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I. Recruitment

When a company needs to recruit or employ new people, it may decide to advertise the job or position in the appointments section. People who are interested can then apply for the job by sending in a letter of application or covering letter (US: cover letter) and a curriculum vitae or CV (US: resume) containing details about their education and experience. A company may also ask candidates to complete a standard application form. The company's Human Resources department will then select the most suitable applications and prepare a shortlist of candidates or applicants, who are invited to attend an interview. Another way for a company to hire is by using the services of a recruitment agency (US: search firm) who will provide them with a list of suitable candidates.



The first step:

1. How to write a letter of application

What is its purpose?	To get a job or a job interview for the writer	
What does it contain?	The most important and most relevant information in the curriculum vitae (CV): relevant experience, degrees, etc.	
What should it do?	Attract the employer's attention; show that the writer would make a good employee	
What style does the writer use?	Formal business style	
How long is it?	Usually only one page	
What is enclosed with it?	Curriculum vitae (CV); sometimes also letters of reference (testimonials)	

Letter of Application: Recognizing the Moves

Most texts in this genre consist of some or all of the following "moves" or sections:

- **OPENING** The writer identifies the reader and invites the reader to read the letter.
- REFERING to a job advertisement The writer refers to the advertisement in which the position was named and described.
- *OFFERING* candidature The writer expresses an interest in applying for the position.
- **STATING** reasons for applying The writer gives his or her reasons for wanting the position.
- STATING availability The writer indicates when he or she would be able to take up the position.
- **PROMOTING** the candidate. The writer presents his or her qualifications and abilities relevant to the desired position.
- STIPULATING the terms and conditions of employment (TC) The writer indicates his or her expectations regarding salary, working hours, and other relevant contractual matters.
- **ENCLOSING** documents The writer lists the documents enclosed with the letter.
- **POLITE ENDING** The writer ends the letter in a way intended to procure a favourable response.
- **SIGNING OFF** The writer signs his or her name in a respectful manner, thus claiming ownership of the letter.

Source: http://www.secth.com.br/si/site/040301

- Connect the above-mentioned moves with the paragraphs of the translated application letter in the exercise 2.
- 2. Translate the following letter of application:

Molba za posao inženjera projektanta

Datum: 1. listopada 2009.

Mr. John Smith, Nuvasive, Inc., 257, Park Avenue South, New York, NY 12345-6789. Poštovani gosp. Smith,

Prijavljujem se za mjesto višeg inženjera projektanta u Vašoj organizaciji kako je to objavljeno u tjednom Inženjerskom časopisu. Bio bih vam zahvalan ukoliko biste uvrstili moj priloženi životopis u svoju datoteku.

Kao što možete vidjeti iz moga životopisa, radio sam kao pomoćnik inženjera projektanta i kao inženjer projektant za Navistar, Inc., Melrose Park, IL proteklih šest godina. Imam veliko iskustvo u vođenju i planiranju projekata, držeći se pri tome zadanih rokova, imam iskustvo u stručnom nadzoru osoblja, vođenju izvještaja o projektu i izradi proračuna. Imam i dosta mentorskih preporuka za izradu integracijskih sistema iz softverskih i hardverskih područja.

Moje znanje, vještina i entuzijazam pomogli bi mi da postanem uspješan u vašoj tvrtki. Bio bih vam zahvalan ukoliko mi pružite priliku za razgovor. Dostupan sam na broj telefona 991-3713-972.

Hvala vam na vašem vremenu i razumijevanju.

S poštovanjem,

Richard Anderson

Prilozi...

Source:http://www.coverletter.com/

3. Fill in the missing words where necessary:

Dear Sir,

I have (a) ______ twelve years' experience (b) ____ business development, management, sales and marketing (c) _____ domestic and international. I (d) ______ very successful in taking two small companies into international markets, and (e) ______ Bollinger Incorporated's international growth in the European Union. In addition to developing exports to over 15 different countries, I was instrumental in (f) ______ and developing major domestic accounts. As one of the three Vice-Presidents of Bollinger, I was (g) ______ general manager in charge of the day-to-day (h) ______ of the company as well as long-term strategic planning. I have an undergraduate (i) ______ in finance and information systems and am highly skilled (j) _____ computers. I have excellent (k) ______ and (l)_____ communication skills and enjoy public speaking.

Currently, I am a partner in a small company which is _____I

Therefore, I have been ______ the possibility of ______ a position which will ______ and challenge my considerable talents, abilities and drive. The position in Oregon is exactly what I have been searching for.

I have ______ a copy of my resume for your perusal. I ______ to the opportunity to speak with you ______.

Yours sincerely,

William Delaney

What is a cover letter?

Whereas the letter of application can also be used for other purposes besides the job, e.g. for grants or scholarships, the cover letter is attached to, or accompanies, another <u>document</u> such as a <u>résumé</u> or <u>curriculum vitae</u>. It gives you the opportunity to "sell" yourself, i.e. to convince the institution or company that they need to have you. Listen to the video clip about structuring the cover letter: which of the following tips does the video clip contain?



4. Use the words from the video clip in translating the following letter into English:

Maxwell Jones

Ganco Engineering

4567 Main Street

Yokomo, IL 99999

Poštovani gosp. Jones,

Nedavno sam završila s korporativnim radom u građevinskoj tvrtci u Sjevernoj Kaliforniji gdje sam bila odgovorna za vođenje manjeg projekta. Nadam se da bih u inženjeringu Ganco imala prilike za sličan rad. Vjerujem da će mi ambijent iz kojeg dolazim i iskustvo pomoći da doprinesem uspjehu Vaše kompanije za kratko vrijeme.

Bavim se geodetskom izmjerom i snimanjem, te mehanikom tla i i temeljenjem, a izvodila sam i preliminarni statički proračun i projektiranje samoposluge. Vodila sam izradu glavnog situacijskog plana za novi sistem prijevoza. Prvo sam geodetski obradila područje, provela istraživanje prometa i mjerenje, istražila regulacije i pravila grada za suglasnost, te napisala izvještaj na 25 strana koji ilustrira izvedivost gradnje novog silaska sa



Figure 1.1

autoputa. Imam veliko znanje matematike i savjesna sam u poštivanju rokova i izvršenju zadataka bez nadzora. Ukoliko mi se pruži prilika da dobijem zadatak, mogu izraditi plan koji će pratiti potrebe projekta.



Figure 1.2

Jako sam zainteresirana za rad na ovom projektu nakon čitanja brošure o Vašoj firmi i Vašeg članka u časopisu "Niskogradnja" gdje opisujete sudjelovanje u izgradnji novog trgovačkog centra u ovom području. Možete me kontaktirati na adresi i broju napisanom ispod. Nazvat ću Vaš ured za desetak dana glede statusa moje prijave. Radujem se Vašem pozivu.

S poštovanjem, Marilyn Appleton 12300 Hilltop Drive Mantana, CA 99444 (919) 345-5566 Adapted from: http://jobsearch.about.com/od/coverletterwriting/a/coverlettersalutations.htm

Top-10 cover letter tips

Do your homework - learn what you can about the company or organization you're applying to, so you can tailor your cover letter and really show the employer that you could be a good fit.

- 5. Join each paragraph below with one of the given titles: Tailor your letter to the job. / Break it down. / Presentation counts. / Don't just restate your résumé. / Be brief. / Personalize your letter. / Proofread. /Follow instructions. / Use a professional tone.
 - ______ Be sure to include any information that was requested in the job posting. If the posting asked for the amount of hours a week you are available to work, be sure to answer that question in the cover letter.





- Use your letter as an opportunity to make a great first impression. Most employers read the cover letter first, so you want to catch their attention by describing your impressive skills. That way, they are more likely to read your full résumé.
- When possible, address your cover letter to a specific person.
 Use their name and title, and make sure the spelling of the name is correct.
- 4. _____ Make sure the skills and experience you highlight in your cover letter are clearly connected to the job you're applying for.
- 5. ______ Use a font that's easy to read, like 12-point Times New Roman or Arial. Using 8.5 x 11-inch white paper is usually a smart choice.
- 6. _____ Make your cover letter easier to read by breaking the text down into short paragraphs.
- 7. _____Be sure to use professional and respectful language when writing your cover letter.
- Your cover letter should be no more than one page long—the best strategy is to keep it short and to the point.
- 9. ______. Review your cover letter several times; don't just rely on spellcheck. Ask someone else to proofread it as well.



