THE HIGH SCHOOLER'S GUIDE TO PREPARING FOR A TOP ENGINEERING COLLEGE

FLORIDA
POLYTECHNIC
UNIVERSITY

TABLE OF CONTENTS

INTRODUCTION

SO, YOU WANT TO ATTEND A TOP ENGINEERING COLLEGE?

For students interested in science, technology, engineering or math (STEM), the economic forecast is quite favorable for both careers and college majors. STEM occupations are expected to grow to more than nine million between 2012 and 2022. Our economy needs STEM graduates who have the entrepreneurial spirit to address challenges in a rapidly evolving global economy.

As tomorrow's engineers, we hope you will use this guide as a resource during your high school years. From freshman to senior year, these tips can help you track your progress and manage expectations, from taking the right math courses to preparing your engineering college application.

CHAPTER 2

INSIDE THE 21ST CENTURY CLASSROOM: TIPS FOR SUCCEEDING WITH ACADEMICS & TESTING

The path to a top engineering college starts as early as ninth grade. Some academic courses and tests are better than others for setting yourself on the right course to a great engineering school. We have broken down tips and suggestions by grade to help you plan for your application to the top engineering college of your choice.

NINTH GRADE

Freshman year is a great time to look ahead at the academic requirements of your high school and the top engineering colleges that interest you. It could also be a good time, if you haven't already, to start thinking about your passions, career plans and the courses you might need to get into the college of your choice.

ACADEMICS:

- Since you are applying to engineering school, admissions departments will likely want to see a high overall GPA with strong performance in math and science courses.
- Consider putting together a folder with samples of your best work across all subjects. This can contain tests you've rocked, writing samples, artwork, or photos of things you have built. You can add to this folder every year. The goal is to have a portfolio you can share with admissions and include in your college application.
- Consider taking five main courses and an elective course (art, music or another course you are curious about) your freshman year when you will have more time. (i.e., You'll have less testing and no college applications to complete just yet!)

Consider taking your basic required courses early so you can be eligible for advanced courses later. Get the requirements out of the way, so you have more time and freedom to focus on subjects that you are passionate about and that may align with your intended major.

For 9th grade consider the following courses:

- Math: Geometry or Advanced Algebra 2
- Science: Physics, Biology or Chemistry
- English
- History
- Foreign Language
- Optional: Elective in an area you are passionate about, like computer science, or try something that fuels your creativity, such as art, music or theater, which may make you a stronger college candidate

TESTING

Freshman year is a great time to get ahead, prepare for upcoming tests, show your ambition, take on challenges and distinguish yourself among your peers.

- You can get a head start on the SAT with SAT Subject Tests. Many students don't think about SAT Subject Tests until junior year, but you can take them as soon as you finish the subject. Just because you want to go to engineering school, don't shy away from tests in the other subjects, such as language or history. Top engineering colleges often look for outstanding, well-rounded students – not just those with high scores in one discipline.
- If you're thinking about taking AP (Advanced Placement) subjects, you may want to register to take the AP exams in the spring. Scoring well on the test(s) can lead to college credit for these courses.
- Since it may be an easier year for tests (relatively speaking), you may want to challenge yourself to participate in competitions, like science fairs, art shows or math bowls related to your coursework and extracurricular interests.

TENTH GRADE

Tenth grade is a great year to check off more requirements while starting to dive deeper into areas that interest you the most. In addition to the math and science you will likely need for a top engineering college, consider choosing other courses that round out your learning experience and interest you. Courses that you are excited about are those you are more likely to do well in and could help you stand out and shine.

ACADEMICS:

- If you have the option to take an AP-level course, you may want to try it. For example, some schools may offer Modern European History and AP Modern European History.
- Get to know your high school guidance counselor. It's never too early to talk to them about your goals and use them as a resource.

