

# Valley Today

## February 9<sup>th</sup>, 2023

### Transcript

Janet Michael

Hello and welcome to the valley. Today I am your host, Janet Michael. We are on the screen today. With Guy Curtis. So it must be the second Thursday. Of the month. You will remember Guy Curtis. He's the director of marketing. At Laurel Ridge Community College and I joked with you guys before we started recording that you're back. Brown has a lovely palm tree with a breeze blowing through and I really feel like we should go there and record a show in 2023.

Guy Curtis

I think it's a great idea, Janet. What do you think in Jamaica or the Florida Keys or what's your spot that you would go to Outer Banks? Maybe something a little closer?

Janet Michael

Oh, Outer Banks isn't a bad idea. That's a really good idea.

Guy Curtis

But, but it's not as tropical right now, but maybe the fishing is good. So let's let's let's. Go and do it.

Janet Michael

I'm excited about your guest today. Dwayne McAlexander is with us and he is a mechatronics. Program instructor and when you sent me the e-mail and told me that Dwayne was gonna join us and said that that's what he was, the first thing that popped into my head were Transformers. So I don't know, Dwayne, if that is anything at all close to what it is that you actually are teaching students, but for some reason Mechatronics reminds me of the. Transformers, so welcome to the show and tell me what are mechatronics?

Dwayne McAlexander

It's not quite Transformers, but you see some of the robots and things we have that could be close. Basically Mechatronics is an umbrella topic or curriculum that covers really anything electrical. Mechanical programming. It's really a program that's Teller to get individuals ready for the demanding need for skilled labor, and really more so than just skilled labor people that are going to take care of and develop and maintain our next generation of automation. That most of our plants in this area are in the process of installing if they have not already.

Janet Michael

I've had several conversations over the last couple of years with various people at our local EDA's talking about not just workers, but the types of workers that they're now in need of because so many of our large industries have started using automation and using robots. Amazon in Winchester has robots that

pick the things off of the pallets. In order to get them onto a truck and send out everywhere, it's really important that people know how to work them, fix them and program.

Dwayne McAlexander

Yeah, we're probably seeing robots, especially in this area, being installed at a faster rate than ever for a number of years. Now just general workforce has been hard to come by. So we've seen a lot of people start to lean on robots to fill some of those voids. So that really opens up the avenue. Now we got them doing the work, but what happens when they go down at 2:00 o'clock in the morning to stay productive? That next tier of workforce, which is the mechatronics individuals that we're going to develop are going to be those people. Right. They're gonna be the experts that are called upon the pit crew to come in and keep these things running when they go.

Janet Michael

And this is a program that Laurel Ridge has had for a while now, but in the last year or two years you guys have. Really made some? Upgrades and updates to it and expanded it quite a bit.

Guy Curtis

Yes, we have the program a few years now, but the building that we housed mechatronics program in the Smith Building has been recently renovated. And so there's an addition of about 3500 square feet that's been added to that space through part to Go Virginia Grant, which is a collaboration. Among industry, education and municipalities across the state, and we're able to upgrade the space with about 800,000 additional equipment in this mechatronics field. So this really enhances the program even further to the Wayne's point earlier as far as just the local need in our region, last year it was estimated around 3000 jobs across the valley are left. Unfilled, and that roughly estimated about 1.4 billion in economic output, they were losing out on. And so with the advancement of manufacturing and these new positions that are needed, those positions are hands on working in the field. Love how the Wayne called it the pit crew. When you have a mechatronics technician, maintenance technician, manufacturing technician, industrial maintenance technician, all these roles are out there that are being unfilled. It's leaving a lot of these companies in our region to a point where they're not as efficient as they can be. But with this advancement of technology and our training, we're prepared at the college to really enhance the skills of those folks who can. Find great, meaningful jobs within our region. Some of the numbers that I've looked at recently as far as the starting wages starting off around 40,000 a year and as they advanced through the program. To level 2. Roughly 60 to 70,000 a year, and even further beyond based on their level of management and their experience. So that's a very exciting thing to be able to do from the college to support such a demand and need. And we have a great new renovated facility at Allison H Smith Hall that will encompass and hold all those programs that we're looking. To build out.

Janet Michael

Wayne, what kind of student would be ideal for getting into the mechatronics program? I think sometimes us older generation people think, oh, I'm too old to learn any of this stuff, even if I am looking to make a career change. But it's not just kids out of high school, I would assume it's a wide range of people that could get into these programs and these great jobs.

Dwayne McAlexander

And I think that's what makes it so exciting. The Skype the limit. So we see everyone from people right out of high school that want to do this and they may have decided that college necessarily isn't for them, but they have already seen the writing on the wall that you can make a very good living working and manufacturing as a maintenance technician. So we we have those we also have. People that are already working as maintenance technicians. But they don't really have the skill set they need to take that next level to be the subject matter expert. That's makes up probably a large portion of it. Then we also have the last level, which is the people that really wanted to make a career change. I've had everyone from school teachers CNA's that decided, you know what it's time for. Change and that's the good thing about the level of approach you come in at level one for training and you really start at the ground up. You don't have to really have any prerequisites and we can take you from that level and make you that subject matter expert to get you to where you need to go.