How To Write A Curriculum Vitae

A curriculum vitae is a written description of your work experience, educational background and skills. It is more detailed than a <u>resume (American style)</u>, which is a summary of your experience and strengths that are relevant to the particular job you are applying for. A resume is usually one page; a CV can be longer than this.

A CV layout focuses on creating a suitable document for students and graduates to use when applying for professional positions. It goes in the following order:

Full Name _____

Nationality _____

Address, Telephone and Email Address _____

Career Objective (optional)

Educational History (most recent first) _____

Professional/Work Experience & Employment History (most recent first) - put this above Educational History if not applying for a graduate position.

Professional accreditations/qualifications if you have any (e.g. ACA – Associate Chartered Accountant) _____

Specialist skills (e.g. typing, bookkeeping, etc.)_____

References_____

6. Read the following example: is it a curriculum vitae (European style) or a resume (American style)?

Last Name, First Name

Address, Zip

Phone No., Mobile, Fax, Email Address

Objective Statement

Seeking a position as a Structural Engineer who with his experience can design and manage the construction of many structures, including buildings, bridges and railways.

Professional Experience

- ∔ [Job Title]
- [Company details], [Location]
 2004 present

Responsibilities and Achievements

- Carried out load and structure calculations, investigated beam and foundation strength
- Managed design and project engineers, as well as all CAD technicians, from planning to construction
- Worked diligently towards timely under-budget completion of multiple projects
- Composed instruction manuals and gave presentations or simplified instruction as required
- Took constant preventive measures in accordance with meticulous analyses of given designs
- Closely collaborated with construction contractors to ensure both the safety of the facility and timely, economic completion according to public and corporal safety regulations
- Used state-of-the-art simulation and design software (EXAMPLES)

Key Skills & Core Competencies

- Accuracy and attention to details.
- **4** Good problem-solving and analytical skills.
- Ability to work round the clock
- Knowledge of structures and designs

Structural Engineer Education & Qualifications

- ♣ Bachelor's degree in structural/civil engineering
- ♣ Master's degree in engineering



Top interview tips

An interview is a discussion between you and an employer to find out if you can do the job. However, there are certain rules and conventions to follow in interviews. Here's a checklist of the main do's and don'ts.

7. a) Match the corresponding parts of the sentences

What to do:

dress	bright and attentive
look	clearly and confidently
speak	smartly

Don't forget that only 7% of the interviewer's opinion of you is formed by what you say - the rest is judged on how you look, act and sound

b) Match left with right

Find out	the interviewers with respect and give them
	your undivided attention.
State	No-one else is going to!
Treat	clear. Make sure you understand the question
	and take your time if you need to think.
Keep your answers	to put some questions at the end - use it as an
	opportunity to find out more about the role and
	the company
Sell yourself	where the venue is beforehand, how to get
	there, and how long it takes.
Prepare	focused on what you can do for the employer,
	not what they can do for you.
Stay	for example, why do you want the job, what are
	your strengths and weaknesses, what are the
	main tasks in this job.

8. WHAT NOT TO DO: Insert the missing words

- Don't ____ or use slang words!
- 🖊 Don't _____in your seat or do anything else that makes you look disinterested
- Don't____! The interviewer may see through you. Even if you get the job, your employer can dismiss you if they find out
- Don't ____your nerves show too much! A few nerves are normal but extreme nerves will affect your performance.
- Don't ____late!
- Don't ____ arrogant and assume you've got the job. Nothing turns off employers more than someone who is disrespectful and over-confident
- Don't _____ controversial topics such as religion, politics and gender relations

- Don't _____from notes or your CV. You should be familiar enough with your own history to be able to talk about it unprompted
- Don't _____former employers or colleagues. Interviewers may mark you down as a troublemaker and a gossip
- 4 Don't _____with the interviewer, no matter what. Remember to keep things positive!

discuss	lie	read	be	let
argue	bend	swear	criticize	

Going for a New Job?



Figure 1.4



Translate

9. Translate the following words mentioned in the text above:

tražiti povratnu i	informaciju	odnositi se	prvih nekoliko sekundi	brinuti se za
nekoga	odvijati se	smišljen (odro	eđen)	

Grammar

Fill in the blank spaces with the indicated words:

thoughts, do, informative, take care, run, present, get, marketable, offer, make, throw away, enjoyable, design, stimulating, follow, impress, go, skills, intrigue

Be careful about the use of PRESENT PERFECT and PAST TENSE!



Figure 1.5

Jacky Woubly $1_{____}$ careers advice for many years. She $2_{___}$ career development workshops, and now $3_{___}$ one-to-one sessions called Career Path. She also had a Careers Advice column in Gioia Magazine. She received a lot of queries on interview techniques, and how to $4_{__}$ that perfect job. Here are some of her $5_{__}$ after years of helping people get where they want to go:

Interview rules

You hear all sorts of rules about job interviews: interviewers decide about your 6_{-----} , and you have to 7_{----} a good "first impression". You should ask insightful questions; learn as much as you can about the company, they will probably ask questions 8_{-----} to trip you up, so have some quick answers ready.

As far as rules go, some make perfect sense. However, getting the job you want is not about $_{_{_{_{_{_{_}}}}}}^{9}$ the rules. It is about $^{10}_{_{_{_{_{_}}}}}$ yourself in the most $^{11}_{_{_{_{__}}}}$ way possible, that $^{12}_{_{_{__}}}$ of you and the interviewers' needs.

So many people 13 their chances. They do not prepare to make the whole interviewing process. 14 , enjoyable and 15 for all concerned.

No matter how nervous you are, you do need to $__{16}^{16}$ the people interviewing you. Show that you know how to communicate and 17 _____people: ask surprising questions. No matter how badly you think the meeting _____¹⁸, if you want the job, always send a follow-up letter.

If you don't get the job and you're curious why not, phone up and _____¹⁹.

Brushing up Your Interview Skills

Fill the blank spaces with indicated words, and some missing prepositions as well:

personal qualities, do, put in, point, leave out, stand out, marketing tools, boost, relate to, layout, ruthlessly, highlight, do, statement, skill, side:

If you want the job, as a lot of other eager people _____, so your application has to _____² from the crowd. CVs. are usually dull and boring, and people create them as historical documents, rather than as _____³. You can ____⁴ your chances of getting a meeting by making your CV look and 'sound' special.

Use good paper; make the _____⁵ readable and easy on the eyes. Edit it _____⁶. People usually _____⁷too much detail. _____⁸_the bits that ____⁹ the job you're going for. They don't need to know you went to St Vincent School when you were thirteen. If you don't have what you think are the right educational _____¹⁰_ don't worry. Just _____¹¹. If you include enough interesting and intriguing material ____¹² who you are now, what you didn't do is far less important. I recommend a short paragraph ____¹³ the beginning that says something about your _____¹⁴ and your business skills. A short ____¹⁵_about what you're seeking can also go down a treat.

As we know, a job for life is so rare nowadays, that eclectic, unusual and even inconsistent C.Vs are OK as long as they're presented well.

Even if you think your current job is lousy, look at the good _____¹⁶ as though you were looking at it from the outside. Most jobs appear much better from the outside than they do from the inside (only you know the real truth); so puff up the goodies and moderate the baddies!

Adapted from: <u>http://www.stjobs.sq/career-resources/interview-tips/brush-up-your-interview-skills/a/88508</u>

II. Interviews



Role-play activity

Conducting interviews

Students practice job interviews with each other while using prepared notes helping them to recognize appropriate language to be used during the job interview.

Take a look at some standard job interviewing questions and replies.

