Welcome to freshman year in UT engineering or the program you are in. This is a list of everything I wish I knew coming into engineering. I will not be commenting on the choice of engineering major, and the list should be equally useful for all majors as well. Hook 'em!

1. Make a Resume
   The most important document to your success past bachelor's is your resume. It says who you say you are to the people you want to work with. They are most likely looking at your resume because you are getting an engineering degree, but it is up to the rest of your resume to tell them why they should give you more time than that. That information has to be clear, so use a format that is familiar to the reader. UT has a recommended resume format for engineers and for business students. Use the format that highlights the most important content, but your work experience should always be fairly front and center because the employer wants to be the next item on that list.
   Engineering Resume Template: https://students.engr.utexas.edu/career-resources/resumes/resume-writing-tips

   Business Resume Template: https://my.mccombs.utexas.edu/My/BBA/Career-Services/Resources

2. Engineering Career Assistance Center (ECAC)
   ECAC is how most engineers find jobs at UT to help start their careers. ECAC has assisted me in finding three internships. https://engr-utexas-csm.symplicity.com/students/index.php
   i. The first time you login ECAC will ask you what type of jobs you are interested in.
   ii. After you get to the home screen, the next thing is to go to Documents→My Documents and fill out your school credentials, post a resume, and make a generic cover letter.
   iii. Using ECAC to find jobs to apply for is as simple as clicking the jobs tab of the side menu and scrolling through the listings. When you see something you are interested in, press Apply then select any required documentation from your My Documents list.

3. Be Ready for a Commitment
   Engineering is no joke, and UT's program is not known for being particularly restful. There are a lot of recipes for success, but every student should have one. Some classes are well suited for minimal work with homework that take two-four hours to finish and exams that only need half a day of study. Other classes can require upwards of 20 hours a week to do well in and 30 to master. Between your other classes, this can mean working 50-70-hour work weeks during the semester. High school had eight-hour days with two hours for nonacademics. According to Brookings.edu, the average high schooler spends about an hour on homework every evening, so your previous schooltime amounts to 35 hours per week for comparison.

4. It is Okay to Transfer

   There are many reasons for changing studies. Do not be afraid to try another engineering major once you know you can do the work. Find a major that works for you. Some people think a field of study is out of their reach, but all engineering degrees dwell upon physics from the previous century and mathematics from the two centuries leading up to that. Perceptually, biomedical engineers (BME) have the most difficult time finding their place in industry, but the BME students I know all found success past their bachelors. Electrical engineering (EE) is notoriously challenging, but the same analytical difficulty can be found in each engineering major depending on how you focus in that major. All the engineering majors will come with a high level of excellence at UT.

5. Work with People

   If you are in engineering at UT, you have a pretty good chance of being a smart person. There is an even greater chance that you have no idea what you are doing in the classes you are taking. The good news is that your classmates are just has likely to be smart and unexperienced. As a group much more can be understood because all the necessary fresh ideas can be first grasped by one member of the group, and they can help the others learn that piece as the group works through the material together. I also benefited from groups because my algebraic work required constant checking at first. Find peers that make you more talented.

6. Find an Advisor

   With the vast amount of structure built around each engineering field/major, it can be daunting to navigate as a newcomer. Thankfully, you are not the first one to do it. Professors are good candidates for advisors because they have learned their way around academia and industry to be a front runner in their focus. Many successful engineers will encourage you to go a similar rout as they pursued. It would not hurt to have a second advisor in a neighboring focus provide some perspective to the advice of the first advisor if you are interested in what they had to say.

7. All Nighters are Bad

   Your brain does not function as well without the rest it needs. Your learning for the day will actually become less concrete as you work though the night. All nighters can be useful for their raw amount of time available for getting work done for projects and other assignments, but you will get less out of those assignments compared to a normal sleep schedule. An emerging concern with all nighters is the link to Alzheimer's disease as it has been shown to induce makers for the disease. Go to sleep and wake up to your work in the morning.

8. Go to Class

   There is a lot of freedom in college, but "can skip class" does not equal "should skip class". Even if you are smart enough to learn it on your own, there is an expert literally telling you

how to do the work for three hours a week. Your best resource for accomplishing the work given to you is to spend time with the person who assigned it. Office hours are also good for the same reason. In the grand scheme of things lecture is not a large demand on your time, and it can save you hours of frustration while providing a baseline for your education in the form of, “I heard someone solve that problem once”.

9. Go to Expo

   The UT Engineering Expo (Expo) is a recruiting event with hundreds of companies hiring for full-time, co-op, and intern positions. As a freshman you will have a hard time getting recondition for your skills, but knowing the format of this event can be critical for future success at Expo. Dress business formal and print out ten resumes is what they tell you to bring, but I would also suggest pin and paper to write down the name, company, and conversation notes with every recruiter you talk to.

10. Make a LinkedIn

    LinkedIn is used like Facebook for many professionals. Directly messaging engineers at a company seems awkward, but keeping up with the people you met at Expo shows a significant amount of interest. Over the years you may notice that your peers have had internships at the companies you are pursuing. Your relationship with those peers will help you understand the company better, and it may help you land a job. At the end of the day most engineers who come recruit at UT are just alumni a few years ahead of you. Your peers can be a great resource professionally as well as academically, and LinkedIn is how you hold those connections.

11. How to Find Scholarships

    Scholarships are a great way to make ends meet in school without going into years of debt. As an engineer, this debt will melt away quickly if you maintain a college level standard of living, but there is a lot of money left of the table if you make time to pursue it.

    - Fill out the Free Application for Federal Student Aid (FASFA) every year. https://studentaid.gov/ This is the number one source of need base scholarships, and many other scholarships will not consider you without going through this front door.
    - UT promotes a handful of scholarships at the Texas Comptroller page https://comptroller.texas.gov/programs/education/msp/funding/aid/faidalpha.php
    - Unigo is the most robust source of scholarships I have found. There is even a scholarship for Magic the Gathering players. https://www.unigo.com/scholarships/all/gamers-helping-gamers-scholarship/1004244

12. When to Study Abroad

    I did not study abroad. For electrical engineers I would recommend a summer program abroad after or in the place of an internship. You will have a hard time finding classes oversees that

advance you an entire semester ahead in your degree plan, so look at the experience more as a long vacation. Try to take it easy and enjoy your new surroundings.

13. When to Apply for Graduate School
    Before you start full-time work is the time. First semester of senior year is your first opportunity to apply for graduate school. Life gets more complicated as you grow with family, work, and other obligations. Your mind also becomes less analytical over your career and more structure and people driven. You are at your most free and keen after your bachelor's. Run with it if you think you ever want an advanced degree.

14. Student Organizations
    While engineering does have its share of Greek life, student orgs that support engineering well-being and advancement can help you succeed. I have met some of the most talented engineers at UT through design teams such as the Solar Vehicle Team (SVT) and Longhorn Racing Electric (LRC). Both teams can be found at the website I got to start. https://www.longhornracing.org/ Here is a more exhaustive list of engineering orgs including personal favorites Women in Electrical and Computer Engineering (WECE) and National Society of Black Engineers (NSBE). https://www.engr.utexas.edu/student-life/student-organizations