

Transcript: [Episode 1 / September 21, 2009](#)

Coming up next on ATETV.

This is a frame for an ROV, remotely operated vehicle.

Underwater robotics. Process technology.

We're dealing with volatile hydrocarbons.

And video game development.

Now on ATETV.

From across the country to your own backyard, ATETV shows you the many advanced technological education opportunities available at your local community college. If you're interested in a career in environmental engineering, and looking for a great way to learn what it takes to make it in the professional work force, your local community college is an exciting and challenging place to start.

Today we're going to Bristol Community College where they've been educating students in environmental engineering.

BCC, much like many community colleges, essentially has an open door policy. So if a student comes to us and they say they want to join our engineering technology program or engineering transfer program, we will let them in.

We realize we need to get more high school students into and interested in engineering, keep them here and get them out and graduated into the work force.

We do a lot of bringing students in from high school to our laboratories. What might we do with our flotation? And that becomes a real big push for them because then they realize this is like any other college we've been to. So would you not do a wet mount like we did?

The group I'm in is using an open system.

It's extremely important for students to come in with as strong a math and science background as they can.

On here we've kind of fused the Chevy Volt and a Honda fuel cell car, into 1 little prototype.

That's pure electric, get a battery, and you won't be getting nearly as much as that through the fuel cell.

You're going to be using your math. You're going to be using your chemistry. You're going to be using your biology.

You put it on battery power, it's going to go right off the table. Hydrogen's the way to go.

We do a lot of applied training, connected with the academics. So when a student is dealing with math or dealing with science, where they may have felt somewhat intimidated by that, we now pull it back together and we show them how we're using math, or how we're using physics in the classroom with the hands on activities.

This program here, you can design a part and then you can extrude it. You can draw the entire thing in 3 dimensional form. This is a frame for an ROV, remotely operated vehicle. This is going to be going underwater. This frame is actually getting made by another student as we speak.

I feel that's vitally important that people actually work with the equipment that they're going to be dealing with, and that's why I try to... when we developed this lab here, I was told to come up with a state of the art laboratory. People actually work with the same equipment they're going to be working on out in the field.

The idea is in every program, whenever possible, to make sure they have that hands on experience to go along with the theory.

You know it's never too late. I mean, I'm here after 8 years from graduating my last liberal arts education, and I'm wanting to become an engineer. It's definitely a challenge.

We're very proud of our graduates and what they've added to our community.

Bristol Community College does change lives.

Wouldn't it be cool if all of our cars were hooked up to solar panels and hydrogen? While you're thinking about your new green ride consider this: BCC is just 1 of 1,200 community colleges in the United States, and nearly every student in the country has a community college within driving distance of their home.

Grab your safety glasses and let's head to Houston to hear from Dennis Link of BP to learn just what it takes to begin a career in process technology.

A vast percentage of things that we use everyday life, originates from a barrel of oil. BP is a global energy company. In this business you are a part of the overall U. S. and worldwide economics. Make no mistake about that. So you're impacting global supply, you're impacting local supply.

Are y'all going to gradually go up, or are y'all just going to stay here at 15?
What we're looking for in a process technology student is a well rounded student. So they have a good education in the technical skills, they've also had some hands on practical experience in the classroom. Once we get them onboard at BP, they will get continual hands on experience in practical application. For example, a tower like this - distillation column, a qualified operator would know exactly what's going on inside this tower. Each and every pipe, an operator would know exactly what's in there.

Your feed looks good. Your 2 levels... uh oh.

We're not making cookies, we're not flipping hamburgers. We're dealing with volatile hydrocarbons. It's a prerequisite that you need to be a strong safety champion, and that's what we expect.

And all it is in actuality is a little check valve...

It's a fun job, it's challenging, it's exciting. No secret, we pay good, we have good benefits.

Should we add more feet to the column?

We on top of it today.

When they come to BP with their associate applied sciences degree, they come in at approximately 30 dollars per hour with full benefits.

I'll hire you as an operator.

The employment picture looks very good for BP right now. We're looking for the best and the brightest employees, and that's why we're very excited to be a long term partner in the process technology program.

And that's coming from...

We've found the quality of the individuals we've hired that have come out of the process technology program, have been high caliber first class employees, long term employees, working safe, working in a compliant manner, and certainly supporting our plant reliability and all of our business initiatives.

So maybe you're thinking, process technology looks great and I'm interested in technology in general, but I'm really more of the creative type. Well there's always a career in video games and simulations. Here's a student from North Carolina who's a building a simulation to help save lives.

My name is Aisha. I'm a student here at Wake Technical Community College in the simulation and game development program.

I was going here to Wake Tech, and I was watching the local news one day and saw a news story about simulation and game development being offered here at Wake Tech, and I came to school that day and changed my major.

What I like about it is that not only do we learn a little about the art side of things, but we also learn about the programming side as well as production. And what I really like about this program here at Wake Tech is that there are schools in the area that do offer degrees that would help you get a job in simulation and game development, but they only offer them for art degrees.

And for someone like me who is interested in production and mainly programming, there wasn't a place for me until I found out about this program at Wake Tech.

How do I change the scale of this?

Right now I am working on developing a simulation to help people learn how to perform CPR.

This is something that I'm doing on my own as a side project, to help build up my portfolio and to hopefully teach people how to save lives.

When I graduate I would love to have a job as a programmer in a serious simulation company.

I would like to be able to merge my love of science with my love for video games, and make simulations to help teach doctors how to perform surgeries.

So why choose Wake Tech for your simulation game development degree? Because the teachers truly care about the students, and want us to succeed, and they have given us the tools that we need to learn everything we need to know to go into our chosen field.

For more information on anything you've seen today, explore our website at ATETV.org. Thanks for watching!