- How long have you been in current position? I've worked here for two years.
- ✤ When did you join XYZ Inc.? I began working at XYZ Inc. in 2003.
- Why would you like to work at ABC Ltd.? I'd like to work at ABC Ltd. because I'd like
- Can you give us specific examples of your responsibilities at past jobs? At MNO associates, my responsibilities included D, E, and F. At XYZ Ltd. I was entrusted with . .



Role play

Act out the following interviews as an interviewer and an interviewee. Focus specifically on tense usage and specific job vocabulary while completing this task.

A) Miguel Rosales, bridge designer

Miguel Rosales has more than 14 years of experience in urban design and bridge architecture. He was the lead architect and urban designer on Boston's Charles River Bridge, and is currently the lead architect on several major U.S. bridge projects. Miguel is a principal and senior designer with Rosales Gottemoeller & Associates, a transportation architecture and engineering firm based in Boston, Massachusetts, and Columbia, Maryland.

Do you make the preliminary drawings?

Before, bridges used to be very standardized. You just take a standard from a book and apply it, and nobody really thinks if it's appropriate or if it's going to match the structure or not. And nowadays, there is this idea of trying to make it more comprehensive, with a style and kind of a family shape, so the whole system comes together. So then you have to do special detailing for the bridges; I get involved in that. And then the construction starts, and I review the drawings. Usually the term of involvement is many years.

How long does it take on average from beginning concept to completion?

The Charles River Bridge crossing in Boston, I started working on that in about 1989 to 1990, and now it's being completed next year. So it took 10 years. The Woodrow Wilson Bridge in Washington, D.C., we have been working on that one since 1993, and it's not going to be completed until 2006. The bridge in St. Louis is just beginning right now, and that one's completion date is 2010. So, again, 10 years. I would say it takes about a decade to do a major crossing.

When you're coming up with an initial concept for a bridge, what are the things that you're looking for?

I'm very interested in how a bridge fits in its context. Especially when it's a major crossing, it should reflect what is there, and it should relate to something that is part of the landscape, of the architecture, or some other feature that makes it fit.

The other aspect I'm very interested in is the proportions and the cultural value of the structure. And that is very important to me. That's why I make a lot of 3-D drawings and models and computer drawings, to try to really see how the bridge is going to appear when it's built.

And that's one thing that a lot of engineers have difficulty imagining, because they are not trained in three dimensions. A lot of their work is only in plans and sections and elevations. Some people, I think, don't understand that bridges can be attractive and well proportioned. They are used to seeing so much ugliness everywhere.

Do you actually meet with community members? Do you hold public meetings or that sort of thing?

Yes, definitely. That's part of all the projects. And I would say some of my success happens because the community members relate well to my work, and they insist that somebody like me is involved in the projects. I think if it was just left to the transportation departments to make a decision, it would not be the same, because considerable pressure to improve the appearance of structures is coming from the communities, not really from the Department of Transportation. I think they are interested, but if the community didn't push for it, it would probably not happen.

Where are you from originally?

I was born in Guatemala. It's a very small country, and the population does not really have any role in deciding anything that relates to government projects. And I find it very interesting here that communities have a role. So I like working with the community; that gives me a lot of satisfaction, because it's like a model for democracy. They are paying for it, and it's coming from the taxes. And it's an enormous amount of money, you know, millions and millions of dollars. So I think they deserve to be listened to, and I like being part of that process.

So that's one aspect. The other aspect I like is that whatever I do is going to last hundreds of years. I mean, the bridge here in Boston is supposed to last 150 years. And that's a long time. So I feel like if I am able to make a difference or make a change, it will be a lasting project, and it will be there for a long, long time. And it can either be a big asset or it can be a big problem. And if I can be part of making it a big asset, I get a lot of satisfaction out of that.

A bridge lasts a long time, especially if it's well designed. People will want to preserve it. And that's something that is definitely a trend in the U.S. Like all the unsightly bridges, bridges that people don't care about, they demolish them right away. A problem comes or they need to repair it, it's easier to demolish. But when a bridge is very attractive and people are attached to it, they keep it. They keep repairing it; they keep preserving it. So I think that's telling about what kind of importance a bridge can have in a city or a community.

I asked you before what you liked most about your work. I'm wondering what you like least about it.

Being the owner of the company, I have to do a lot of business-related tasks, and I don't enjoy that completely. I think I would rather just be working on the design or the ideas. But if you are the owner, you cannot really do that. You have to deal with the other side of the company, the business.

Sometimes it's hard because the projects last a long time; it's not an immediate reward. And you have to be patient, so sometimes it gets frustrating, because you think that you've got to a point and then you stop or it's changed again or you have to bring another group into the formula to try to make a solution. So I would say that sometimes it's difficult because of the long-term commitment. Sometimes I see friends of mine that are architects go and do an interior, and then in six months, it's finished.

It is kind of a miracle when it's finished.

What advice would you have for a young person who wants to pursue a career in architecture or engineering?

I would say you have to be committed to it and be interested in doing something like that. I think it's important to try to have some self-confidence in whatever you're going to do. It's going to be there, and you're going to be able to live with it. Be prepared to take responsibility for your work, because once it's built, you can't really go back.

I'm also interested in helping people make their life better. And I believe that whatever I try to do is related to that. If you're interested in people, improving their life in some way, I think that would be helpful, too.

Source: http://www.pbs.org/wgbh/buildingbig/profile/interview/rosales.html

1. Use the following cues to write out full responses for a job interview.

- a) Three specific examples from a past job
- b) Current responsibilities
- c) Strengths / weaknesses (two of each)
- d) Why are you interested in this job?

2. Translate and make full sentences:

most (u skladu s okolinom)	glavni projektant	prednost
idejni nacrt	odnosit se	pregledati crteže
dugotrajni projekt	brojno osoblje	obnova naselja



Grammar

Make sure to review the various tenses that are used to answer these questions. Remember the rules for using each tense:

- Present perfect (continuous) to speak about work experience up to the present moment
- Present simple to discuss current job responsibilities
- Past simple to discuss past responsibilities
- Use of <u>conditional forms</u> to imagine situations at work -

B) David Nyarko, Bridge Designer

David Nyarko is based in New York City, where he works as a lead mechanical engineer with Parsons Brinckerhoff, an international engineering and program management firm. He has extensive experience with movable bridges, including bridge inspection and rehabilitation, preventative maintenance, and machinery and component design.



Figure 2.1

What kinds of things do you do as a mechanical engineer?

Well, I think a lot of people do not know that mechanical engineers work on bridges, but we work on what are called <u>drawbridges</u>. Technically, we call them <u>movable bridges</u>. And we basically design all the systems that actually move the bridge. It takes about 10 to 15 minutes for boats to go through; it could be for a railroad crossing or vehicular traffic. While the boat is coming through, the cars or trains have to wait. And this huge bridge opens slowly, because you don't want it to drift apart in any way or form. And there are different types of machines that open them up. It could be hydraulic, or it could be your normal gears and motors. You have to size them up, make sure this machinery has enough power to open up that particular bridge.

of drawbridges What aspects or movable bridges do you work on? Well, I work on all types of movable bridges. It could be a brand-new one, where you start from scratch, and we have to do what we call a type-study, to determine the type of bridge that is adequate for that particular crossing. After the type-study, you come up with preliminary drawings of what should be there. Then you go to the final design process when you design the details of the bridge. During the construction of the bridge, we assist the client or the contractor in reviewing shop drawings and clarifying various technical issues that might come up.

Is that something that you've been involved in?

Yes, in various ways. Another major part of my job is what we call condition surveying, or inspecting the condition of existing bridges. And there's probably more work around the

world in surveys than in building new bridges. We look at bridges to assess the operating condition and to evaluate whether they meet current codes and standards.

What sorts of things do you look for?

Well, first of all, we look at a bridge to make sure that nothing is falling apart. We also look at specific conditions of the machinery to make sure it will not fail or it's not deteriorated in any way. Of course, we can't fully predict failure, but we can see when something is not running right. The margin of safety in bridge design means that when components reach a dangerous amount of wear, they are still unlikely to fail immediately. On bridges with hydraulic equipment, you can do all sorts of what we call diagnostic testing of the system.

