

## ELECTRICAL TECHNOLOGY AND COMPUTER SCIENCE PODCAST TRANSCRIPT

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S1: I don't think I've ever had an issue looking for a company that wants technicians.

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S2: So what we focus on is the fundamentals of electrical engineering and computer science to allow students to have the options to be able to move in either direction once they graduate.

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S3: I'm so grateful for the Chattahoochee Tech faculty and staff for providing with all the equipment that is needed, and by offering support whenever I need it.

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S4: 98 seven Chatt Tech where 98.7% of our students earn a career. We're going to look at the Electrical and Computer Engineering Technology program located on Chatt Tech's North Metro campus and the new 20,000 square foot center for Advanced Manufacturing. Today, we're starting at the top of our contacts list and talking to some current students, an instructor and employee of the program. And I bet we don't make it out of the "A"s. We'll learn about some of the classes and careers available after completing this program. And we may even speak to an international spy. Okay, probably not. But we will learn how graduates of this program can help save lives while earning an electrifying career at the same time. All right. To keep this alphabetical, let's start with Ahn. You're a student, right? Tell us a little about yourself.

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S3: So my name is Ahn Phung. I'm 22 years old and my major is Electrical and Computer Engineering Technology.

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S4: Anh, what's different about this program compared to an engineering degree?

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S3: It's sort of like you you are more leaning towards the technician side and you'll be getting more hands on experience rather than just knowing the theory, so you'll be doing more hands on troubleshooting, stuff like that.

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S4: So what led you to this program?

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S3: Well, before this, I was an international .... uh....

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S4: International spy! Right.

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S3: Business Major. Oh. But I just wanted to be an engineer. And electrical sounds pretty interesting to me because I can work with maybe robots. Like electric cars.

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S4: Well, I mean, robots could be spies.

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S3: But when I got into the major, it's. It's so much like other branches, because right now here at Chatt Tech, they're offering like a specialized for biomedical equipment technician, which is what I'm majoring in right now.

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S4: Biomedical equipment sounds important. What do you mean by that? Give us some examples.

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S3: Any any medical equipment. But mostly, if you're starting out, you will be considered as a Biomedical Equipment Technician One. And you you'll be working mainly with. But, well, they consider you as a

General Biomed Technician. So you'll be working with IV pumps, feeding pumps, all the, like, non-critical medical equipment. As you progressed more, you can go out there and get specialized training on, like, imaging, like ventilators. You guys train on those things. So as you progress with more, you will get the opportunity to get specialized equipment.

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S4: So, let's just take life saving out of the conversation for those who aren't, you know, great under that kind of pressure, what other types of careers are out there for this degree?

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S3: You can work on, like, semiconductors designing. I mean, I've taken it and then you can work with the electrical side of like cars and stuff because right now EV is kind of big and we're moving towards more electric things than like fossil fuel.

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S4: Anh, can you talk a bit about your experience with the staff and instructors at Chat Tech?

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S3: I'm so grateful because of the Chattahoochee Tech faculty and staff provide me with all the equipment that is needed for all my programs. We just sent the lab and could buy office support for whenever I need it.

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S4: What's the career path look like for an international spy --? I mean, an Electrical Technology graduate in the Biomed field.

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S3: For Biomed right now it's in high demand. Every - a lot of hospitals have been coming to Chatt Tech to recruit Biomed Technicians. We've seen Agility, CHOA, like, Children Hospital of Atlanta, even GE and stuff like that, they're looking for freshly graduated students and actually offer around \$26 to \$30 an hour.

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S4: Next up looks like an instructor and again another "A". Sir. If you don't mind introducing yourself?

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S2: My name is Andrew Kazamien. I'm with the ECET Department. I've been with Chattahoochee Tech for about eight years now.

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S4: Andrew, can you tell us what the ECET program is?

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S2: I guess the name kind of gives it away. It's Electrical Computer Engineering Technology. So what we focus on is the fundamentals of Electrical Engineering and Computer Science to allow students to have the options to be able to move in either direction once they graduate.

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S4: What type of jobs are available once you're an E.C.E.T. G.R.A.D.?

