

What can the engineering community do to encourage more people in the U.S. to pursue careers in engineering?

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In my opinion, the best way to increase interest in engineering is to appeal to children and high school students and really show them what engineering is all about, rather than just telling them. Events such as National Engineering Week give children the opportunity to participate in hands-on activities and really demonstrate the cool and exciting things that you can do as an engineer. The same goes for high school students—it is important that these students experience engineering through hands-on activities, camps, and plant tours so that they can gain a tangible understanding of what engineers really do.

Student

Shawn Blanton

Professor of Electrical and Computer Engineering
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Some CIT faculty have crafted their own outreach programs, many with the goal of “marketing” engineering careers to kids. My participation in these programs has been simultaneously sad and exhilarating. Exhilarating because kids are thrilled to learn that engineers are so central to things that fascinate them (mobile phones, video games, electric cars, etc.); and sad since many of them had no idea that engineers did these things. So early marketing is necessary, since it is unlikely one will strive for a career that she knows little to nothing about. Engineers should play a major role in this effort, but non-engineers must manage these programs; that is, engineers are simply too busy working on the next great thing. I am positive, however, that engineers would volunteer their time for a comprehensive program that introduces, encourages and enables kids to pursue engineering as a life-long career.

Faculty

Richard W. Heckel

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Data indicates that the selection of engineering as a field of academic study is made in the early high school years. Unfortunately, if national economic problems exist at the time of the decision-making process and the demand for recent engineering graduates is not robust, many high school students will select a non-engineering field, resulting in a decline of engineering graduates. To reach out to high school students, I propose the establishment of coordinated “engineering careers” media centers that serve to inform these students and their advisers about the opportunities of the engineering profession and the benefits that accrue from such careers. The critical issue here is to attract young students to engineering before they select a non-engineering discipline. I believe this matter is far too critical to the engineering profession to entrust the general media to provide the necessary coverage of this topic.

Read Heckel's in-depth response on the Web at www.cit.cmu.edu/magazine.

Alumni