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Coming up next on ATE TV.

Industrial manufacturing.

The projects we work on here at the school, they're industrial projects.

They help us solve a lot of problems that they may run into while working in industry.

Riding the biotechnology wave.

And we look for those who like the lab in every sense, the record keeping, the precision, and multiple hours of dedicated work.

And cloud computing.

You no longer have to worry about installing software.

You no longer have to worry about downloading updates.

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 have a strong foundation in math and science and are interested in solving real world industrial problems, then you might want to think about a career as an engineering technician.

And swing.

What are the speeds we're going at?

Posting one dot.

And then we measure in centimeters.

The projects we work on here at the school, they're industrial projects. They help us solve a lot of problems that they may run into while working in industry.

So this gives you a negative movement.

Every 10th of a second.

We need to calculate

They entail a lot of the physics and algebra that we deal with. And the math itself, it factors into the physics and the electrical as well. So it gives us a real idea of what we'll be dealing with after we graduate from the college.

You could make him your proofreader.

Talon you can hook this to.

That's only way to go in.

Do we know how many miles we're going out of our way for this?

Today we're working on a project that entails flight plans. And what we had to do was adjust some flight plans of a plane to make it counteract with another plane, a plant, a stadium, and some mountains.

So it didn't come within a certain distance of another area.

Now I could probably use these skills to work inside of a assembly line. You may not want two parts running too close together. So It's gonna help a good bit in the real world.

Beginning.

Yeah, it's missing.

We'll I've decided to go to a technical college, because a four year college is a little bit costly for me. But I, I've had a lot of help from scholarships and, and different programs, and my internship has helped me a lot.

I'm interning at the power plant by my house, so a technical college works for me, because I can afford it, it's close driving distance, and it's by where I work. So this kind of all worked together.

I like my internship for the experiences, because I get to work on a lot of systems in the nuclear plant. But I'm in school 90% of my time.

Okay, so we're turning at a 45 degree angle, it travels 10 miles.

The reputation of the school is good. And when I was researching I realized FDTC was more for me.

Which one are you doing now?

Deceleration and constant speed.

My dad and brother are mechanics and carpenters, and we didn't know how to do any electrical work, so I took some in high school.

And it kind of got me into messing around with it. So that's why I ended up here.

It's negative power to that.

Hypothetically it should work.

Any advice for new students that come into this program is to definitely study hard at it. Especially with your physics and your math, because that is your key classes that will help you out in the field. I think it's a great program for anyone to get into.

It works for me.

Ben's using his classroom knowledge of cutting edge technology and applying it directly to his internship. That's putting him one step closer to an exciting career as a nuclear engineering technician.

Comfortable with hands on biology, and see yourself working in a laboratory environment? Then biotechnology could be the perfect career for you.

Community colleges across the U.S. offer programs that prepare students for well paying laboratory research positions.

San Diego's the hub of biotechnology in the entire country. We have over 500 biotechnology companies in San Diego all in need of entry-level technicians.

There is a deficit of people at these basic laboratory research positions in the country.

The biotechnology program at Southwestern College started in 1999. And our idea was to increase the number of technicians available for the biotechnology industry from our population.

The demographics of our population is primarily Hispanic. Enriching this population with the knowledge of biotechnology and inviting them to be a part of it will, we hoped will spark an additional growth of the industry in this part of San Diego.

I look for those who are comfortable in the lab, who really like doing this work. Because part of our work is done in the field, but most of it comes back to the lab. And we look for those who like the lab in every sense, the record keeping, the precision, the quietness, and the multiple hours of, of dedicated work. But primarily we're looking for those who have found out about the field and are excited about it, and are willing to make the investment.

Enriching them not just in knowledge about biotechnology, but in experiences with students from varied levels of education and backgrounds, and then giving all of them the job experience through internships and prepping them for success in their career.

We include molecular biology, all the chemistry required to go into these classes, and then we have four core biotechnology courses that address the DNA molecule theoretically and in the lab.

We teach them all the laboratory procedures needed to work in a lab. Many of our students when they do their internships in academia with four year institutions, they work side by side with graduate students and are very helpful to them, because they need so little training.

All right.

For, you know, hour or so.

All right, so we'll get this sequence.

Our laboratory class max is 20 students. So no matter how much the work is, you will never be competing with more than 19 other people in the class. And so that forms an intimate group.

We're gonna have a contest here. We're gonna see who has the highest transformation efficiency.

Probably 50% of our students go on to transfer to a 4-year degree. The other half are going into industry.

Tell me how many colonies you've got on your plate.

There's plenty of opportunity out there.

And what you guys have?

If you have an eye for precision and detail, and like working in a clean, quiet, and comfortable environment, then biotechnology might be for you.

Check out your local community college to
see what biotechnology courses they offer.

Know what cloud computing is? Don't worry, most people haven't heard of it, yet.

Thing that goes on with the cloud?

A mathematical equation, oh wow.

Computing.

Oh my God!

When things are unrealistic.

Getting high up in the clouds while you're doing your computing?

Finding out when it's gonna rain?

You're unrealistically approaching reality.

Something on the Internet that's fuzzy?

Satellites in the sky?

The only thing I know about cloud computing is that my brains a cloud, but I forgot where I parked my car.

Cloud computing, the idea was that instead of having software installed on your computer, all the software was gonna move off the computer, so you didn't need a computer that was as fast. All you needed was a web browser. And then all the software lives in the cloud. You no longer have to worry about installing software. You no longer have to worry about downloading updates.

And what's happened is the bandwidth is there now to support it. And so you can have applications, that again, are living in servers that run as if they're running on your computer.

The really biggest benefits of, of cloud computing in these web based applications is they allow you to collaborate to share things. You don't have to worry about sending emails back and forth, and trying and keep track of which, which version is the version that I'm supposed to be looking at. Or who's gonna be responsible for taking the edits that this person did and combining them with, with the edits that you did.

It, it changes the whole way that you work. So, so real, really neat stuff that you can do with cloud computing.

Whether you're interested in cloud computing or computer technology in general, your local community college offers courses that will help you get your career off the ground.

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

Thanks for watching.