For 10th grade, consider the following courses:

- Math: Advanced Algebra 2 (a requirement for much advanced math) or Precalculus
- Science: Chemistry, Physics or Biology
- English
- History
- Foreign Language
- Optional: Elective in an area you are passionate about, like computer science or for which you may have a school requirement, like art/music

TESTING

- Consider taking the Preliminary Scholastic Assessment Test (PSAT). Looking ahead to junior year, you can take the PSAT again and may be eligible to be named a National Merit Scholar. This can also be helpful in preparing for the SAT.
- If you are already taking an AP course, such as AP Biology or an AP language course, consider taking the Advanced Placement exam as soon as it is offered in the spring.
- If eligible, you may want to take SAT Subject Tests. If this is your last year taking a subject you have mastered, consider taking the tests in this area to show you can do well.

ELEVENTH GRADE

Many students describe 11th grade as the most stressful year of high school due to required coursework and college preparation. Top engineering schools often look for students who have challenged themselves throughout high school and can manage the potential stress of complex coursework and multiple projects. To prepare for this, it may be helpful to take advanced courses across a range of subjects.

ACADEMICS:

- If your school does not offer a certain advanced course, consider taking it at a nearby community college. Admissions counselors at top engineering colleges typically love to see signs of budding entrepreneurs and go-getters.
- Start preparing early for the SATs. Aim to take the SAT once in the spring of your junior year. If you don't achieve the score you're hoping for, you always have senior year to retake the test.

For 11th grade, consider the following courses:

- English: The AP class, if your high school offers it
- Math: Pre-calculus or AP Calculus AB
- Science: AP Biology, AP Chemistry or AP Physics
- Computer science or an elective you enjoy
- AP History and/or AP Language and try to take the most advanced level you can handle
- Optional: Elective in a subject that you are passionate about

TESTING:

- Fall: It's advisable to take the PSAT. High scores can qualify you for several national scholarships, such as the National Merit Scholarship, the National Achievement Scholarship or the National Hispanic Scholarship, and may be needed for admission.
- Spring: SAT and/or ACT.
- AP (Advanced Placement), if applicable.
- SAT 2 subject tests, if applicable.

TWELFTH GRADE

Senior year can be broken into two parts: before and after college acceptance. If you can, apply for early decision to a top engineering college, as it could improve your chances of acceptance. But don't coast after you get accepted. Colleges can revoke an offer, if you fail to maintain a strong GPA.

ACADEMICS:

- If you have taken all of your pre-requisite history/language courses, and you know you want to be a science/math major, consider doubling up on one of those advanced math and science courses.
- Senior year can be a great time to take that elective you have been postponing.
- Finalize your academic portfolio. It should be pretty hefty by now; you've been assembling it since freshman year. Include the following: transcripts, resume, personal statement, samples of projects, papers and other work.

For 12th grade, consider the following courses:

- Advanced: AP Calculus AB or AP Calculus BC
- English
- Science: AP Chemistry, AP Biology or AP Physics
- AP Computer Science or an additional advanced math or AP Statistics, Multivariate Calc/Linear Algebra (if your school offers it)
- Optional: AP History and/or AP Language
- Optional: Elective

TESTING:

- Fall: Retake the ACT and/or SAT college entrance exam if your counselor advises.
- Spring: Take any of the AP exams for the courses you selected.

These tips may help you prepare for application to a top engineering college, but there is no absolute formula to getting in. Top engineering schools typically look for students who will be active, involved and make the most of their time at school. So let your academic portfolio and application reflect who you are.