So after the inspection, do you also get involved in repair?

Of course. After the inspections, we put together reports, and out of this comes short-term and long-term recommendations -- that is, if the repair recommendation needs to be implemented immediately or if it can wait till later, when it's funded. And then, based on that, the client will ask us to do a rehabilitation, or it could be just a minor repair.

Do you use any special equipment in your work?

Yes. For power transmission equipment, we use stuff such as gears, bearings, couplings, etc. There are all sorts of tools, such as gear calipers for some gears, feeler gauges for gears, and machinist levels to check alignment. You could also use a whole computerized data-gathering system to check pressure and flow at various points, or ports, as we say, on the hydraulic system. The flow in the system represents how fast the oil is going through the piping. Or for another type of movable bridge, called a bascule bridge, we determine the balance of the bridge during operation by using strain gauges and data-gathering instrumentation.

Do you work with a team of engineers?

Yes. I normally have an electrical engineer with me, and a structural engineer. The structural engineer will be responsible for the <u>loads</u> and the structure itself, to make sure it doesn't fall apart when it's windy or when it's moving, just making sure that the loads are well distributed and that the bridge will be <u>stable</u>. There's also normally a geotechnical engineer, who looks at soil conditions and foundations, and also the alignment of the roadway. Then

you have the electrical engineers, who basically make sure that all the equipment is powered well. They also work on the controls, to make sure that everything is in sequence, that something opens or something moves before something else. And then the mechanical engineer, who works on the mechanical components to make sure they're sized properly.

What does a typical day in your work look like?

Well, a typical day would be putting a report together, putting some drawings together, answering a call from a client about a problem they have out there.

What would you say is the most interesting thing about your work?

I personally enjoy what I do. My father is a mechanical engineer. He worked for Volkswagen for 25 years building cars. So that's my other passion. I always wanted to be a mechanical engineer, but I got into bridges by default. I wanted to go into the car business. But around 1987, '88, when I came out of school, they were laying off people in Detroit. So I got a job with the City of New York, and was introduced to the industry, and slowly came to enjoy it and became an expert without even knowing it.

But it's been fun. There are two things I really enjoy. You get to go to bridges all over the country. You get to work with all sorts of people out in the field -- maintenance crew, bridge operators. They're very helpful; they're very nice. There's also the new hydraulic equipment on movable bridges, what I call the high-tech end of it. The fact that there's always new equipment and new developments -- I enjoy that.

Is there something that you like least about the work?

When I started, more than 10 years ago, I wouldn't say I was scared of heights, but when I climbed up there, I sometimes looked down and said, "Boy, what if I fall in the water?" That was at the beginning. It takes a little getting used to.

Do you have to climb a lot?

Oh, yeah. On what we call <u>vertical-lift bridges</u>, where the middle of it lifts up like an elevator, the machinery is actually located on top of the <u>towers</u> or the lift span, so you need to go in there sometimes. You're just climbing around and making sure you don't fall in the river.

Is it automated? Are there lifts, or do you literally have to climb?

Some bridges have lifts. Others don't.

I'm sure that takes a little getting used to.

Definitely. Climbing into places, or crawling in there.

What's the most interesting project you've worked on?

Well, the projects have been very exciting. One of the projects that I worked on for my company, Parsons Brinckerhoff, and really enjoyed, was the construction of the Coleman Bridge in Virginia. This is probably one of the longest <u>swing bridges</u> in the world. The company won so many awards for it. It was interesting because it was very historic. There's quite a lot of history in that area. It was an existing bridge that was widened from a two-lane bridge to a four-lane bridge.

Finally, what kinds of things do you like to do in your free time?

I play tennis, and I do work on cars.

Source: http://www.pbs.org/wgbh/buildingbig/profile/interview/nyarko.html



Translate

- 1. Inženjer voditelj
- 2. Obnova mosta
- 3. Promet vozila
- 4. Pregledati radioničke crteže
- 5. Pojasniti tehničke probleme
- 6. Ocijeniti uvjete funkcioniranja
- 7. Zadovoljiti sadašnja pravila
- 8. Razina habanja
- 9. Skupiti izvještaje
- 10. Mjerenje deformacija

Form three questions and responses in addition to the cues provided in the interview

C) Patricia Frayre, Graduate Civil Engineer

Patricia Frayre is a Project Graduate Civil Engineer at Walter P. Moore, a Texas-based consulting engineering firm. She has five years of experience in civil engineering design and management.



Figure 2.2

What kind of engineering do you do?

I do general civil engineering -- that is, site/land development. It includes anything from setting finished floor elevations to grading sites to making sure all the utility (water and wastewater) lines function. In general, any development project that gets constructed has to have water, wastewater, and storm drainage capabilities. That's basically what I do as a

graduate civil engineer.



Figure 2.3

What's a project you're working on now?

The New Harris County Exposition Center near the Astrodome. It's actually under construction now. We broke ground in June. It's scheduled to be finished by 2002. I'm proud of the project because it was a monster to design.

And what is involved in designing something like that?

Everything. There is research on existing utilities -- you have to coordinate with the different agencies that will be reviewing the designs and issuing permits; making sure that everything works. Parking lots have to drain. Pipes have to be sized accordingly. Most importantly, coordination with the other disciplines like the MEPs (mechanical, electrical, and plumbing engineers), structural engineers, and, of course, the architects has to occur.

What's a typical day like for you?

I would say it's mostly spent in the office, but once a project goes into the construction administration phase, you have to go out in the field and make sure that construction is being done per the design. I think construction workers are still getting used to the fact that there are female engineers out there. We still definitely need to have more women out there representing engineers.

How did you get into your field, and when did you know you wanted to be an engineer?

When I was in high school, there was an ex-student who came back to talk to the class about her job as a NASA engineer. It was then that I decided I wanted to be just like her. I started out at Texas A&M University with an aerospace engineering major. The market was not good for aerospace engineers. People were graduating with 4.0s and not getting jobs. I decided to switch majors and study structures in the civil engineering department. I figured I could get the same basic training, but with different material properties.

I found out I really liked structures, which was the focus of my undergraduate degree. I started my Master's degree in structural engineering, but then decided to take this job as a civil engineer. I really enjoy the fact we get to interact with the client. It's not so much number crunching. There's some of that involved, but the majority of the work is coordination between the different disciplines, making sure all design guidelines have been followed, making sure all the different governmental agency requirements have been met. I think it's a challenge.

What would you describe as the most fun thing about your job?

The most fun thing about my job is seeing something you've designed being constructed or people using the facilities after construction. Seeing a clear site or something on site that gets torn down and replaced with new construction is a very satisfying part of this job.

What advice would you have for young people who might want to pursue a career in engineering?

If they want to go into engineering or a science-related field, I would say absorb as much knowledge as you can while you're in school, especially in the mathematics courses. The formative years in middle school or high school are the years that you need to be like a sponge and absorb as much information and knowledge as you can.

Do you have any particular advice for girls or kids who might look at the engineering world and ask, "Are there any engineers like me out there? Could I do this?"

I would say, you can! Look around. I'm part of an ASCE task committee on diversity. We're working on programs that will stimulate an interest in engineering. I would direct kids to Web sites like this one. All it takes is to log on to the Internet, and you will see there are people like you. There's everything from young to old, from white to African American, and everything in between. There is no reason why anyone should say, "Well, I don't know if I can do this. There's no one like me out there."

I don't know. I can't identify with that mentality. I was the first in my family to get a higher education, and it's difficult for me to understand why some people don't believe in their ability. I can see where it would be harder, but I'm a strong believer in if there's a will, then there's a way. You just have to apply yourself.

Did you build stuff as a kid, or did you have those kinds of influences?

Yes, I guess you could say I had those kinds of influences. There was always something going on in the neighborhood. You see things like construction of houses or public utilities and you think, "I want to do that," but not necessarily the actual labor. The background, however, makes you think of what it would take to take it to a different level.