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S2: Grad students can have all of a range or different types of jobs coming out of the program and the expectation for what types of jobs they can apply for. So the typical type of job that a Electrical Computer Engineering Technologist would apply for would be anything associated to Engineering Technology, Computer Science, anything dealing with like Electronics Design. So in most cases you will see positions offered as a Electrical Technician. But there are some opportunities for entry level engineering positions. When you're doing more design and you're a little bit more autonomous versus working directly with an engineer. But typically students who graduate, they usually are working in an industrial field or they're working in an office doing industrial or electronics design underneath another engineer.

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S4: What is the student makeup of the program, Andrew?

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S2: So, you know, the majority of our students are on the traditional side, but we do have a pretty big percentage, I'd say. I don't know the exact number of top of my head. Around 30% of the students are non-traditional who do come back, who've been working in the field for years and want to get a degree in engineering or students who went to the field and realized they want to come back to school and change their path and career wise. So we kind of have a mix between the two. I wouldn't say it's just heavily traditional. There are some semesters where I have a lot of nontraditional students as well.

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S4: Now, Andrew, I hear you are kind of a legend around Chatt Tech. What brought you to teach here?

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S2: You know, I started teaching when I was 21, so I started teaching at a very young age. And my goal in regards to teaching was always to give back to the community. I feel like that there's a huge emphasis in our society right now as young people or millennials or whatever generation you want to call it, of saying, hey, you know, there's no value in traditional schooling and I can kind of do it on my own. And yes, that is a possibility. But I like to stress the fact that there is value when you come to school, you learn a trade or you learn a profession that is very heavily science focused. And then being able to change your life and find potential outside of a school. So what drives me to teach is helping students find value within their personal lives and being able to grow and achieve the goals that they want to.

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S4: What does it take for a student to do their best in this program?

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S2: I would say the students who do the best are the ones who are open minded and the ones that want to learn. So that sounds a little cheesy in regards to, oh, you know, everybody wants to learn when they come to school. But when it comes to engineering, it's such a broad area in regards to the direction that you can take. I think the students who are open minded and willing to experience different facets of engineering and are excited about that are the ones who come into the program and they realize, Wow, there's a lot of value in this and I can take make this work for me in regards to potentially finding a career or achieving my goals.

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S4: The field seems pretty broad and we're from a generation where words like engineering and computers are kind of attached to everything. What about students who know that's where they want

to land but aren't really sure where to start or they change their focus in the field once they are a student?

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S2: Oh yeah. So I tell my students all the time, you know, my goal isn't to tell you what to do. My goal is to help you figure out what's best for yourself and what you want to do. So a lot of students come in who have no idea of what they want to do in regards to engineering or they have no idea and what what they want to do in regards to work. And they're like, Hey, I like computers or I like games and I've always liked electronics and I just want to learn about it. And in the intro class, we really focus on the aspect of this is what engineering is and a broad spectrum. And if you want to focus on this specific task, you should start looking at that now and doing research in that area to see exactly what type of jobs are available to you. So the whole purpose of our intro class and the way that we guide them throughout the program is to take students who don't have the best thought in regards to the direction that they want to go, but they kind of have an idea of the topic. They want to study and help them narrow that down until they get to the final class, which is the Capstone Project class, to eventually say, Hey, I've learned something and now it helps me get a job in this specific area.

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S4: Now, Andrew, as a legend, we know you may be a little partial but how does Chattahoochee Tech do it better?

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S2: Chattahoochee Tech's program, I believe, is the best program in the state of Georgia in regards to electrical computer engineering technology, because we try to focus directly on the industry and the industry needs. Students who come into this program, want to come in to learn exactly what needs to be done in the field and apply that once they get a job and be able to keep their job once they get or get into the position that they want to. And our focus teaching is to directly relate the field to the classroom and help students have an understanding and learn exactly what they need to and in order to be efficient at the jobs, once efficient in the field, once they graduate.

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S4: Let's talk to another student. Anthony, how did you get started at Chatt Tech?

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S5: So actually a funny story about that. I've been bouncing around jobs. I didn't really know what to do and I had a friend in the program doing his biomedical degree, biomedical engineering degree. And yeah, he told me to jump on board. I did that. And here I am repairing medical equipment.

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S4: And where do you currently work?

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S5: I work for GE Healthcare, but we're contracted to Northside Hospital Cherokee.