CHAPTER 3

SPORTS, GUTS AND GLORY: EXTRACURRICULAR SUGGESTIONS AND WHAT TO DO IN THE SUMMER

Top engineering colleges often look for well-rounded applicants who have a variety of interests and experiences. Admissions officers consider extracurricular activities, sports and summer experiences that demonstrate:

- Engagement in meaningful ways that match your goals
- Contributions that have a positive impact to your high school and the community
- Ability to seize opportunities with the resources available to you
- Leadership showing initiative and impact

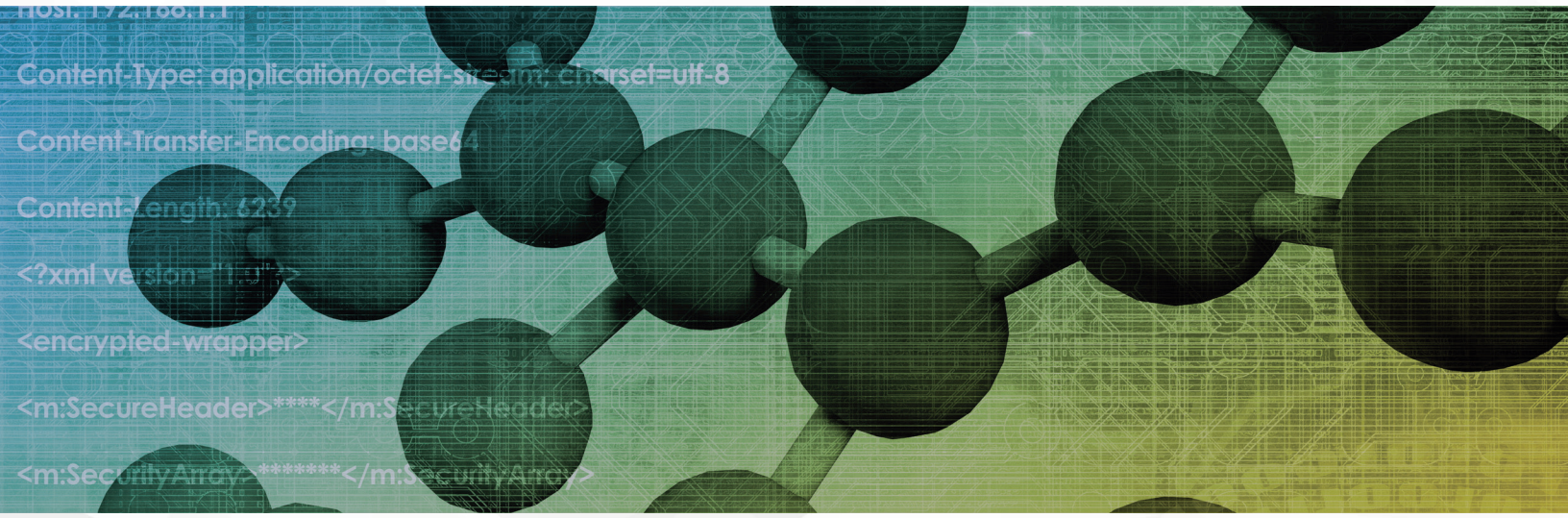
Below are tips and ideas for how to become a top candidate on and off the field, and how to make the most of your summer vacation.

NINTH GRADE

Ninth grade is the year of exploration in extracurricular activities and sports, and is a great time to put yourself out there. Consider trying new things. For example, you may want to try out for athletic teams, explore different clubs, or just discover new interests in your community. Consider these questions when starting your first year of high school:

- What do you enjoy?
- What are you naturally good at or think you have potential to excel in?
- Who are the people you could see yourself becoming friends with or who you want to spend time with?
- What can you feasibly pursue considering access, acceptance, cost, time commitment, etc.?

Below are examples of extracurricular activities, sports and summer activities you may consider. These examples show you a progression through all four years of high school.



EXTRACURRICULAR ACTIVITIES

Extracurricular activities are best if they match your true interests. While no single club or activity will get you into a top engineering school, a strong record of participation and engagement can help to set you apart with admissions counselors at top engineering schools.

If you are considering a career in engineering, some extracurricular activities may help to develop your math and science skills better than others.

Examples:

- Chess club member or high scorer
- Hackathon participant
- Debate team
- Community service volunteer

SPORTS

Participation in any sport is often viewed positively because athletics builds confidence and work ethic. Team sports are a great way to build a network and demonstrate your ability to collaborate, a skill that both colleges and companies value down the road.

