one.

Related: [What To Do After an Interview: 9 Tips to Help You Succeed](#)

3. Research salaries

When you are waiting to hear back from the employer, start to look into how much you might make in this engineering role. You can use Indeed's salary search to find out. This way, you are prepared to negotiate your salary if you happen to get a job offer. Remember, the pay range for engineers can vary quite a bit by discipline, so make sure you type in your particular job title.

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- On what kind of projects will I be working?
- What is the work environment here?
- Who would I be working with?
- Which clients would I be working for?
- Is this a client-facing position?
- What programs does your team use?