

# 29. Heath Tims: Teaching, Tradition, and Tech XXII

## **Gavin Kelly**

You're listening to beyond 1894, a podcast dedicated to updating you on research, innovation and Campus Life happening in Louisiana Tech University.

## **Tonya Oaks Smith**

So Hey, y'all and Welcome to Beyond 1894. I'm Tonya Oaks Smith, Executive Director of University Communications for Louisiana Tech University. And we're here today to talk to Dr. Heath Tim's who is Associate Dean of Undergraduate Studies in the College of Engineering and Science. Is that right? That's correct. That's a long title.

## **Heath Tims**

That is that is.

## **Tonya Oaks Smith**

So tell me Heath came as an undergraduate to Louisiana Tech. Right?

## **Heath Tims**

That's correct.

## **Tonya Oaks Smith**

So tell me what your dad did cuz I was reading your bio. And that's a really interesting tie to engineering there.

## **Heath Tims**

So my parents actually both came to Louisiana Tech, they met at Louisiana Tech actually. And so interesting how it fell out. later on. I kind of fell in the same boat. I met my wife here at Louisiana Tech as well. But my parents met here. My dad was in agricultural engineering, which is a degree program that we actually don't have any more. It's very close to mechanical engineering, and actually has a lot of similarities really only just a few classes difference. He, he ended up working over for a company FMC Sidewinder and he designed agricultural equipment, mainly mowers and tillers and things like that had a great job in that industry. And then when the ag industry really went bust, and kind of the early 80s, things changed. And so he and my mom, who had a business degree, they got involved in kind of starting their own construction company at that time doing home improvement type work. And so I grew up in that world actually grew up kind of going through and going to work with my dad, I was even homeschooled early on. And so I grew up in that environment and kind of loved working in that environment. Years later, my parents ended up actually starting a second company. It was fairway karts. It's a golf cart dealership over in mendon. And so I grew up basically doing construction, and I

grew up doing kind of mechanic, King, drove trucks and everything else. So I grew up in that sort of environment. And that really helped shape what I wanted to go into. I knew I wanted to do engineering from early on, that was never a question. But you know, which one became a question. And so for me, mechanical engineering was a was a great fit. Because I was very broad a like being broad, I liked having interest in a lot of different things. And so that was what really interested me.

### **Tonya Oaks Smith**

So what defines mechanical engineering, because then we have industrial engineering, and we have chemical engineering and systems engineering, and there's all these different types of engineering. So explain the

### **Heath Tims**

so the the difference, I'd say mechanical engineering is probably the broadest of them all, there's kind of three different areas that kind of typically define mechanical, you have sort of the mechanical system side of things where you think of mechanical things that you're designing, then you have more of what's called dynamic systems and controls, which really deals with things that move things that are dynamic things that are changing. And typically, that's obviously associated with a lot of mechanical systems. But that may also deal with some of the interfaces now, and with computers and electrical world. And then you also have the thermal fluids, which is basically, you know, everything from heating, ventilation, air conditioning stuff to how, you know, evaporators or hell, you know, heat flows. That was not my interest, I obviously had to understand that material. But I was not interested in the thermal fluids, I was definitely a mechanical person, I wanted to be able to touch it, I wanted to be able to feel it. I like the the big things, I like to be able to touch it and understand it, and still be able to go out there and do it not just on paper. So that really was my interest.

### **Tonya Oaks Smith**

So cars are a big thing, right? So So

### **Heath Tims**

cars are a big thing, a lot of students, and I kind of got this from my dad as well, you know, he went to ag engineering and you know, looking at that degree, and that's something that we don't offer here at Louisiana Tech anymore. And really, what it comes down to is that that's such a niche area that really you want a degree program that's going to offer you a broad spectrum of where you can go after you finish. So automotive engineering is a degree field that some students are always very interested in, and I would have been one who would have fallen into that category as well. But I personally really see the value in staying broad. So mechanical definitely incorporates that aspect. my graduate degree, went to the University of Texas down in Austin, and actually did work in a more automotive type of way. I did more dynamic system and controls for automotive type systems, mainly military vehicles. I worked on suspension systems for a lot of the future. combat system vehicles, the ones that were the kind of the land based whether that was a, you know, Humvee or some type of track tank or something along those lines, so worked in the suspension category in that doing kind of controls related to active suspension systems.