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S4: Aaah. Look at that. Electrical technology program is paying off before you even graduate. Did you get the job because of Chatt Tech?

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S5: Yes. Yes. So I did the apprenticeship program. I did that for a few months and I pretty much got hired on before the program even ended.

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S4: Anthony, I'm guessing you're taking things learned in the classroom and immediately applying them to your career, is that right?

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S5: A lot of instructors will. They have a lot of experiences. They'll tell you about it in the actual classes. We basically get hands on with everything. So pretty much basically what we're doing in the classes carries over to the job pretty much almost the same.

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S4: So the apprenticeship program helps you land your current job. What's the next goal for you with the degree?

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S5: Once I graduate, I'm looking to probably continue my path as a biomedical engineer. Right now I'm a B Med one. Hopefully once I graduate, I could become B Med two or three. That way I can work on more life saving equipment like anesthesia machines. Then if I wanted to do imaging, I could probably do that as well.

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S4: Describe a day in the life of a B Med One.

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S5: So it's pretty much close to your 9 to 5. You get to the job. You'll see what needs to be done. You look at the work orders. It depends on what the equipment is. There are usually a lot of work orders that need to be taken care of immediately, like a defib is a stat work or sometimes monitoring equipment. Telemetry boxes need to be fixed as soon as possible.

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S4: Stat work orders. I've always wanted to yell, STAT at a hospital. What kind of student could excel in this program?

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S5: I feel people who like to be hands on. You're always touching medical equipment. If you're really organized, that really helps as well, especially with documentation. But mainly, mainly students who like to get their hands on things. You know.

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S4: Let's hear from one more student. Seriously? Not only another A, but another Anthony. This is magical. Anthony. Number two. Have you always been interested in Electrical Technology?

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S1: Even growing up, one of the things that I really liked enjoying playing with was like snap circuits. So I guess that's kind of where my spark started. Also, my father's an electrical engineering and computer engineer. And originally that's where I was going for was my bachelor's in electrical engineering and decided to transfer over to Chatt Tech and to start and looking into the electrical technology because I found a little bit more interest in the hands on applications and a little less on the theory side of just the basic engineering portion of it.



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S4: As someone who went to a four year school before Chatt Tech, how was this program different?

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S1: There's a lot more labs. I mean, even when I was over at Kennesaw, they do have quite a lot of labs and hands on experience with their classes. But I would say Chatt Tech definitely tries to instill it a little bit more and they explain the purpose of the application and how important it is to be able to actually get your hands on the components and work on these on these concepts. And it really does just give you a much better understanding of it.

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S4: Okay, Pop quiz. What does PLC mean?

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S1: It's a logic control device. It's a program, logic, control system. And basically you can use that to run, run, engines, run. I know at the plant we use it to run on dryers and reactors and stuff like that when they need to start and stop at certain times or if something reaches a certain limit, you need it down and things like that. It's something that you would program to run a certain system.

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S4: Congrats. You get an A in this class. Anthony. Tell us about your experience with the instructors.

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S1: They're very involved, just like my professor, for example, Andrew Kazmian. He is very involved with the students and making sure that we understand and if we ever have any questions or need help on something, he's very much there with anything that we need, and especially the lab techs as well that they have hired on are extremely helpful and they've definitely made a huge difference. There is a few labs even this semester that I wouldn't have been able to complete if not for how qualified and how willing to help and get involved these faculty members at the school are.

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S4: Anthony, what advice can you give to a student of the program or potential student who sees finding the right career in the Electrical Technology program is pretty intimidating?

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S1: It can definitely be very scary because even after going through all of this classes and and finally graduating and having that completed, the real world can still be very intimidating, obviously. As far as the job market goes, though, I don't think I've ever had an issue with looking for a company that wants technicians. Technicians are wanted just about anywhere. And it's a very versatile job. And all you have to do is, look.

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S4: Congratulations. You're all A's. Thanks Anh, Andrew, Anthony and Anthony. To find out more about the Electrical and Computer Engineering Technology program at Chattahoochee Technical College, visit [Chattahoochee Tech. Edu](http://ChattahoocheeTech.edu). Thanks for listening to 98 seven Chatt Tech where 98.7% of our students earn a career.