Janet Michael

And I would think too that it's ideal for someone who has always liked to tinker, who always takes things apart and wants to put them back together. Somebody with math skills, somebody with critical thinking skills. That is always. Trying to solve a problem, I think personality wise those are great skills to have when you're thinking about the Mechatronics career.

Dwayne McAlexander

Yeah, absolutely. I think the biggest piece that people eventually one day just it's all the southern snaps is the way you think about problems. So a lot of the training is, yeah, we're going to be training you on individual pieces and components, but the mindset of how you think about a problem, how you approach it right systematically. I think once they get that piece after that, we just provide them the tools anybody can do it, some are gonna get there faster than others. That's the good thing about having to tear the approach that makes sure everybody gets rolled up to the same level at their own pace.

Janet Michael

Guy Dwayne touched on this a second ago with people who are currently in positions that maybe have this title, but now their employer is upgrading their equipment or they're making some changes. This is great too, because it's part of those G3 and Fast forward programs that they can jump right into. And by the time that stuff gets installed, they could be. Certified to be able to work on it or. Work with it.

Guy Curtis

Yes, that's right. Whether you're an individual or an employer helping your employee move forward in their progression and learning, that's the amazing thing about the G3 program, which this is supported by. If you're a household of four individuals making less than 111,000 per year as a last dollar scenario based on your poverty level and income you have within your region. It's at 400% in terms of the pocket level and the opportunity, so no words. Most people will be eligible for this program based on your household. Or if you're looking to leverage your employer to help support you in many cases they will because a lot of them have those incentives to grow the workforce from within. So G3 is part of it right off the bat. Fast forward is also another state funded grants that's supporting the funding of these. So regardless of where you are and the employer, you might be coming from or the career coming.

Through as well, there's going to be a funding opportunity somewhere for them to support you. So we're so very excited about those two grant programs supporting it. Just showing you even more how the state of Virginia and the industries in desperate need of these folks and they're supporting it with these scholarships and special grant opportunities.

Janet Michael

Let's take a break when we come back, I want to hear more about the program itself. Duane, will you walk me through what? Maybe a typical class is like so people get a sense of what they're in for when they're considering this as a career.

Dwayne McAlexander

Yeah, absolutely.

Janet Michael

Clear on the screen today with Guy Curtis. He is director of marketing for Laurel Ridge Community College. Joining us is Duane McAlexander. He is a mechatronics program instructor. We're going to talk more about that program when we come back in just a couple of minutes.

Commerical

Hello, I'm Rena Jelline, a graduating senior at Mountain Vista Governor School and we are partnering with local environmental nonprofit sustainability Matters to help you help yourself while helping the planet. Did you know that, according to Columbia Climate School, in 2017, only 34 per cent of municipal solid waste was recycled? In fact, recycling companies cannot be used plastic if it is contaminated with other materials, meaning only a 6th of the plastic you recycle is reused and the rest is incinerated. Also, did you know that not all plastic is easily recycled? Choose containers with the numbers one and two in the recycle symbol. These are the most widely recyclable, better yet, upcycle as much as you can. My favorite is to turn plastic jugs into seedling pots for native plants. Thank you for listening. This has been an ecologically exciting. Message from the Mountain Vista Governor School and Sustainability matters, reminding you that together we can keep the river clean and the valley green.

Janet Michael

Welcome back to the valley. Today I am your host, Janet Michael. It is all about the mechatronics on the show today. Guy Curtis is here with me on the screen. He is director of marketing for Laurel Ridge Community College, Duane McCall. Zander is with us as well. He is the Mechatronics program instructor and we went to break Dwayne. I asked if you would walk me through a typical day in the class because I would imagine it's a very hands on class.

Dwayne McAlexander

Very hands on and a lot of that is by design. A lot of these classes are night classes, so some individuals have already worked maybe 8 hours that day before they even get. To class. So I have learned that if you just sit there and you go through PowerPoints, you go through textbooks, it's pretty easy to lose your students, right? I would be right there with him if I was on the other end. So I try to make it as interactive and as hands on as possible, while still making sure that they get the required material. Usually what we do for the classes which a lot of times it'll be two nights a week, lasts for about 6 weeks

from start to finish when the kids are, it's hard for me. I always call them kids. You gotta remember, some of these are. Adults, maybe even older than myself, when the students arrive, we always start out with a recap from the previous. Make sure everybody is retaining the information, right? That's number one. If they're not getting it, I wanna make sure really quickly we get ahead of that and that they truly understand the information that we're giving once we get through the recap, but we'll get into what the Knights Lesson plan holds usually try to dissect it into making sure that they have at least one or two key learnings. That evening for that learning, the purpose of it, how we want to get to the final result. And then by the time the class was done at the end of that night, they need to be able to perform and execute what that learning is. One of the classes that I just completed, which is the mainframe for what this class is about or the whole program which was robotics, we had the brand new trainers in. We was able to develop small pick and place applications. And given this is a level one, so this is really an entry level class. That's, but we were able to develop programs and execute those before the class was done each night. So we would have different scenarios, each one a little more complex. And then by the end of the entire course for that robotics course, we was able to put all of those previous lessons together. And make the entire project which was a robot that would actually assemble parts.