Intramural sports and community teams are another way to get involved in sports outside of the classroom. This can be a low-risk, low-commitment avenue to meet people, exercise, and see what sports you like best.

SUMMER

Summer is a great time to continue exploration, participation and enjoyment of the activities that interest you. Continue to stay involved with the connections you have formed at school, and consider reaching out to make new ones in your community.

Examples of summer activities:

- Volunteerism and community outreach (local or abroad)
- Soccer or lifeguard work
- Hackathon meet-ups
- Coursework for credit or interest

Summer may be a good time to take courses to get ahead in your program or for extra practice. See if your school or local community college offers summer classes in courses you want to take. There are also great online courses free of charge that you may be able to leverage, such as classes offered by Khan Academy.

TENTH GRADE

For sophomore year, you may want to gain some focus on activities you want to continue. It's not necessarily about breadth, but depth. This is the time many students start to specialize in particular interests and activities.

EXTRACURRICULAR ACTIVITIES

You don't have to limit yourself to extracurricular activities at your school. If you think you might like something not currently offered, you might be able to find it at another school or in your community. Or perhaps you can demonstrate leadership by starting a club or activity at your school?

Examples:

- Chess club captain
- Code Academy participant (outside of high school)
- International Olympiad participant
- Model United Nations delegate
- Community service volunteer

SPORTS

Even if you aren't the most valuable player on the team, consider ways you can be a leader off the field, like nominating yourself as fundraising chair.

SUMMER

In addition to fee-based summer programs, there are various merit-based summer programs you can explore. These programs are often more competitive and require advance planning.

You can also reach out to the advisors of some of the clubs you're active in to see if they would be interested in a summer session. You may be able to ask your school's alumni department if there are alumni who might be able to offer you an internship in a field that interests you.

Other options include:

- Math, science or technology camp
  - Math example: Prove it! Math Academy
  - Science example: The Summer Science Program
  - Tech example: iD Tech
- Hackathon meet-ups
- Coursework for credit or interest
- Coach a soccer team

ELEVENTH GRADE

You are now well on your way to graduation, and applying to a top engineering college may be in your not-too-distant future. Colleges may want to see how you are engaging yourself with the activities you have committed to.

EXTRACURRICULAR ACTIVITIES

Consider helping others by tutoring in advanced topics such as pre-calculus or chemistry, if you are qualified. You may also want to research competitions to show off your skills and meet peers with similar interests.

Examples:

- Founder/President of your school Robotics or Engineering club
- International Science Olympiad competitor
- Debate team captain
- Community service volunteer or leader

SPORTS

Consider giving back to the community by helping coach youth or junior varsity teams. Or you may want to seek captain positions on your varsity sports team, if you've discovered a passion and aptitude for a particular sport.

SUMMER

This can be a great time to get an internship, if you can. Alternatively, you might consider using the time to practice the skills for various competitions you may enter in the fall.

Consider reaching out to your high school teachers for opportunities to shadow an engineer at a local company or be an assistant to or a researcher for a professor in your field of interest. Your school's career advisor may also know about opportunities to intern at a local engineering firm or STEM-related business.

Examples of summer internships include:

- Research assistant to a high school teacher or community college instructor
- Internship in related engineering field
- Tutoring in a STEM subject that you enjoy
- Build/pursue/tinker with a project you are passionate about, such as a website/app/robot

TWELFTH GRADE

By senior year, many top engineering colleges expect students to hold leadership positions within their extracurricular clubs, on their sports team or in community activities or projects.

EXTRACURRICULAR ACTIVITIES

Colleges are often interested in students who have held leadership positions in extracurricular activities and have demonstrated the ability to lead with purpose and impact. If you've started a club at your school and it is getting a lot of attention and interest, consider entering the club in a local or national competition to show engagement and impact.

