

SECME: Plan it •Build it •Live it

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Science, Technology, Engineering, and Math are all very important in everything we do in life. There are plenty of different hands on activities at SECME STEM Club at my school. Some are Balsa Wood Bridges, Mouse Trap Cars, Gliders and Water Bottle Rockets. They all require Science, Technology, Engineering and Mathematics. They also all need to have creativity and a little bit of imagination. You must imagine the design of what you are making or building. This is part of PLAN IT.

You must have a plan or idea of what you are going to do. The dictionary defines a plan as a scheme, program, or method worked out beforehand for the accomplishment of an objective. If you don't have a plan it will make things that you do a whole lot harder than it actually should be and it may be a waste of your time. If you don't have a plan there is basically no direction for you to get to your goal.

Next, you have to BUILD IT. To build is to construct by putting parts or material together over a period of time. Build it, is a very important step because without actually building it, you would just have an idea on a piece of paper. Building it makes your idea becomes a reality.

Last, but not least is LIVE IT. To live it, means to go through with your plan, to experience it. This is the very last step after all the hard work of planning it and building it. In my opinion, this is my favorite part. Living it is to actually use it.

To plan for my future as a student, I looked at my interests. Computer technology STEMulates my imagination. I enjoy computer technology and I really like the iPad. On my iPad I can do educational things and fun things. I can read books on it and I can download a lot

of apps. There is an app called "Game Changer" that my mom can use to keep score at my softball games. I can also facetime my friends. Imagine, you can see and talk to your friend real time through a computer. How cool is that? A decade ago, people would not have thought that was even possible. Computer technology helps you do things so much faster than doing it by hand.

In my computer class at school, we use Microsoft Word, Excel, and Power Point to generate reports and presentations. I was curious about how to program a computer, so I did some research, and found a simple program called "Scratch" that you can learn how to tell the cat Scratch to move, using computer commands.

Math is another subject that I like. I love doing math in the "First in Math" software and to compete with other students in our school for first ranking. At school, I'm in the Math Club. In Math Club we work individually and in groups to solve a variety of math problems. It helps me get more practice and as you know, "practice makes perfect".

I enjoy the activities we get to do in SECME STEM Club, for example, bridge building and water bottle rocket. I love to see the excitement of my classmates when we had a successful launch of our rocket or seeing the completed bridge we built. These activities are not only fun to do, they also teach us the engineering process of planning, designing, building, and testing our model, as well as working together as a group. We are living out the theme of "Plan it, Build it and Live it".

Because I am good at math and I like working with a computer, I think a career as a computer engineer would suit me well. Since I am using the computer a lot, I would like to program computers to be able to do a variety of applications.

I looked up the salary of computer software engineer, and on average, Software Engineers make about \$90,000. In order for me to become a Software Engineer, I need to have a four year Bachelor of Science degree in Computer Science. I would need to get good grades, B or above in core subjects like Language Arts, Math, and Science.

I went to some of the SECME websites to research engineering careers, and I found some helpful advice from working engineers. I will need to have strong verbal communications skills and need to learn how to write well because engineers write a lot of documents. It also helps to have excellent leadership skills. I will consider the AP or IB program in high school to help me prepare for an engineering degree in college.

AP (Advanced Placement) and IB (International Baccalaureate) programs are advanced high school courses. Timber Creek High School near me provides the AP Program, which introduces college level work to academically talented students. Students need to take a minimum of 6 AP courses. They will also receive an AP seal on their diploma and honor cords at graduation.

Another local high school, University High School, has the IB Program. Students must complete a set of 6 courses in languages, social studies, experimental sciences, math, and the arts; the Theory of Knowledge course, a 4,000 word Extended Essay, and 150 hours of creativity, action, and service hours. Only juniors and seniors can take IB classes and exam. If they get a score of 4 or higher, they will get an IB diploma. AP is well known in the U.S. and the I.B. is well known worldwide.

I thought what I researched and learned was good advice because in the AP and IB programs, I will have taken college level courses, so that I am well prepared and my chances of

getting into good colleges and graduating are greatly improved. To succeed, I will need to study hard, complete all my homework, and do well on my exams.

Some Universities that are near me that I am interested in are UCF, UF, USF, and FSU. At UF, there is a program called Gator Launch Mentoring Program for STEM students in the second and third year of college. This program helps students through mentoring, networking, and internships.

UCF has a program called EXCEL for STEM students in their first two years of college, which offers the following benefits. EXCEL students live in the same housing block. They have an EXCEL center, which offers free tutoring for math and science. There is an EXCEL advisor in the center to help with academic planning. There are no special programs for STEM students at USF and FSU, although they do have workshops for K-12 students to learn about STEM.

Internship is a good opportunity for students because they would get the opportunity to work at companies in their field of study while still in college. A lot of companies near UCF offer internships; they include Lockheed Martin, Siemens, and Department of the Navy. The Central Florida Research Park has a lot of high tech companies that do simulation and training for the Army, so there are a lot of jobs around the UCF area. There are a lot of opportunities for software engineers.

Writing this essay has been an exercise of plan it, build it, live it, in itself. It is an eye opener to see the steps I need to take to get to my goals. I discovered things that I didn't know about before this essay. For example, I did not know about the AP and IB programs, college admission requirements, and about the many technology companies near me and the opportunities that they offer. I have discovered that engineer jobs are not boring jobs because I may be able to travel and meet new people.

There are many choices to consider, and I will need to choose one. Looking over my research, UCF seems like a good match for me. It is close by, and has an excellent engineering school, especially in computer science. There are also a lot of companies near campus for internship opportunities. I also like the fact that UCF hosts our SECME regional competition every year!

Now that I have a plan, I will build my plan by following the blueprint that I had set out for myself, making sure that I take the right courses in high school that will help with admission to college. By doing this, I believe that I am on the right track to achieve my goals. I will be carrying out my plan and then be able to live it. The plan it, build it, live it principle applies to other aspects in your life as well, not just in your career. Follow these steps and you will be disciplined, organized, and have structures in everything you do. Plan it! Build it! Live it!