I notice you sign your e-mails with the letters "E.I.T." What does that stand for, and what does it mean?

"E.I.T." stands for "Engineer-In-Training." When you graduate college, you take an eight-hour exam, and if you pass it, then you become an E.I.T. You then have to work for four years with a registered, professional engineer after which you become eligible to take another exam to get your professional engineer's license. That exam is another eight-hour exam. If you pass it, then you become a registered, professional engineer. That's the next milestone in my career. Right now, I'm working on my experience. Once I become a professional engineer, there's really no stopping me.

Source: http://www.pbs.org/wgbh/buildingbig/profile/interview/fryare.html



Translate:

- 1. Poduzeće sa sjedištem u Beču
- 2. Komunalne službe
- 3. Upravo se gradi Astrodome
- 4. Izdavanje dozvola
- 5. Terenski rad
- 6. Zadovoljiti zahtjeve vladinih agencija
- 7. Inženjer stažist
- 8. Javni radovi
- 9. Ovlašteni inženjer

D) Susan Knack, Civil Engineer



Figure 2.4

Susan Knack is a civil engineer who specializes in building envelope issues. Since 1998, she has worked for Simpson Gumpertz & Heger, an engineering firm with offices in Arlington, Massachusetts, and San Francisco, California, that designs, investigates, and retrofits buildings and structures of all types.

Have you always wanted to be a civil engineer?

My father was a carpenter, and my uncle was a civil engineer. They used problem-solving skills to design and build things, and I enjoyed helping them determine how things went together. I thought I had the skills necessary to solve engineering problems, and so it seemed like a good fit. It was really my desire to build things that led me towards a career in civil engineering.

Did you major in civil engineering in college?

I actually initially majored in computer science at Cornell University -- but only for one year. I changed my major because I did not feel connected to the projects I was working on, and wanted a job that got me out of the office more often. I felt solving engineering problems would have an impact in the real world, and liked how civil engineers could design things and then help to build something concrete. So my sophomore year in college, I switched my major to civil engineering. I'm glad I did.



Figure 2.5

So what kind of things do you do as a civil engineer?

Today I work for a company called Simpson Gumpertz & Heger, Inc. in Arlington, Massachusetts. My main job is dealing with building envelope issues. This means I investigate why buildings leak and deteriorate and design new construction and repairs to deal with these problems. Really, there's a varied mix of things I do. Sometimes I examine the condition of entire buildings, ranging from old historic buildings to modern office buildings, and other times I look at smaller issues -- like whether or not a window is properly attached and flashed. I do some of this work using industrial rope access, or rappelling, to see the building.

What is rappelling, and how did you get involved in it?

Rappelling, or what we call industrial rope access, is something my company has been involved in for several years. Basically, we harness ourselves to two ropes, scale down the side of a building, and examine its construction for various problems or conditions. The ropes give us access to spots on a building that conventional means just can't get to. For example, it's pretty hard to examine the inside of a big smokestack -- but rappelling makes it much easier.

Civil engineering is a field dominated by men. Have you ever felt intimidated being a female in a male-dominated field?

I've never had a problem being a female engineer. People generally respect quality work, no matter who produced it. And as more and more women enter the field, which was historically male-dominated, I do not think people will even view this as an issue.

So what are you working on right now?

Right now, I'm working on designing roof repairs for the New York State Capitol Building. The building is experiencing some stubborn leaks that we hope to solve. The roof is very steep and intricately designed, so rappelling is a handy way to examine its construction. I've had to do a lot of research on the Capitol Building because of its unique construction and the historical significance of the building.

What would you describe as the most fun thing about your job?

Applying problem-solving skills to solve real-life problems, visiting job sites, seeing my designs transformed from paper to real life, and every once in a while, getting to rappel off a building.

What advice do you have for kids who may want to pursue a career in civil engineering?

Take lots of math and science courses. Be aware of your surroundings -- look at buildings and structures, and try to figure out how they work. Think creatively about problem solving.

What was your favorite class in high school?

I've always loved problem solving, so my favorite classes in high school were math and computer science.

What was the most unique building that you've ever worked on?

It's a tie between the historic Quincy Market dome in downtown Boston, Massachusetts, and the New York State Capitol Building in Albany, New York.

What is the most frightening moment you've had as a civil engineer?

The most frightening moment of my career was the second I first stepped over the edge of a building to go rappelling! But even today, I get a little nervous when the wind whips around a building and the rope I'm on starts swinging back and forth!

What do you like to do in your free time?

I really enjoy the outdoors and activities like rock climbing and hiking. I even once went bungee jumping. I also enjoy woodworking and carpentry. Right now, I'm helping to restore a barn up in rural New Hampshire with a friend.

Source: http://www.pbs.org/wgbh/buildingbig/profile/interview/knack.html

- 1. Use the following cues to write out full responses for a job interview.
- 2. Which position / want like to have / new job?
- 3. Which are your future goals?



Translate

Translate the following expressions:

- 1. propadanje zgrada
- 2. problemi koji se odnose na fasadu
- 3. obnova fasada
- 4. glavni predmet u studiju
- 5. poslovna zgrada
- 6. pričvrstiti prozor

E) Matthys Levy, Structural Engineer



Figure 2.6

Matthys Levy has been designing domes, buildings, and bridges for almost 50 years. His projects include the Georgia Dome Stadium in Atlanta, Georgia; the Rose Center for Earth and Space in New York City; and La Plata Stadium in Argentina. He is the author of several books, including Why Buildings Fall Down (1992) with Mario Salvadori, and Engineering the City: The Story of Infrastructure (2000) with Richard Panchyk. He is a principal with Weidlinger Associates, a structural and civil engineering firm.

So what do you do as a structural engineer?

I design buildings and bridges, all kinds of buildings, from long-<u>span</u> buildings, like stadiums, to tall buildings, high-rise buildings, skyscrapers, to even houses.

And what are some projects that you're working on right now?

I have a stadium that is just starting construction in Argentina. It's a very large stadium. It's for football -- or what they call football there, which is soccer. And it seats about 50,000 people and is actually, in terms of size, about the same size as the Georgia Dome, which was also one of my projects. It has kind of an unusual <u>cable</u> roof that I designed.

What makes the Georgia Dome unique? What makes it special as a dome?

The two things I think that stand out about the Georgia Dome: one, it's very large. It's almost 800 feet long and almost 700 feet wide. The plan is kind of an ellipse -- not a pure ellipse but a type of ellipse. And it has a unique cable roof, which we call a <u>tenseqrity</u> roof, because it's a mixture of <u>cable</u> elements and <u>rigid</u> posts, very much like an umbrella. If you think of an umbrella, an umbrella has some rigid elements and very soft elements. Then it has fabric, which serves as a surface of the roof. And the fabric is translucent so that the whole roof

appears to be part of the sky. You can't look through it, but you get light coming through it. And it's extremely light for that <u>span</u>. It weighs only about five or six pounds per square foot, where most roofs of that size would weigh at least four to five times as much.

Is it the design itself that gives it its strength?

Yes, it's a very unique design that gives it its strength. The cables are arranged in such a way that they actually pull against the posts, so you have -- like a drum -- a very tight roof.

What's a typical workday like for you?

Well, let me tell you some of the tasks that I have to deal with, apart from answering the phone and dealing with issues of administration. From a design point of view, what I deal with is to try to organize the other designers who are working on a project, give them tasks that they have to carry out, numerical calculations that they have to make, and drawings that they have to prepare.

And then I meet with the other members of the design team -- the architects, the mechanical engineers, who provide the air conditioning, ventilation, lighting, and plumbing -- and we try to coordinate our tasks so that the building contains all of these elements in the right place and they don't interfere with each other.

And then I, of course, spend part of my day trying to get new work for the office, because the work is not given to you; you have to go out and get it. You have to spend a certain amount of time getting that work. And that pretty much covers the kinds of things that I'm involved with.

Let me ask you, what do you like most about being an engineer, and what do you like least about your work?