Examples of extracurricular activities include:

- Founder/President of your school Robotics and Engineering club
    - Robotics competition such as VEX, First or Botball
- International Science Olympiad finalist
- Debate team president
- Community service volunteer or organizer

SPORTS

Consider entering your sports team in tournaments with opportunities to compete at regional, state and national competitions. While it may be impressive that you're the team captain, it is even more impressive to see you leading the growth and advancement of your team.

SUMMER

Congratulations, you are officially a high school graduate! Hopefully, your planning and dedication has paid off, and you are on your way to great things at a top engineering college. Use this summer to really enjoy the wide network of friends and mentors you have made and to plan for the fall ahead. If you feel like you've made the most of your community and you want to explore the greater world out there, consider a summer abroad program that interests you. You might be able to reach out to a professor at your prospective college and see if there are summer programs or projects you can join.

Examples

- Research assistant to a top engineering college professor
- Internship in related engineering field

No one said it was going to be easy, but by planning ahead and breaking the journey into smaller steps, you can be well on your way to success. Good luck as you work toward that coveted acceptance letter to the top engineering college of your choice.

CHAPTER 4

FUNDING YOUR FUTURE: HOW TO PAY FOR ENGINEERING COLLEGE

As you plan for your college education, look beyond the cost of tuition. It is important to consider associated expenses and additional costs like housing, meals, transportation and books.

Unfortunately, there is no single formula to determine the exact cost of attending college, but you can use tools like a net price calculator, which estimates the price of attending a particular college or university. According to College Board, the average cost of tuition and fees for the 2014-2015 school year was $31,231 at private colleges, $9,139 for state residents at public universities and $22,958 for out-of-state residents attending public universities. Factors such as books, supplies, room and board and personal expenses all contribute to the cost of attending college.

Use the list below to determine what you might expect to pay for college each year and ways to pay for college such as scholarships and saving tips.

WHAT IS INCLUDED IN THE PRICE OF COLLEGE?

TUITION AND FEES

Tuition covers the cost of class instruction usually charged by semester and varies by major and number of credits. Most colleges combine the cost of tuition and fees into one figure.

ROOM AND BOARD

Room and board includes housing and meals. According to College Board, students should estimate spending around $9,800 at four-year public schools to $14,500 at private schools. The cost can differ significantly based on whether you will live on campus in a dorm or apartment, or off campus.

BOOKS AND SUPPLIES

The cost of textbooks and required supplies will depend on the major, as some may require more books than others. The College Board estimates that the average student spends around $1,200 a year on books and supplies. Due to advancing technology, students should also budget for a computer or laptop they can use inside and outside of the classroom to complete coursework.

TRANSPORTATION

Students living on campus will spend on average of $500 to $1,000 per year on transportation. The average student typically goes home twice a year, for winter and summer break. Some also go home or travel during Thanksgiving and spring break. If you have your own car, factor in gas, maintenance, insurance and parking fees.

HOW CAN FINANCIAL AID HELP PAY FOR COLLEGE?

Financial aid is money available through the government or other organizations to help qualified students pay for college. To qualify for financial aid, students must apply. You may already be familiar with the Free Application for Federal Student Aid (FAFSA), which allows students to receive assistance regardless of financial circumstances. FAFSA is accepted by over 300 schools nationwide and helps students cover college costs.

WHEN DO I APPLY FOR FAFSA?

FAFSA must be completed for each year that you seek financial assistance. You can submit the FAFSA application on January 1 of each year you plan to attend college, so apply early. To qualify for as much financial aid as possible, apply as early as possible. Fill out the form online at the FAFSA website.

WHAT DOCUMENTS DO I NEED TO COMPLETE THE FAFSA?

To submit your application, you will need:

- Social Security Number
- Alien Registration Number (if you are not a U.S. citizen)
- Most recent federal income tax returns, W-2s and other records of income that you've earned
- Bank statements and records of investments (if applicable)
- Records of untaxed income (if applicable)
- An FSA ID to sign electronically

If you are a dependent student, you will also need the above information for your parent(s).

