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Coming up next on ATE TV.

Video game development and simulation technology.

It's now catching like wildfire across the industry that now there's this huge simulation industry that's starting to emerge outside of gaming.

Biotechnology.

What got me interested in biotechnology is the fact that it is essentially the future. We have the potential to save lives, treat diseases, change the world as we know it and I want to be a part of that.

And rapid prototyping.

We got our model that we can see in the cad. I'll set up the machine and it'll literally print that physical model. It's like basically sending it to your home printer.

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.

The demand for skilled biotechnology workers has never been higher.

If you have a love for hands on science and biology and want to have the work you do help change the world then a career in the expanding field of biotechnology might be for you.

This is our science department where we take our biotechnology classes.

My name is Marina Watanabe. This is my second year at Southwestern College. My schedule is definitely very full. I do have 2 jobs. I'm a full time student so it is very difficult. I generally sacrifice my sleep but I'm managing, I'm doing well [laughter].

What I really like is science especially biology. So what got me interested in biotechnology is the fact that it is essentially the future. We have the potential to save lives, treat diseases, change the world as we know it and I want to be a part of that.

Well I was originally accepted to the University of California at San Diego as a biotechnology student but I chose instead to attend Southwestern because I know for a fact that we have a great biotechnology program here.

I know many people say oh it's a community college I don't want to do that. It's this whole mentality that community colleges are inferior but honestly it's not like that. Your teachers pay so much more attention to you. I have friends who are in lecture halls with upwards of 300 students.

I have no idea what's going on. What do I do? What do I do? here's no panic here.

The number of transformants or colonies per microgram of DNA.

There are smaller class sizes because it is a community college. If you ever have a question you can just go straight to them you don't have the distant TA or you're never going to see your professor at all so it's a really great program.

The tutoring program is really great. Your teachers are always there for you. Everyone is very friendly.

The DNA will clump up and fall out of solution.

Once I graduate I will attend the University of California at San Diego. After that I'm hoping to graduate with a Bachelor of Science in biotechnology or bioengineering and then move on in the working industry.

Community colleges can offer students like Marina personal attention and a cutting edge education. If you think you might be interested in a career in biotechnology or bioengineering be surento check out programs offered at your local community college.

The video game industry is booming with no sign of slowing down. If you want to put your love of playing video games to work for you then consider a program in simulation and game development technology like this one at Wake Technical Community College.

My name is Brent Parsons. I'm a student here at Wake Tech Community College and I am a student in the Simulation Game Development Program.

Here at Wake Tech we get a general education over design, art and programming and then from there we kind of then focus into which different little sect that we want to go into.

Most students come in because they want to learn games but there's a whole other side that corporate training is now starting to switch to where they want people to be more immersive so a lot of companies are coming out that do simulations rather than just handing you a packet of information, hey read this information, learn it and be able to recite it back it's now catching like wild fire across the industry that now there's this huge stimulation industry that's starting to emerge outside of gaming.

I think my favorite courses involve using Maya. We use Maya 8.0 here to do animations and to do modeling so getting into the whole 3D modeling and seeing exactly what goes into modeling and animation.

I have a completely new found respect for you know artists and animators out there and what they gotta do. It's very time intensive but it's a lot of fun when you reach the goal that you were intending.

What I've been most excited about in this program is beyond everything that I've learned about what it takes to get into a game and this that and the other is I've gotten to meet a lot of influential people through what we've done here at Wake Tech with the new speakers

that we've brought in from different companies and everything else we get to hear firsthand accounts you know from industry professionals exactly what we need to be doing, what it takes and what they want to see when we get out of here.

Once you do get into the program you need to understand that you're gonna be here with many other students who are also gonna be competing for the same jobs. Just doing the bare minimum to get your assignments done is not the way you want to approach it.

To really stand out with companies you really want to go the extra mile. You want to put as much as you can intothe projects that you're working on. Now for a living I'm definitely going into games. It's an exciting industry. It's one that's also proven
to be recession proof. It's a no brainer.

Brent is headed for an exciting career in the growing field of simulation technology and he has many different career tracks available to him such as programmer, animator, producer or designer. If game development and simulation tech is something that interests you be sure to check out your local community college.

Have you ever wanted to turn your design from just an idea on paper into a 3 dimensional reality?

Then you'll want to learn more about rapid prototyping. Let's take a look.

Something that's done quickly.

Fast something.

Rapid what now.

Quickly making a decision.

Doing something very quickly.

Maybe someone who can type really fast.

Rapid manufacturing is taking a 3 dimensional model and being able to produce it in less than a week.

We got our model that we can see in the cad.

I'll set up the machine it'll literally print that physical model. It's like basically sending
it to your home printer. So what we end up with after we're done we're getting a full 3 dimensional model. It's a part that you can have in your hands and work with instead of going to a machinist and getting it done and taking forever and lots of money.

It's a quick, inexpensive way to get products made and this is what we got it's
a 1/18 scale rock crawler. It's not a working model but its moveable, all the parts move.
It's just no motor so it's just basically to see how things move and how things fit.

I could not have made this model without going to a rapid manufacturing type course.

Those engineering students are using the latest technology to make their designs at a low cost and to get their ideas to market faster than ever.

Community colleges all across the country offer similar programs that can help you get your career started in rapid manufacturing.

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

Thanks for watching.