On a positive side, I love to design. I love to create designs and to see them carried out and also have them so well detailed that when I go out and see them in real life, they look exactly the way I imagined they would. That's very exciting.

Really, what I like least, in a way, is the effort you have to make to get work and the fact that you are competing against other people who, in your mind, are a little less talented than you are.

Then once you know the material that you're going to use, you can begin to lay out the building, which the architect usually does and you help him with, and you lay out points where you will provide supports.

And then you can begin to lay out the orientation of the structure -- what the structure is going to look like. Once you know that, then you begin to calculate how big each of the members that constitutes that structure has to be.

Do you have a favorite kind of structure that you like to design?

No. I love to do something I haven't done before. That's really fun. I did the new planetarium in New York, which is a very unusual structure. It's a sphere that's supported on three legs, and it's enclosed by a glass box, so it's a totally unusual structure. That was a lot of fun.

What's the most interesting project you've worked on?

It's always the last one. There have been really so many that I consider interesting. I've done some really fun high-rise buildings in Atlanta in concrete -- unusual configurations, different shapes, not the ordinary straight up-and-down tower. The Rose Center (the new planetarium) was really interesting. The Whitney Museum, which I did with Marcel Breuer, a very famous architect, was really interesting.

A small pedestrian bridge I just did for the Rockefeller University -- it's an interesting design because it's a <u>cable-staved bridge</u>, where there are cables that support it. And the arrangement of the tower and the whole look of the bridge is really quite exciting. That's just been finished. It just opened.

Source: http://www.pbs.org/wgbh/buildingbig/profile/interview/levy.html

1. Use the following cues to write out full questions for a job interview.

- 2. How long / work / present?
- 3. How many / languages / speak?
- 4. Strengths?

- 5. Weaknesses?
- 6. Past job?
- 7. Current responsibilities?



Translate:

2. Translate the following expressions:

- 1. izvesti numerički proračun
- 2. izraditi projekt
- 3. sondirati teren
- 4. načiniti plan konstrukcije
- 5. diplomirati

F) Diana Nishi, S.E.Structural Engineer

Diana Nishi is a registered civil and structural engineer in California. Her professional interest and expertise is in the design of concrete and steel structures, including hotels, regional malls, parking structures, office buildings, and mixed-use and institutional facilities. Since 1988, Diana has worked for Robert Englekirk, Inc. /Englekirk & Sabol, Inc., a California-based consulting structural engineering firm, where she serves as Project Director on several current project



Figure 2.7

What do you do as a structural engineer?

I mostly work with commercial buildings, like retail buildings, medical buildings, museums. Basically I work with the architects as a team. And we do the structure for the building, basically the stuff that you wouldn't see: the beams and columns and the things that keep a building standing. And here in California, we engineer buildings to withstand earthquakes.

What's a typical day like for you? Do you spend time in the office or in the field?

Actually, I do both. In my position, I'm a manager, but I still do a lot of the production. Basically we're a consulting firm; we work with the architects. So we produce drawings and blueprints that show all the structural systems and what the building is made of. The engineers have to do calculations first, and then we put all that information on the drawings. I work with a team of people that assist me in creating the documents. And I still do production myself. I still do some hands-on engineering because I enjoy it.

So a typical day would involve managing these people and then running calculations, basically doing the vertical gravity system, your floor system, and then the earthquake system. And part of it is going to team meetings to meet with the architect, the mechanical engineer, civil engineer as part of the team to get the whole project together. Then once the job gets into construction, we go to the site regularly to look at the job as it's being constructed. So that's a typical day, I guess.

Do you use any special equipment?

We just use computers. There are a lot of programs available to us to assist us in our engineering. We do computer modeling for a lot of the buildings if they're more complicated. We use 3-D models to assist us. We model the building to make sure that we understand the behavior, how the building is going to behave.

The geotechnical [engineer] on the job gives us the earthquake criteria. The geotechnical report has to have all this earthquake information and data to assist us in the modeling. There's software available where you model, basically, a stick structure, and then you can put that in a program and subject it to a certain kind of ground motion. And then it moves, and it gives you output that can tell you how much the building, we think, is going to move, and how this motion creates certain forces in the members. And then we design the members for

these specific forces. We're looking primarily at the lateral system, this earthquake system that I'm talking about. In some cases it's a frame or x-bracing or cross-bracing -- that's a lateral system.

Usually, at the start of any project, we go over all the different types of options with the owner. Does this building want to be concrete, or does it want to be steel? And usually there's a consultant on board who's more familiar with cost, a contractor perhaps, who would say "If you do it this way, you could save money here." We usually do a schematic, which gives them a bunch of different structural schemes, using cross-bracing or using this other type. Then they price it out, with all the other architectural and schematic packages, too, for the owner to get an idea of how much this is going to cost.

When did you know that you wanted to be an engineer?

I got my Master's a little bit later. Because [Cal Poly San Luis Obispo] was a practical-based school, I felt a little weak in theory, so I worked for a couple of years, and then I went back and got my Master's degree at UCLA.

I think some of the schools that are more theory-based, I don't think they really understand what you're going to be doing, that you're really sitting at a desk for a large portion of your day just crunching numbers. And I think a lot of people think, "I'll be building buildings; I'll be out in the field." And you will eventually, but it takes time to build up to that.

What's the thing you like most about your work?

Seeing a building being built. Seeing what you designed and engineered being actually built and finished and being occupied. That's exciting to me: seeing something that you've engineered being actually built.

I'm curious what advice you have for kids who might want to pursue a career in engineering.

Math. Make sure they keep up on their math skills. I was very, very good in math. You know, the multiplication contest and things. Math is really important. Also, tell them that it's not as hard as you might think it is. Engineering always seems to scare people away. But really it's just problem solving; that's all it is. My father was an electrical engineer. But I didn't have any idea, really, what engineering was. I didn't know what it was when I was in junior high or high school. I'd go, "My dad is an engineer," but what is that? It's really just problem solving.

Whether you're structural or electrical or civil or whatever, it's just solving problems in whatever field it may be. And in my case, it's building buildings. I'm just solving all the problems of how to build buildings. So my biggest advice, I guess, is it's not as hard or scary as you might think.

And then I would tell all the women that I've never had any problems, ever, all along the entire way. Where I'm at now, it's pretty much still a man's world. I mean, a construction site, there's not a whole lot of women. But the world is actually changing a lot, and most men are actually pretty open now about accepting you for who you are. I think nowadays whether you're a man or a woman you still have to prove yourself to anybody and gain respect. It's not as hard as it probably once used to be.

What's the most interesting project you've ever worked on?

The J. Paul Getty Center, in Los Angeles. My firm, Englekirk, did all the structural engineering for all the buildings. I was on that project for probably close to eight years of my career. And I've been at the company for 12. So I learned from just a junior right out of college, a couple of years. And then I worked my way up to project level, which is basically running smallertype projects. And I learned a lot of the field issues where you basically go out to the field and solve all the problems that happen when they try to build it and it doesn't work for whatever reason. And basically I grew on that project. It was a very challenging project, and a very exciting project to work on. So that's probably my favorite.

What do you like to do in your free time?

Before I had twins? I took off a month before they were born, and I'm going back to work in November. I still love to garden. And I love antiques. I love collecting antiques and collectibles. And now I guess spending it with my children.

Source: http://www.pbs.org/wgbh/buildingbig/profile/interview/nishi.html



Translate:

- 1. stručno znanje
- 2. objekt višestruke namjene
- 3. aktuelni projekt
- 4. izraditi nacrte
- 5. izraditi proračune
- 6. izraditi dokumentaciju
- 7. voditi izračune
- 8. sa sjedištem u
- 9. orijentiran na praksu
- 10. baviti se konstrukcijama

III. Advertisements

Job Interview Practice

It is always a good idea to **practice interviewing** before you go to a real job interview. The more familiar you are with the questions you will be asked during a job interview, the more comfortable you will be and the better equipped you will be for interview success.