HOW LONG DOES THE APPLICATION TAKE?

The application process generally takes between one to two hours. To cut time, research any questions you may have before starting the application, and collect all the necessary documents so you can easily access them.

WHAT HAPPENS AFTER YOU APPLY?

Each application will be evaluated using the federal need formula. The Student Aid Report (SAR) will be sent to you by postal mail or email. The SAR contains the data that you entered on the FAFSA, so you should check it for errors and keep a copy for your records.

The front page of the SAR lists the expected family contribution (EFC), which outlines your family's financial situation and their estimated contribution to your college education. The EFC is sent to the colleges that you selected in the FAFSA application, and that figure helps determine the amount of financial aid they will provide.

WHAT OTHER FINANCIAL AID OPTIONS ARE THERE?

In addition to federal programs like FAFSA, financial aid can come from a variety of sources such as state governments, private organizations, banks and lending companies, and the schools themselves.

WHAT OTHER TYPES OF FINANCIAL AID ARE AVAILABLE?

WHAT ARE SCHOLARSHIPS AND GRANTS?

Scholarships and grants are payments made toward your education usually awarded on the basis of academic or other achievement. Some scholarships are merit-based, meaning students can earn them by meeting a certain set of standards. These are usually academic achievement, talents or other accomplishments. Most other scholarships are need-based relating to a student's financial situation.

WHY ARE SCHOLARSHIPS AND GRANTS BENEFICIAL?

Scholarships and grants are not loans, do not require repayment and can significantly reduce the cost of college. They are awarded based on a variety of factors such as academic performance, being a first-generation college student and involvement in a specific organization or club. You can be awarded a scholarship by being involved or doing the things you already do.

WHERE TO LOOK FOR SCHOLARSHIPS AND GRANTS?

The Internet is one of the best resources to start researching scholarships that are awarded to students seeking a degree in engineering. Many third-party websites, such as professional associations and corporate foundations, allow you to search for scholarships and grants based on your background, interests, abilities and financial situation. You should also consult your guidance counselor for advice on finding and applying for scholarships and grants. In addition, research the colleges you plan on attending to learn about their scholarship programs. For your reference, consult our list of scholarships for STEM students (link to <scholarship article on STEMstart>).

WHAT ARE SOME TIPS FOR STUDENTS TO CUTTING COSTS AND SAVING MONEY?

RESEARCH SCHOLARSHIPS

To lower the cost of college, apply for scholarships. Start looking into scholarships while still in high school and apply early. New scholarships are constantly being offered, so it is important to check your sources often when searching for scholarships.

COOK ON YOUR OWN

To save on personal expenses, students might consider supplementing a meal plan with home-cooked meals, if they have the right facilities in their housing.

RENT TEXTBOOKS

Renting used textbooks from sources such as Chegg, Amazon and eCampus.com might be cheaper than purchasing them new. Gutenbuerg.org has thousands of books that can be downloaded for free. If you do buy textbooks, you may be able to resell them at the end of the semester and recover some cash.

RESEARCH TRANSPORTATION OPTIONS

Look for flights in advance, and book early for a cheap fare if you are planning a trip home during break. If you have a flexible schedule, opt to fly mid-week rather than on the weekend, as fares tend to be cheaper. To save on gas, consider carpooling or traveling by bus or train. If campus is a reasonable distance from home, consider biking, walking or using public transportation.

MINIMIZE OVERALL COSTS

Start creating a budget and saving early. Cutting out habits like dining out frequently and purchasing coffee every day could save you hundreds of dollars over time. And you'll appreciate having that money once you start college. Consult online blogs and resources for tips on how to save and minimize costs in college.

CHAPTER 5

CHAOS TO CLARITY: APPLICATION TIPS & POINTERS

This chapter tries to bring a little clarity to the college application process, which might seem like chaos at times. Outlined below are a few application pointers to help keep you on track when applying for college.