### **Tonya Oaks Smith**

So tell me one, one thing that you are well known around campus for is, is working with the Eco car. So explain what the Eco car is.

### **Heath Tims**

So when I was a new faculty member, and came back, for mechanical engineering, I was in mechanical engineering professor. And obviously, I had that automotive background, so many students have that automotive interest. I was getting approached all the time about, you know, was I doing any research in that area, and I'd kind of shifted my research focus from what I worked on in my graduate studies, really more toward engineering education. And that's mainly what I did once I got here. But a lot of students knew of my interest. And I still had a lot of that interest, the idea of designing a car was something that was still fun to me, that was that was kind of a goal. And so I found out about a competition that was actually sponsored by shale, which is the Shell Eco Marathon. And it came about actually, over Christmas, I saw an email and it just popped up. And this was an opportunity to kind of compete in what they called the Eco Marathon. The goal behind it was to build a vehicle that could basically get the highest fuel economy that you could, what's the most gas mileage that you could get out of a vehicle. And so I approached a couple other faculty about it. And we really thought it was something we could do something that was more manageable, that wasn't a crazy project to try to take on. And so we hand selected about five students, and that first year just went out there and, and gave it a shot and did very well had a blast, and that really kind of springboard to what that program is becoming now.

### **Tonya Oaks Smith**

So that's not the only way that Louisiana Tech excels, though, with with engineering competitions. And I know it seems like okay, there, we have athletics, and then we have academics, but there are competitions that are academic focused, right, and, and some of the best ones fallen engineering, yeah, we

### **Heath Tims**

definitely have quite a few, you know, kind of competition teams, as we call them within engineering and science. Some that have been around for many, many years. For instance, the American Society for civil engineers has the concrete canoe that they've done, and there are so many alumni going back for many, many years that have competed in that. And we're actually going to be, you know, hosting the national conference here, which is a great opportunity for us to showcase our new building and showcase the campus, that'll be a lot of fun, because it'll be something in person, and it will be the first in person event in over two years, because of the way that you know, COVID kind of landed. So there are competitions like that, or the mini baja team or any of the others. And so this was just another outlet, another opportunity for our students to do something outside of class to do something that they could enjoy and get into. And they volunteer 1000s of hours realistically in the end, in terms of what the time they put in, but they get a lot out of it as well, they get that hands on, they get that application. And really it kind of forms more of an apprenticeship type model and how it works. So myself or even other faculty who've been involved over the years, really kind of take these students in and just try to show them some skills that are outside of the classroom. And that has worked very well.

### **Tonya Oaks Smith**

So you open the door on COVID. So let's talk a little bit about how your college responded to what we're calling the COVID challenge on campus. Because engineering is a hands on thing. You've mentioned that several times, that was the attractor for you. That was that's the attractor for a lot of students. And it is difficult to teach things like engineering and science without having humans in the same room. So how did y'all approach that?

### **Heath Tims**

Well, obviously, the first thing was just react quickly, right? All of this happened very fast. And a lot of our faculty just had to make adjustments on the fly. And there were things that we kind of experimented with some of those worked tremendously. Well. Some of them did not. And we've tried to work through that. I think our faculty have responded very well in terms of how they've approached it. I think even more important, our students have responded well, but we are very hands on environment. And even those classes that aren't necessarily hands on, there's still technical content that's being presented, that is not easily taught, you know, over zoom or you know, over a lecture that's recorded. And so being able to be in the room and ask the questions became very important. So last spring, obviously everybody had to basically shift online and we realized that we needed to be back as as possible. So even starting this summer, we were some of the first ones back this summer, we started in July, being able to start offering some of our classes, we still did a lot online at that point. In the fall, we pretty much moved back toward face to face as much as we could, obviously courses that were a little bit larger that we were able to kind of make do with kind of an online delivery, we shifted to more hybrid as much as we could, so that we could still get people in the classroom as much as possible. During the winter, we pretty much shifted most of ours back face to face. And this spring, we're pretty much I'll say, we're essentially back face to face for our college. That is not for every course we do have some faculty who are still out that we're working with on a course by course basis. But generally we are back face to face. And I think this whole thing has served kind of as an as a large experiment in a sense. And it's proven to us that where we are really good and where we are so strong as a program is that face to face, and having our students there, and being able to interact with them is so important. And that is not only in the classroom, but that's also the outside class stuff, the social aspect. peers are such a valuable part of student success, and they need to be around their other peers. So doing that in a safe way, obviously, but we've really pushed to have everything back as face to face as possible.

