



## Pathways to Engineering: Researching Colleges

### Researching Schools

As students are exploring college options, have them consider the following engineering education paths:

#### **Two-Year Associate's Degree**

There are many great technician and technologist jobs that require just two years of school. This is a great way to save money on tuition and still get a great education. Plus, many engineers start with this degree and then go on to do another two years at a four-year program to earn a bachelor's degree in engineering.

#### **3-2 Program at Liberal Arts Schools**

These programs allow students to earn two degrees in just five years. Students spend the first three years pursuing a liberal arts major and degree. The student then transfers to the universities engineering school and earns a degree in engineering in two years. These programs are wonderful options for the student who wants to blend a liberal arts education and technical degree. A benefit of these programs are employers are eager to hire students with a well-rounded education.

#### **Four-Year Degree Programs**

In a typical program, courses in the first two years are a mix of math and science, English, social sciences, the humanities, and introductory engineering classes. This is a great time to explore engineering as a whole and discover a student's interest. In your last two years, students investigate the engineering specialty of their choice. (Some programs offer a more general engineering curriculum for all four years; after that a student can choose a specific field to pursue in grad school or through a job.) Practical work experience through internships and co-ops is also an integral part of many engineering programs.

#### **The Military**

Options include applying to a Service Academy (i.e., Westpoint). All Service Academies are free for accepted students. Students might also want to consider enlisting in the military to earn money for college. In addition, students who know they want to pursue engineering can get on the job training in a technical field.

## **Find a school that's right for you.**

A good starting point when researching schools is to ask: what is important to your child? Beyond strong academics, are they interested in playing sports? Do they want to go to an urban school? Stay close to home? Go far away? Make list of their interests and use this to compare various colleges.

Another important factor to consider is the engineering curriculum. When looking at schools ask how they incorporate engineering projects into their classes. Do students get to work in teams? What clubs and competitions are they involved in? What support systems to they have in place for students?

To narrow your choices, use the database of ABET accredited schools. You can search by state, degree level, and program area. When choosing a school make sure it is ABET accredited. This is important for licensure, graduate school and to most employers.

<http://main.abet.org/aps/Accreditedprogramsearch.aspx>

## **Scholarships and Financial Aid**

Figuring out how to pay for a college education can be pretty daunting. But there are lots of financial aid opportunities to be found, including some that are specifically targeted to engineering.

Financial assistance can mean scholarships, grants, loans, or school-based employment opportunities (like campus work-study, paid internships, and co-ops). Here are some ideas for where to look.

### **Online**

An online search is always a useful place to start. You'll find many sites devoted to helping college-bound students finance their education. For instance, FastWeb ([www.fastweb.com](http://www.fastweb.com)) offers a free scholarship search. (Registration is required.) This resource will also help you search and compare colleges, as well as find jobs and internships.

### **The U.S. Department of Education**

The Federal Student Aid program (<http://federalstudentaid.ed.gov/index.html>) awards billions of dollars in grants, work-study, and low-interest loans to students and their families. You apply for these with one form, the FAFSA (Free Application for Federal Student Aid, <http://www.fafsa.ed.gov>).

### **Your Own Backyard**

Talk to your child's school counselor and teachers for ideas. Find out what engineering-related scholarships might be available through your high school. Most schools also publicize general scholarships that can be applied to engineering programs.

### **Your Child's Prospective College**

In addition to helping you acquire federal student aid, many colleges offer grants, scholarships, and other aid packages of their own. Be sure to check with both the engineering programs and the financial aid offices of the schools in which you're interested.

### **Higher Education Resource Centers**

There are many resource centers dedicated to helping students obtain information that will help you plan and finance a college education. One example is TERI (The Education Resources Institute, <http://www.teri.org>), whose Web site offers valuable college planning resources and information about TERI's loan programs.

TERI also supports college access centers that offer one-on-one student guidance. You can find similar access programs in your state by visiting the National College Access Program Directory (<http://www.collegeaccess.org/accessprogramdirectory>).

### **Engineering Societies and Associations**

Many engineering associations offer scholarship and other aid programs. Some may focus on a particular engineering field or on a particular group of applicants (e.g., women or minorities). For example, the scholarship program of the Society of Women Engineers (<http://www.swe.org>) offers financial assistance specifically to women admitted to accredited engineering programs.

You can locate engineering organizations by doing a Web search and by checking out the Engineering Go For It website (<http://www.egfi.org>).

### **Learn more about engineering at [www.discovere.org](http://www.discovere.org).**

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