Here are some practice interview questions and sample answers for a variety of different occupations and types of jobs. Take a look at the questions; then consider how you'll answer them.

1. As a structural engineer in Kuala Lumpur, Malaysia, you are expected to do the following tasks:

- Develop, from basic data at the commencement of the project, the design data and basis to include all information regarding the scope of work, contractual requirements, site data, project programme and control estimates pertaining to his group.
- Develop the process design concepts, criteria and specifications.
- Co-ordinate, control and supervise all engineering and design work carried out for the project in his group.
- Ensure the technical adequacy of engineering and design consistent with economy, good engineering practice, safety in design and the specific requirements of the project.
- Co-ordinate with LEAD/ Sr. Safety Engineer to complete the safety discipline deliverables.
- 4 Assess the overall impact of Process and Safety deliverables on each other.
- Ensure compliance with the prescribed Company, Clients and other Standards and local Regulations.
- ✤ Forecast resource requirements and inform the project manager about them.
- Examine and monitor allocated project man-hour and expenditure of man-hour and institute remedial measures when necessary.

- Evaluate and pursue design changes initiated within the discipline and those initiated by others.
- Ensure that design changes are dealt with promptly and jobs done, which come under change order category, are brought to the Project Manager's notice.
- Assist in the preparation of commissioning, operating and maintenance manuals as required by the project.
- ✤ Participate in progress review meetings within the company and with the client.
- Report on progress, man-hour and computing expenditure as requested by Project manager.
- Prepare man-hour estimates and budgetary quotations and list of deliverables for the purpose of new work order proposals.

1. Find expressions with the following meanings:

uskladiti sa	ciljevi
postići rezultate u području sigurnosti	početak projekta
viši inženjer za sigurnost	sukladno sa
oblikovati projektantske koncepte	vodeći inženjer za sigurnost
izvještaj o radu	razraditi koncept

2. Structural Engineer

A large telecoms company based in Surrey is looking for an experienced structural engineer to work on greenfield and rooftop telecom base station installations.

The successful candidate will be responsible for the preparation and designing of telecom sites for the main telecom operators.

Main duties include:

- Producing Structural Assessments, Structural Surveys, and health and safety reports
- Designing telecom base stations, including interface calculations
- 🔸 Advising and managing the CAD team
- 4 Advising and liasing with construction teams during build phase of sites.

- The ideal candidate will have the following [skills and qualifications]:
- Knowledge of structural steel
- Experience of both greenfield and rooftop sites
- ✤ Good people management
- Experience inworking with technical/CAD drawings
- Ideally MICE or MIStructE
- ↓ Fuel Recruitment operates as an employment agency and employment business.

After each interview, the student interviewers should spend five minutes taking notes on strengths and weaknesses of the interview and then share their notes with the student interviewees.

3. Structural Engineer – Engineer in Training (EIT)

Concord, Vaughan, York, Ontario, Canada

Experience / Skills Required: The successful candidate will bring 1–2 years related experience within the structural engineering or construction field, possess a Bachelor of Science Degree in Structural Engineering & EIT Certification and have the ability to communicate clearly and professionally with senior managers and clients. You must also have the knowledge and demonstrated ability to identify potential problems between the architectural design and the structural requirements. In addition, you will learn how to perform structural analyses of building materials, determine the causes of structural failures, damages and defects through site investigations, and have the ability to gain in-depth knowledge of the details required for the engineering of exterior wall cladding, especially stone. Advanced computer skills with AutoCAD, Structural Analysis Software and MS Office and a valid driver's license are required.

Duties: The basic function of the Structural Engineer is to interpret architectural renderings and to incorporate scope-of work-information in engineering structural submittals for clients. The Structural Engineer supports senior management with key planning information and regular production updates and is required to be accurate, timely and able to complete multiple jobs within the time parameters set by the client. You will be responsible for all engineering matters related to a project to ensure that it is constructed in accordance with the contract drawings and specifications. Aside from that, you will be responsible for preparing structural analyses and designs of wood-framed structures, light gauge steel stud assemblies, structural steel, and concrete applications.

Industry / Client: A highly respected structural engineering firm providing innovative engineering solutions to a wide range of clients and is known as a leader in the fields of stone cladding and anchoring, lightweight cladding, residential structures, and building science.

Use the cues below to write out full responses for a job interview.

- 1. Current job /
- 2. Abilities / duties
- 3. Responsible for/ areas of work
- 4. Profile of the company



Translate and fill in:

Shop drawing, material data, samples of	
Shop urawing, material uata, samples of	
manufacturer's product information, trade	
name	
Manufacturer's /contractor's drawn version	
of information shown in the construction	
documents	
Uočiti moguće probleme	
Izvesti statički proračun građ.mater.	
Provesti statički proračun	
Steći dubinsko znanje	
Imati slično iskustvo	

4. Position description – Structural Engineer

- Our Client is one of the largest commercial organisations in United Arab Emirates constructing steel and timber frame buildings in the Middle East. The Company has established an outstanding reputation for designing, planning and executing costeffective projects on time and within budget, employing over 3,400 staff from countries including UAE, India and South Africa.
- A highly experienced Structural Engineer is now required within their offshore division for various upcoming projects.
- Applicants must be degree qualified and have a solid background in offshore design engineering.
- The successful applicant will be offered the following:
- A base salary of 20,000 25,000 AED basic salary per month dependent on experience.
- Housing Allowance 8025 AED per month
- Transport Allowance 1350 AED per month
- All fuel costs
- Airfares for family economy class, Phone & Laptop, Company Sponsored Visas, 30 days leave, 5.5 day week working every second Saturday



Translate:

- </u> Steći međunarodno priznanje
- Provesti financijski povljne projekte
- 🖊 Konstrukcije s drvenim okvirima
- Projektiranje platformi
- 🖊 Novčana nadoknada

5. Position – University graduate with BE/B Tech in Civil Engineering, – Master's Degree in Ocean Engineering/Structural Engineering

Job Purpose:

- Engineers with jobs at this level are responsible for the checking/reviewing/issuance of all engineering deliverables in a timely manner within the budget. Jobholders in this position are required to ensure the quality of all deliverables and adherence to the company's quality plans and job specifications/guidelines, etc.
- Jobholders at this level are responsible for planning, allocating tasks for the Engineering and Drafting teams, co-ordinating activities, attending meetings with Clients/Offshore, and preparing as well as checking all project documentation.

Responsibilities:

- Handling medium to large size EPC projects independently.
- Checking, reviewing and ensuring the technical accuracy and quality of all discipline deliverables such as structural analyses, design calculations, drawings, specifications, purchase requisitions, technical bid evaluations, etc., during all phases of the allotted project, i.e. basic, detailed, construction and installation engineering.
- planning, organizing and delegating work to discipline engineers and drafting staff working on the allotted project under him.
- Interdisciplinary checking activities, i.e. issuance/review and approval.
- reporting Directly to HOD for all matters except for allotted project related issues, for which he/she shall report to the Project Engineering Manager.
- Reviewing various types of tender documents and providing input for allotted enquiries.
- Ensuring adherence to company procedures, client specifications, guidelines, and international codes and standards.
- **4** Reviewing and approving all vendor documents, drawings.
- + Preparating all critical documents such as the design basis and other specifications.
- Material procurement scope and material control for allotted projects.
- Linsuring the timely issuance of all engineering deliverables pertaining to his scope.
- Working within the estimated budget and ensuring high efficiency for the allotted projects.

- Providing guidance and motivation to team members working under him on the specific project.
- Holding technical meetings with clients, PMT, Operations, Yard, etc., and maintaining cordial relationships with all parties involved in the allotted projects.
- Offshore site surveys and survey reports.
- Keeping close interaction with the Fabrication Yard to resolve yard-related issues during the fabrication stage.
- Close interaction with Operations to resolve installation issues during installation phase.
- Providing input for various sub-contracts such as scope of work, and handling subcontractors.
- Qualifications / Skills:
- 12 years' experience in offshore oil and gas fields, out of which minimum 4 years should be in an LDE role.
- Must have experience in detailed and construction engineering for various types of offshore structures such as jackets, topsides, bridges, LQ modules, etc.
- ↓ Good command of written and spoken English.
- Must be well versed in using offshore structural software such as SACS, GRLWEAP, etc.