### **Tonya Oaks Smith**

So y'all are doing that with still with masking and distancing. And, and all those health and safety measures that that we've talked about for over a year now. It but what is interesting, I think is when you go into the ISP, the new engineering and science building, how much group work is going on? And and how much the curriculum depends on that. How is that? How is that done now?

### **Heath Tims**

Well, obviously, we're having to be very careful. And it's caused a lot of administrative challenges. That's probably the best way of saying it, I think our students have responded, honestly, better than most of us, as faculty and staff have the students, the students have really responded well. And I've even found that, you know, for the most part, they are wanting to do whatever they can. And we especially saw that back in the fall, they were willing to do anything, because they wanted to be back. So whatever the requirement was, they may not like it, or they may love it, but they were willing to do it

because it allowed them to be back. And so that was something that was unique to see. And I think a fun thing to see. And I think that that drives a lot of us as faculty to see our students do that. Obviously, we're still using the masks, we're still trying to, you know, force that within, you know, within the buildings and keep all the spacing, it has made for some challenges administratively, as I said, because of, you know, just spacing and rooms, even things like you know, having to have additional sections that maybe we didn't have to have before or having to shift to rooms that we didn't really want to be using as a room, we wanted it for something else. But we've had to have them because of the spacing. So we've had to make those type of adjustments. But I think students as a whole have really done well with it. And in our our faculty, especially those that are back have really appreciated being able to be standing in front of a room with students in the room.

**Tonya Oaks Smith**

And what's the saying Necessity is the mother of invention,

**Heath Tims**

right? We're kind of kind of forced into it, right. But it, it was something that I think helped us to learn a lot as well. And I think will even help us going forward because our students, I think, appreciate and understand that they need to be there those that have been successful, or now, you know, are advocates to other students and to future students to say, you need to be in class that has been proven more over the last year than anything else. And I think our faculty also have realized what things they can use that are maybe outside of the class and adapting what they teach in a different way or using the flipped classroom or using ways that they can, you know, get information to a student different way so that they can use their time together even more in a more valuable way.

**Tonya Oaks Smith**

I think that's an interesting thing that I've learned because I'm involved in a graduate program now is that you are more responsible for the things you do outside so that you come to class prepared. And I wonder if you're Are you you're seeing students respond. We're seeing

**Heath Tims**

that definitely the successful students doing that. I mean, obviously, there's tremendous challenges with trying to do it online and, and that's something that we've been pushing to our students. The ones that have struggled, are the ones that they're still in their bed, they're still in their pajamas, they're trying to watch the lecture online. It just doesn't work. It doesn't it doesn't perform the same. So even classes where they had to shift online We were finding that students were coming to the building and finding spots, just to sit just to force themselves to get out, and to have that interaction. So even if they were sitting there with the headphones in and sitting in a corner, they were still able to be there doing that. And that helped them just because it forced them out of a extreme comfort level that made it hard to concentrate. So that was something that we saw.

**Tonya Oaks Smith**

So let's, let's switch gears, to use an automotive metaphor. And talk about another aspect of your your life that in the past couple years has become even more important. Now I know you're you're a tech undergrad, you went away for grad school, but you came back. And you have a family and your family

includes a very important member, not any more important than your actual children. But who is the member of your family. So

