

**Transcript:** [Episode 17 / January 11, 2010](#)

Coming up next on ATETV:

SOPs in bio manufacturing.

You have to read verbatim every step in order to run or process anything that you do.

Agriculture technology.

I've done an internship at Crop Tech Services out in Ely. They did a lot of Ag technology with the GPS and soil sampling so you went out and tested different soil types throughout the field.

And information and communication technology.

Computer and information technology is sharing of content, its accessing data, its opening applications that allow you to do your job.

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.

Do you know what an SOP is? You will if you're in the field of bio manufacturing.

Sounds like something that might have to do with water.

I don't know.

It's like soap but...That's what I was thinking.

Stupid other people.

I don't know.

I know what SOB is.

Son of a something.

I don't know.

Please tell me.

Hi there gang how's it going?

Well.

In the lab an SOP, which is standard operating procedure is used to define how you perform every action from processing a biopharmaceuticals all the way down to how do you use a scale?

You have to read verbatim every step in order to run a process on anything that you do.

You follow the SOP whenever you do anything in the facility.

So basically SOPs or standard operating procedures are acquired by the FDA and govern the production of biologics. That may sound like a mouthful but if it appeals to your sense of order you might be headed for a career in bio manufacturing.

Interested in helping farmers efficiently use agricultural resources? Want the opportunity to use skills from the classroom in your internship? Then a program in agricultural technology like this one might be for you.

Yeah just pull it back a little bit.

Take that off. Put that onto the inside. Ok look at your material.

Students learn all different ways and one of the best ways to learn is having the students actually do the exercise, do the math, do the work. They can hear about it. They can read about it but it's not gonna stick with them until they actually experience it.

did an internship for Crop Tech Services and they are a service provider for GPS technology and crop scouting. It gave me a great deal of knowledge as to how everything works, how the satellites work, how the computers take that data and turn it into data that we can use and implement in the farming.

An internship I think helps 2 main ways. 1: It gets the students out in the workforce and shows them that maybe some of the skills and things that they're doing in class and doing here are applicable to the real industry and second it gets another foot in the door.

I did an internship at Crop Tech Services out in Ely. They did a lot of Ag technology with the GPS and soil sampling so you went out and tested different soil types throughout the field.

A lot of the internships that these students will get will turn into full time jobs after they graduate.

An internship can lead to career opportunities in precision agriculture, alternative energy production and natural resource management. Be sure to check out the internship opportunities available at your local community college.

Interested in securing computers and networks from hackers and cyber criminals? How about working with network switches, routers and security products. Let's hear what Juniper Networks has to say about the career opportunities in information and communication technologies.

When you're accessing the internet you want to make sure that it's done in a way that it's secure and that it's reliable.

There's a lot of problems out there right now you know people stealing data from secure servers or supposed to be secure servers.

Juniper networks is a leader in high performance networking. We provide products and technology that power the internet. Whether you're in a business, in your residence or using one

of these you've used Juniper Networks products and technology.

Computer and information technology is sharing of content, its accessing data, its opening applications that allow you to do your job, it's downloading music, it's texting your friends.

The information and content that you're using or sharing amongst your friends, your family, in your business is likely being delivered or processed securely and reliably through Juniper Networks technology.

Let's go on in the lab and take a look.

Juniper Networks produces switches, routers and security products. So here we have a couple of racks of security devices determines who can get access to your network and what they can get access to. We also have products called intrusion detection and prevention devices. This is what determines are there bad guys trying to actually get into your network.

Let's say for example you're sitting at home at your computer. You have a homework assignment. You go off to a search engine, you look for that information, you find something that's applicable to what you're trying to do and you download it or you access that content from your computer. It's very likely that that information has gone through a service provider or through a business that is based on Juniper Networks technology.

No matter what you do in this day and age your information is stored on a computer system somewhere. Most people think oh I don't use online banking, I don't put my credit card into websites that it doesn't affect them but that's not true because the businesses that take the information from them do use computer systems and do use the internet.

More users are added to the global network infrastructure everyday and therefore the opportunities in this industry will continue to grow for people who are qualified for and seek out opportunities to be a part of this industry.

ICT programs can prepare you for a career working on advanced network and computer systems.

Check them out and for more information on anything you've seen today explore our website at [ATETV.org](http://ATETV.org).

Thanks for watching.