Match:

Providing an item for official purposes	A formal proposal to buy at a specified price
U skladu s planovima o kvaliteti	Yield, pay off
Doznačeni projekt	Field of study, theme, issue, subject
Item – koji pripada određenom dosegu	Somebody who promotes or exchanges goods or services for money
Pravilo, norma, odredba	The act of giving out
Bid, tender	issuance
Vendor – seller	adherence
yard	specialization
discipline	An enclosed area around a building where

people can do activities outside



positive contribution to the teaching curriculum. You must have a strong background in construction and architectural structures and have a flair for design. You will be engaged in studio teaching, at both undergraduate and postgraduate levels, and be involved in the delivery of lectures on building technology.

Studio teaching: students and teachers work together for periods of time, teaching and learning in a physical space



Translate:

- 1. imati smisla za projektiranje
- 2. dobro poznavati konstrukcije
- 3. držati predavanja o tehnologiji gradnje, visokogradnji
- 4. predan, posvećen radu
- 5. baviti se

Grammar

How to shape questions – Forming questions in English can be confusing.

For starters, there is a simple formula that works for asking questions in almost ALL the verb tenses! This formula is called QUASM:

- QUestion word
- 🔸 🗛 Auxiliary verb
- 🔸 Subject
- Main verb

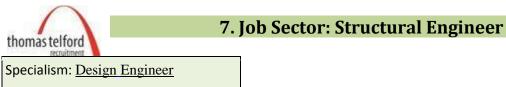
Reported questions, indirect questions, and subject questions do not follow QUASM – However, when a reported wh-question begins with the main clause, it is followed by the content of the quote as it relates to the speaker in time, person, place, and direction, at the moment of speaking. A subordinating marker—who, what, where, why, or how— links the reported speech to the main clause.



Correct the following sentences:

- 1. The man asked what time is it.
- 2. She asked where we are going for lunch.
- 3. "What did Mrs. Papas just say to you?" George asked me what did she said to me.
- 4. "Where are you going"? She asked me where I am going.
- 5. "Why does she want to know that? " Can you tell me why she wants to know that?

Adapted from: http://www.grammar-quizzes.com/nounclause1.html



Salary: <u>£35,000 to £40,000 per annum</u>

Location: Buckinghamshire		
Job Type: <u>Permanent</u>		
My friend always asks, "How are yo	u?"	My friend always asks how I am

My father said, "What is he doing" \longrightarrow My father asked what he was doing. Where are you going today? My friend asked me where I was going that day.

This is a unique career opportunity for a structural engineer who wants to develop commercial and business skills and work for a major firm in the international arena. The position is within the successful international division of this UK PLC, which operates in over sixty locations worldwide. The business focuses on complex supply solutions to the building and energy sectors. They are looking for a degree qualified structural engineer with a design background to join this high margin, incremental business focusing on steel and composite products as its major projects. You will work very closely with the divisional head, who is a chartered structural engineer. The position is international and will require occasional overseas visits to Europe, SE Asia, Australia and Latin America. The position will entail meeting with designers/specifiers to influence the specifications of building systems, responding to project enquiries, identifying new projects and customers, providing technical support for orders through the management of drawing production and by acting as the interface between designers/customers and suppliers. The position comes with a generous final salary pension scheme, a generous bonus, on-going training and development, and the rare opportunity to develop a commercially focused international career that uses your existing technical knowledge. Full training and extensive support will be provided. Previous commercial/sales type experience is not required. It is essential that you present well and have good interpersonal skills. You should be a degree qualified or chartered engineer. There are excellent career prospects.



Translate:

- posao je usmjeren na
- 🖊 sektori povezani s grašenjem i energijom
- 🖊 poznavanje projektiranja
- velika podrška

4 kontinuirano obrazovanje

8. Structural Engineer

Location: Scotland

Specialism: Oil&Gas

Our company has successfully completed a number of major projects around the globe and has received recognition from clients and customers for first-class service. This has in turn provided us with the opportunity to bid for a substantial amount of further work within our specialist area, and therefore, we are currently in a position where we must expand.

We have carried out an aggressive business development campaign and have identified multi-million pound growth the company could achieve within their relatively niched market. We have realistic but exciting projections for the coming three years, which will see our company grow to more than three times its current size.

In addition to this, we are in the process of being acquired by a large-scale, multi-national organisation, which will bring significant investment and rapidly accelerate the company's ambitious plans for more market share. We currently require a structural engineer to join our team on a permanent basis here in Aberdeen.

The job will involve taking individual multi-million-pound projects through the design stage and carrying out the necessary analysis. These are large-scale structures, and therefore, it is essential that someone has carried out a calculation and stress analysis function beforehand. You will be highly involved with front-end engineering design and carrying out a detailed design function. It is imperative that you have had offshore structural experience before, as you will be responsible for ensuring compliance with the relevant industry standards and signing off designs for submission to the independent verification bodies.



Translate

- veliki projekt
- 🖊 provesti razvojnu kampanju
- 🖊 provesti analizu
- konstrukcije velikih razmjera
- 🖊 izvesti proračun i funkciju proračuna naprezanja
- 🖊 🛛 rana faza planiranja
- završiti (phrasal web)

Rewrite the sentences from the first, second and third paragraph, changing the Active into the Passive voice:

Example: A number of major projects have successfully been completed (by our company).

9. Specialism: Engineering Consultancy

Job Sector: <u>Bridges</u>

Salary: <u>£42,000 to £55,000 per annum</u>

Location: Scotland

Job Type: <u>Permanent</u>

For an Experienced Project Engineer this is a great opportunity to join a prestigious global provider of engineering solutions who are responsible for some of the most prestigious and imposing process plants in the world.

As the Project Engineer and based in Motherwell, Scotland, you will control all elements of projects from inception through to completion, including the preparation of estimates to the provision of full costings from the original specifications.

It is essential that you have sound knowledge and experience in Engineering Construction with particular emphasis on storage tanks for petro-chemical processing plants.

You will also need to have at least an HNC in Engineering and a strong understanding of storage tank design and construction, along with experience in using Microsoft Project and/or Primavera software packages.

The Project Engineer role offers an attractive salary and benefits package, dependent on your level of experience.



Translate:

sjedište poduzeća je u Škotskoj	
početak projekta	
procjene	
dubinsko poznavanje	

10. Structural Engineer

Location: Poole

Position

Our client is looking for an experienced Structural Engineer.

This key role is responsible to the Associate Director for full building designs and submittals; Steel, RC and Civil works adhering to appropriate British/European Standards. They will be responsible for producing scheme, concept and estimate designs to British / European Standards, as well as the management and monitoring of design budget information where appropriate. Reporting program status at the appropriate frequency, they will also liaise with clients, engineers, architects and other internal departments to achieve appropriate designs.

Regular attendance at design team and technical launch meetings will enable the jobholder to assist with product research, design and development, and to provide draughtspeople with design engineering input on a day-to-day basis. The applicant must be assertive and able to bring about change through persuasion. They must be self-motivated, possess good communication skills, and be pc-literate. They will also need to bring structural steelwork design experience to the post.

Find synonyms in the advertisement above:

plan, project _____

to connect _____

to start a meeting

employee _____

self-assured _____

Give your comment on the following picture:

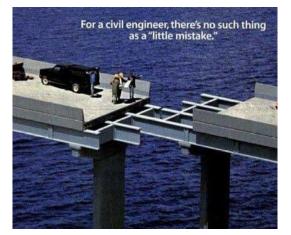


Figure 3.1



Translate or fill in:

izgrađeno područje	
savjetovanje i povezivanje timova	
	Refers to the estimation of the performance
	level of the structure system when subjected
	to earthquake load
	A piece of previously undeveloped land, built
	from scratch, an unfenced open field
	Brownfield land