### **Heath Tims**

the the additional member of my family, as I said, My third son is is the tech mascot tech 22 as we call him techie. So we we've referred to him as techie ever since we've had him. And that's kind of a common name that a lot of students around here call him as well. So whether that's the formal name or not, that's kind of what he's known as, but our family had the opportunity to become the host family for the tech mascot, the laugh mascot, as people sometimes commonly misunderstand, there's the two legged version, and there's the four legged version. And so we have the four legged version. And we have really enjoyed that it's been a great thing for our family. You know, it's it's one that comes with some additional work and some additional, you know, time that's involved with that. But it's been a great addition for our family to be involved in I think we we fit that very well, because of our background, as I mentioned early on, my wife and I'll say we really met at Louisiana Tech, we we did know who each other were before coming to tech, but we really met when we were here and had an opportunity to date through college and then end up getting married after college. And so both of our boys have only been raised on the Tech campus. So when we came back, was when our sons were born then and so we had an opportunity for them to basically be on the campus and many students know them. I think that's kind of interesting how it doesn't matter the event. My boys are there and and that makes it fun. For me from a family perspective, I think that's a huge part of why I wanted to be at Louisiana Tech is that environment. And I regularly think about kind of that cool aspect for them to essentially grow up on a college campus. So you know, the things that they get to see and experience are really unique. So whether it's, you know, a union board event, or whether it's a baseball game or a football game, or, you know, getting to meet some of the players at a, you know, that in one of the athletes getting to hang out with the college students in our own building, even that serves as kind of a driving force for them as well. They can see students that do amazing things. And they also get a chance to interact with them. And it can kind of be a role model for them as well. So that's been a great thing for my family, on a personal sense. And so being a part of kind of the host family for techie, has kind of gone along with that. And so we've really enjoyed that aspect. So he's got a good personality, right? He does have a great personality. He's interesting, for those that obviously follow him on social media and all the other different things that's been fun to watch and see him and see him interact. They they tell me that Bulldogs kind of take the personality of the family there with so I guess we lay around and sleep a lot. I don't know if that's not what I've you to says. But he does that. He definitely lays around a lot. He is a lazy, you know, Bulldog, but at the same time I say he is extremely loyal. So when you talk about these tenets of tech, and you talk about the things of, you know, loyalty, that is truly embodied in him. And so I remember during the quarantine and he literally he wants to be right beside one of us. And it was interesting where he would literally center himself between us as we were working during the quarantine, whether the boys were doing school or my life and our work and he would almost center between all of us. He wants to be with people. And so that's been a fun thing to do and see and he loves him to campus and I mean if he sees us getting the crate out or opening the door, he thinks it's time to go so he is excited to be up here.

### **Tonya Oaks Smith**

So you mentioned that Turkey is incredibly loyal. So would loyalty be your favorite tenant or is there another one excellence commitment.

### **Heath Tims**

So it seems vary kind of cliché, and it's kind of the one that everybody talks about. But for me, loyalty is the one that that I kind of tombos to, is the one that I put inside of my matech ring. You know, when I, when I had the choice, it's something that I am very, you know, kind of tied to having background here, growing up in in the general area, you know, I grew up about an hour away. But, you know, having been around tech, and then going here, I was very involved. And I was here as a student, mainly within the College of Engineering and Science, not as much around the campus. Once I came back, I got more involved around the campus, but I'm definitely tied to that. Myself and a few others have really been the ones in the background that pushed the idea of loyal blue even years ago. And I think that's something that we really wanted to see happen more, still something I push. And, you know, I'm glad to see that more and more students are participating that I'd love to see everybody, I think it's a it's an, you know, just a way of showing connection, you know, commonly get joked if, if something is wrong, and I'm not having blue on Friday, there's, there's something bad wrong, I don't miss a Friday and having if I'm, you know, on vacation, or whatever, I will have a tech royal blue shirt on. So a couple years ago, it was a group from Forever that I was working with during the summer. And I actually did take a vacation, which doesn't happen often. But it did. And I was in Hawaii. And so they sent me a message wondering if I had blue on and I did, I was on the on the beach, and I sent him a picture back showing that I had the little blue. So I definitely taught to the loyalty aspect.

### **Tonya Oaks Smith**

So you mentioned loyal blue Fridays, what does that mean for somebody who is not acquainted with? You know?

### **Heath Tims**

Well, the simplest answer is, you wear blue every Friday, and you especially wear tech blue every Friday. And the good thing is more places in town are even buying into that. I mean, I know recently, the kind of the marketing aspect that came into play, even with super one foods, and the whole push of you can get a discount on Fridays, if you were loyal blue. To me, it's about connecting with your university. And, and really, I think all of us are brands, and we market, the university and all that we do. So whether I'm on a trip, or whether I'm local, or whether I'm out, you know, at a high school or wherever, I want people to associate that, and I want them to connect with Louisiana Tech. And so that's something I think that I want our students to do. So really, the simple aspect is, you know, on Friday night, or Friday morning, when you get up in the morning, you make sure that you have your blue ready to go. And so, or my case, you just have most of your closet blue, and it makes it easier. But definitely, you know, royal blue is is I think something that just kind of showcases, you know, the university and your connection to it.