TREAT THE APPLICATION PROCESS LIKE A PART-TIME JOB

It is important to do your research and stay on top of all the application components for each school you are applying to so that you don't miss an important step or deadline. For that reason, you may want to treat the process like a part-time job. (Because finishing high school is your full-time job, of course!) That means you should try to be as informed as possible when choosing colleges to apply to, and then proactively pursue your top picks. This can entail knowing all of your options, researching the schools and determining which ones fit your goals.

It's advisable to start college applications early so you don't have any surprises, and it's best to apply to multiple colleges and universities to ensure the best possibility of acceptance.

Here are five top pointers for getting ahead of the application process:

1. **KNOW YOUR OPTIONS.** Become familiar with the different types of engineering colleges out there, and prioritize which applications to focus on first. Research your options and assess the similarities and differences between the colleges. This will help bring focus to the application process and will also help later in the "why XYZ college" essay and conversations you will likely have during interviews.

2. **NETWORK.** The more people you meet and the more conversations you have about your options, the better. This is an important part of the due diligence process and shows you are informed about your choices. And it may even help you gain acceptance by making you more informed about a university, program or field.

3. **9-5PM DOESN'T ALWAYS CUT IT.** Just like you may need to put in longer hours sometimes to get ahead at a job, you may need to work nights and weekends on your college applications. This might mean writing essays, making college visits or networking.

4. **THINK BIG PICTURE.** Each element is important, but try not to get mired in the details and avoid "analysis paralysis." Remember you are a total package candidate. College admissions officers typically look at each "detail" in the larger context of your overall qualifications.

5. **ASK FOR HELP.** Go to your high school guidance counselor. Talk to your teachers, family and friends. Call and visit the colleges you are interested in. These people have been doing this for a long time and can likely give you great advice from their experience over the years.

WHEN TO START APPLYING

When should you start applying? Simply put, early.

It's advisable to start researching and putting together the various components of your application during the summer of your junior year, if not sooner. That way, when you head into fall of your senior year, you are ready to apply for early decision or early action (if it's an option) to your top choice engineering college.

Sometimes it is easier to gain acceptance through early decision/action to a top engineering school because there are more spaces available, and Admissions counselors may like seeing that their college is one of your top choices. Make sure you have researched whether or not the college you are applying to early has a binding acceptance policy.

ORGANIZATION TIPS

With so many different components to the application process, it is important to stay organized. One way to stay organized and assure you don't miss any deadlines is to set up a master calendar. Build a spreadsheet and color code all the components of the application process (i.e., "academics" is blue, "essays" is green, etc.).

Here's one way to group six common application components on your calendar:

1. **ACADEMICS.** Note the due date to send in your high school transcript and determine when you need to request your transcript.
2. **TESTS.** Note when the tests you have to take are offered and block plenty of time on your calendar to prepare. Also, make sure you request the scores are sent to your selected colleges before the deadline.
3. **EXTRACURRICULAR ACTIVITIES.** Allow time to write your resume and outline your extracurricular activities, your position and the impact you made. Note any awards for competitions you may have entered.
4. **ESSAYS.** Factor in plenty of time to develop, draft, edit, and proofread your college essays. Ask at least two other people to review and provide feedback on your essay, and then draft revisions based upon their feedback. Then proofread it again. This iz know tyme four typOs. ☺
5. **RECOMMENDATIONS.** Research how many recommendations each college requires and from whom. Some colleges allow a family member; others request a peer reference, teacher or other advisor. Make sure you understand all the required recommendations and then ask the person you want to write the recommendation as early as possible. When you ask, put together an outline of what aspect of your candidacy you would ideally want them to highlight. Give the person a deadline in advance of the actual deadline to build in some extra time for you to compile everything.

6. **INTERVIEWS.** Take the time to schedule, prepare for and attend interviews for each of the colleges to which you are applying. Note some interviews may require on-campus visits or lengthy travel time, so account for that. Interviews may not be mandatory at all colleges, but are highly recommended if they are offered and time permits.

