What should I take in high school (Idaho) if I’m interested in Engineering, Computer Science or Construction Management?

High school is a time when many influences, other than academics, are important to students. There is no one “right” answer to this question -- any curriculum in fact can lead to these kinds of degrees, but certain paths will enable you to get the degree faster. Below is a list of courses that prepares you very well for a degree in engineering, computer science or construction management in four years.

**8 credits**  math, four years, through pre-calculus, calculus if possible. Taking statistics is less helpful than taking calculus in terms of your preparation, so if you have a choice, choose calculus so you can get a head start on it.

**8 credits**  English, four years

**8 credits**  science, four years, including earth science, biology, physics, chemistry. Note – if you can’t take four years of science, it's okay, but do try to take at least three (preferably including chemistry and physics).

**6 credits**  social studies:  3 years or whatever your high school requires.

**4 credits**  foreign language:   2 years (note: there is no foreign language requirement to be an engineering/comp sci major – so if you like foreign language, great, but if you don’t, it’s okay!).

**1 credit**  computer apps (typing, spread sheets etc) 1 semester.  If there are any programming courses, take one if you want to.

**2 credits**  PE

**1 credit**  health

This accounts for 38 credits.  The graduation requirement at the moment is 42 credits, which will shortly rise to 48.  This plan leaves little room for electives.  The course load is designed to give a student the tools with which to think logically, understand something of the world around him or her, and communicate with people in multiple situations.

We realize that many students have additional interests, such as sports, band, choir, or other clubs. Such activities may make it difficult to take all of the academic courses listed above – that’s okay, and you should pursue your interests!

Keep in mind that you can do some of the prep for college on your own.  There’s a great way to learn or review math online via: [www.aleks.com](http://www.aleks.com)  Boise State University actually requires an assessment via ALEKS anyway for enrollment in Precalculus or Calculus see: [http://math.boisestate.edu/aleks/](http://math.boisestate.edu/aleks/)  So – if you weren't paying much attention in 8th grade and have a few math “holes”, you can repair them pretty quickly online!  Or if you’ve been out of high school for a few years and have forgotten a lot, you may be able to save some college dollars by reviewing math prior to enrollment. Check out the website and purchase the assessment and learning module.

With these thoughts in mind, we recommend the path shown above, to whatever extent your high school can provide.

Posted 12/2008 by Janet Callahan, Associate Dean, College of Engineering
Send any feedback or questions to Leandra Aburusa Laburusa@boisestate.edu