### **Tonya Oaks Smith**

Well, that definitely is a a tradition, a more recent tradition at Louisiana Tech and in the office of University Communications, we appreciate your living out the brand, we do really do appreciate that. So

tell me do you have a favorite tradition, from your time as an undergraduate from your time when you were in the classroom from now.

### **Heath Tims**

So one of my favorite traditions, as a student, I was mainly involved in the College of Engineering Science. And when I was here had the opportunity to work with a few other students to actually revive at that time, what was called Louisiana Tech engineering Association, that has now been rebranded into the engineering and science Association because of the change of being College of Engineering becoming College of Engineering and Science. And when I was here, I was a part of LTA and actually got to serve as the president when I was here. And we've kind of revived it back in the late 90s. And one of the things that was involved with that was what was called engineering and science day. And that was something where we brought in high schoolers from throughout the region to kind of showcase what engineering was, and now like, say engineering and science, what it is. And as the President of that it was a kind of a weird tradition, but it was something we always did as we welded link onto a chain. And it's just something always remember it was kind of a unique thing that I got to participate in. And so as the president that year, I got a chance to to weld that link on to that chain, which was a chain that had been done many years before. So that was something I definitely remembered as a student kind of as a memory was a lot of work that went into it. So it's probably also partly what, what came into play. Now that I'm back, you know, I really appreciate a lot of the different traditions and I think there's been a lot of things that have improved over the last, you know, 15 to 20 years even in terms of traditions on campus. I love participating in the freshmen convocation. Personally, that's something that I've really enjoyed. This year was one that that was not able to happen. And I worked with some of the first year experience folks and took FYI classes, I had to fyp classes in the fall. And we actually did a freshman convocation in the fall just for my classes. So I was able to use the medallions. And they didn't get some great speaker, they got me instead. But, you know, it was a neat thing, I actually had quite a few students that came out there in the evening, and they had heard about it. So they wanted to participate. So we literally stood around the lady of the mist one evening and fall, and just a group of us just from one class, and we did that twice. And that was something that I really appreciated. And so, to me, that's one of those traditions that I'm glad to see that we're gonna be bringing that back and continue it, I see no reason that will go away. But that's something I'm glad to see happening now. And I would encourage even alumni or anybody else, especially if you're around, it's neat to see it's kind of encouraging to see, you know, 1500 to 2000 students right there at the beginning of the fall term. They're excited, they only know what they're getting into. And they just kind of get into it. And to have some of the alumni that show up is is really special. So that's something I really enjoy now.

### **Tonya Oaks Smith**

Well, that is it is something to watch it definitely as and and after the students drop their Tennant coin in, in the lady of the mast, they get it back when they graduate, right? They do

### **Heath Tims**

they they get it back. And you know, obviously the students all think that they get the exact one back and my engineering brain says no, let's put some logic to this. You get you get a medallion back, obviously, but you get it back with your year inscribed on the back. And I think it has more to do with the meaning it's the it's the message of it. And so I think that's pretty special for them to be able to



participate in that. And then obviously, when they graduate, kind of formalize that in a way that they get it back kind of shows that they've made an investment in the very beginning when they walk in the door. And that if they'll put in and invest in themselves essentially over the next four years or so then they're going to get something out of it in the end. So the medallion is really just kind of the token, but it's symbolic of what's actually happening to them.

**Tonya Oaks Smith**

Well, that is an awesome way to end this discussion. So thank you Dr. Tim's for joining us today. And we look forward to seeing what great things come out of the College of Engineering and Science to come.

**Heath Tims**

Thanks for having me.

**Gavin Kelly**

Thank you for listening to beyond 1894. Please subscribe and rate us wherever you listen to podcasts. For more information about this episode, check out our show notes beyond 8094 is produced by Louisiana Tech University's Office of University Communications