

Transcript: [Episode 9 / November 16, 2009](#)

Coming up next on ATE TV -- women and engineering.

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HVAC.

We're in one class all day long. It's a very hands on program. Our instructor is really knowledgeable and is able to communicate really well.

And lasers and photonic technologies.

We do a lot of hands on projects. We have laser labs with lasers in them. We do a lot of experimenting getting hands on.

Now, on ATE TV.

From across the country to your own backyard ATE TV shows you the many advanced technological education opportunities available at your local community college.

If you think a career in engineering is for men only, think again. Community colleges such as Florence-Darlington Technical College in South Carolina are working to make women aware of the many exciting opportunities available in technical engineering.

I've also been interested in engineering.

I was originally signed up to be a nurse.

I'm usually the only girl in my class.

Even in high school I was the only girl in my drafting class and my mechanical drawing.

And 26 times ... which is 13.

The majority of the students who are enrolled in engineering technology programs at Florence-Darlington Technical College are still male. You know, we're 40 to 50 percent African American. We have a growing Hispanic population, but we don't have nearly as many women as we would like.

We have worked over the years to figure out ways to make these careers and these pathways more attractive to females. We're making tremendous gains, but we're not where we need to be yet.

It's very different going to school with all guys. I don't have much of a problem with it, but I have to step it up a little bit; make sure that I study harder so that I'm a little farther ahead.

You want all different kinds of people working together. And having girls in the program is good

because they bring something different than ten guys on a team. We have a female graduate who's at ABB, and she was electromechanical and engineering graphics. She works for the engineers. She helps to design and troubleshoot these boxes and then it kind of blows the guys' minds when she puts on her welding equipment goes out and actually builds what she's designed.

If you can present education in a way that taps into those natural abilities of females then they can excel in ways they never thought they could excel. They can be successful where they thought they couldn't be successful.

You've got 32 and 26 with their values.

We want girls to understand what they can do as engineers and how they can change the world.

You guys need to sign up. It's very fun. You get to learn new and fun things express your creativity. You'll like it. I promise.

Community colleges across the U.S. are working to recruit women into engineering technology programs that will prepare them for exciting high tech careers.

If you're interested in a lucrative, hands on career in heating, ventilation, and air conditioning, there are many programs being offered throughout the country. Take a look at this program at Boston's Benjamin Franklin Institute of Technology.

My name is Kevin Ross. This is my second year here at Benjamin Franklin Institute. I'm majoring in heating, ventilation, and air conditioning. I was out of school for like 20 years, got laid off. I was unemployed and then in the fall I enrolled in the HVAC program.

We do a lot of work with refrigeration. Hotels use us a lot, restaurants, anyone that has food and things of that nature involved we can definitely get a good job at.

Classes here at Ben Franklin for HVAC program we're in one class all day long. It's very hands on program. Our Instructor is really knowledgeable and is able to communicate really well.

In Massachusetts you need a license as far as to work on equipment. And again Benjamin Franklin definitely helps you do that, and the school is licensed to give the test. The universal test is taken right here in the classroom.

I already received my universal license refrigeration license received that already. I feel very confident at my completion at Benjamin Franklin that I'll be employed. And being in the field and getting a job, I think that's going to change my life dramatically for me and my family.

So I'm really looking forward to it, I'm excited and looking forward.

Kevin's decision to attend that program has really jump started his career. If you're interested in an exciting, secure, and well paying technology field, be sure to check out the engineering programs offered at your local community college.

Setting your sights on a career working with lasers? Then you want to check out this program in lasers and photonics being offered at Central Carolina Community College.

I went to high school, but I left there at a young age. I had a lot of problems when I was growing up. I graduated from this college for my GED, and I decided to come back to further my education.

You take your hand and follow the beam around and show how it's hitting the mirrors.

One thing that we have is a Sex Equity Grant. All females can go to school for free, free tuition, free books. Doesn't make any difference whether they're real poor or real rich. It's free education. You can't beat that.

I was taking my placement test, and I had really good math and science scores. And I've always wanted to do something in research, so they pointed me in this direction, and it worked out really well because I enjoy it.

The energy from the laser is so powerful and so strong that it can burn this piece of wood.

We do a lot of hands on projects. We have laser labs with lasers in them. We do a lot of experimenting getting hands on. It's not that we're just getting talked to all day. We are actually doing it ourselves -- a lot of interaction with it.

And what do you expect to see before you turn it on.

We have labs, lots of labs. We have a lot of electronic work.

Now, we no longer have an AC lab, what do we have?

We go over a circuit and then we put it together and make it work.

We do. It's fun. It's a lot of good learning experience. Kind of geeky so it works out.

So this is the power source of the excitation medium.

I like working in a group because I am a people person. I like to interact with people. But we also do a lot of stuff by ourselves, so that way we have full understanding of what we're doing.

Our camera man, if he'd fell on the light he would have definitely caught on fire.

I work full time. I go to school. It's a lot of work. It's very tiring and very stressful, but it's worth it in the long run.

If you are interested in getting your education up to light speed be sure to checkout programs that offer research in lasers and photonics at your local community college.

For more information on anything you've seen today explore our website at ATETV.org.

Thanks for watching.