Besides the application itself, the other items you may want to organize and add to your color-coded calendar include:

1. **FINANCES.** If relevant, create a financial aid calendar tab noting what financing you are applying for and when those applications are due. Block time to fill out the FAFSA and/or additional financial aid forms.

2. **CAMPUS VISITS.** Depending on your preferred top engineering colleges, these locations may require substantial travel from your hometown. Block time to book your travel/schedule the trip, travel, and take the tour. Consider staying overnight with current college students when that is offered. It's a great way to gain an insider opinion of the school. If possible, schedule the admissions interview at this time so you don't need to take more than one trip. If physical travel is too difficult to schedule, most schools have virtual campus visits. The point is: Know about the schools you're applying to.

CRÈME DE LA CRÈME: MAKING YOURSELF UNIQUE

With all the requirements of the application ready and organized, here are three last pointers that may help you stand out.

SHOW WHO YOU ARE. From the extracurricular activities you choose, to the recommendations people write about you and your essays, each component of your application helps paint a picture to admissions reviewers of who you are and how you are unique.

STAND OUT WITH FORMAT. College admissions counselors usually consider the total package when reviewing applications. For example, if you are a robotics enthusiast or master coder, what could you build that shows off these skills? Don't go overboard, but do consider how you can package your application to showcase your unique skills and experience.

SHOWCASE SKILLS WITH SUPPLEMENTAL MATERIALS. If allowed, submit supplemental materials to support your application and further show who you are and the skills that you will bring to the school. For example, you might take a multimedia approach and submit links to websites you have designed, things you have built, videos you have created, or music you perform.

NO SECRET FORMULA

At the end of the day, there is no secret formula to college admissions. There are many paths and many qualified candidates. Showcase who you are and your skills, strengths and character in each section of the application. The college application process is certainly a large undertaking, but with organization, planning and thoughtful consideration you will be able to get ahead of it and be well on your way to a top engineering college.

CONCLUSION: TALK TECH TO ME

With the ever-increasing presence of technology, positions in the field of engineering are at the forefront of in-demand careers. With the current job market and economic forecast, students are seeking college majors with the most return on investment. Majors in science, technology, engineering and mathematics (STEM) may help graduates to get the most from their tuition investment due to current job prospects and potential salaries.

We hope this guide will help you join the engineering revolution through preparation, dedication and hard work during your high school experience and your collegiate career in a top engineering program.

#BETHENEXT AT FLORIDA POLYTECHNIC UNIVERSITY

Florida Polytechnic University is Florida's newest and most innovative state university dedicated wholly to STEM education. Located in Lakeland along Florida's I-4 High Tech Corridor, you have access to a growing cluster of innovative companies and entrepreneurs.

The University boasts an Innovation, Science and Technology (IST) building with some of the most advanced technology spaces in the world, engineered for collaboration, inspiration and real-world problem solving. Designed by world-renowned architect, Dr. Santiago Calatrava, the IST building is anything but typical. In addition to 26 classrooms, you will find 11 innovation labs, including a Visualization and Technology Collaboration (VTC) & Robotics lab, Cyber Gaming & Digital Media lab and one of the largest Rapid Application Development (RAD) Makerspace labs in the country.

Florida Poly offers a cutting-edge curriculum with a connection between education and industry. Professors work hand-in-hand with STEM business leaders to develop a rigorous, relevant curriculum tailored specifically to the industry's evolving needs. This curriculum includes six degrees across 19 areas of concentration in high-tech, emerging research areas that will stimulate the economy over the upcoming years. Through two colleges, the College of Innovation and Technology and the College of Engineering, students are able to gain the specific knowledge and advanced skills to lead the technology sectors upon graduation.

What's next for you? At Florida Poly, we want our students to be more than just graduates; we want our students to be tomorrow's engineers. How will you **#BETHENEXT?**