Janet Michael

I can't even imagine what the faces look like at the end of the course when they've been working through this and doing it in little bit. And then suddenly at the end, it all comes together and they get to see the final product and see it in action. That's gotta be one of the happiest moments of the entire course.

Dwayne McAlexander

Very gratifying for them as well as me, right? Because you take people that have seen robots maybe in their workplace and they never were allowed to interact or mess with them to really now they got to see the other side of that and they was able to take something from scratch, build it and have it do what they wanted it to do and give them a really a sense of. Publishment to know that OK, their knowledge of even things that they work with now went up exponentially.

Janet Michael

On average, how many students do you have? In a class.

Dwayne McAlexander

It varies. Normally classes are anywhere between 6:00 and eight students. We try to cap it at about 15 just because of making sure that everybody has the amount of attention they need. If they have issues.

Janet Michael

And that's really a bonus because that sometimes is a barrier for people who are maybe disqualifying themselves in advance that, oh, I can't go into this big class with all of these people knowing that it's a smaller class. There's more individual attention and then you mentioned too that it's entry level, so you're not really expected right out of the gate. To come in and know all of the things and be able to do things. It really is a great way to put somebody's mind at ease and make them take that first step.

Dwayne McAlexander

And you know, really, if they knew all of that, they probably wouldn't be here. As you get to students that have been out of school for a while. This is really a decision that they make towards where they want to get to in their. So they are very dedicated. They're not there because they have to be. They're there because they want to be. You really see it's a whole different mindset when they come in there. They don't want to just go through the test, they want to truly understand so you can see the hunger for the the material.

Janet Michael

Hey, when we were talking in the first segment about expanding the Smith Building and upgrading the equipment, this was no. Intensive venture for the college and granted, you got some go Virginia funds, but it really does speak to the commitment level of the college as a whole to the Community when it comes to getting them educated to get better jobs and to move up in their stations in life.

Guy Curtis

Yes, absolutely. I think the local matching funds as well as the grow Virginia funds help really make all this possible and it's really a partnership with our local municipalities and local agencies that are supporting it too, as well as the employers sending folks to us. So we're very excited about the growth. I think we're getting closer to over \$2,000,000 worth of equipment that are. That are now housed at our Middletown location in the new newly expanded. Smith, Hall. And so I think it's finally in some cases come home too because we were using different facilities and operations and locations that have this program go on. But now it's all coming back to home in a more central location, and the newly expanded space of the Smith Hall has allowed us to really showcase those pieces of equipment, provide more and better hands on learning experiences. More potential students and employers coming through, so we're very excited about that expansion and where it's done local. And hopefully we'll keep on addressing that employment issue with those local employers really helping them with that dedicated pipeline of skilled professionals.

Janet Michael

And that's the other piece of this that we talk about almost every single month is this isn't a program that you're offering that you hope maybe jobs will be there. This is a program that you're offering because you already know that there are jobs there and you already have these relationships with employers, so that when the students go through this. They're going to have opportunities that they're going to be able to pursue to get actual. Good paying jobs.

Guy Curtis

Yeah, that's right. I think we've had many conversations around as you consider your options and exploring careers, mechatronics or advanced manufacturing is not very well known. And I think many individuals, if you knew all your options locally and if you're looking to live and work locally, this program is a great, great opportunity. Just think about the Amazons and the different manufacturing places, logistical places that are. Needing these technicians, if you enjoy working hands on, it's a just great career opportunity cause long term. Obviously we need folks to help build, maintain and repair. All that equipment that's being put in place by these employers, so the job prospects are great. The local opportunity and across the country for that matter too, it's going to be here and it's not going anywhere anytime soon. So we're very excited about the expansion. We're excited about bringing on professionals

like Duane who have that industry experience, who can speak to the programs. But I know he's doing that kind of work as well. Hands on in his full time. So those students who are coming through our programs will really get a well-rounded experience and very prepared for that job market that's out there because I know they're hungry. Those employers are looking for opportunities. And so just thinking about long term investment into a career, think about the funding options and course too we forget to mention these are fast track programs. In other words you can get through a few. These courses in the matter of a couple of weeks and that's meaningful for someone who's trying to change quickly to get into nuclear fast and try to support their family or whatever outcomes they're trying to do. It's exciting to be part of this bigger picture more than just the college, more and more, more about the employers, the region and of course, the economic impact to our area.

Janet Michael

And Dwayne Guy touched on this a second ago, having everything now all in one space has got to make it. Here for you and your team of instructors to be able to work with the students because you're not having to figure out where which class is going to go for what. It's all now in one space.

Dwayne McAlexander

Yeah, that's couldn't be better. And then also talking about the upgrade of the equip. So I've been teaching with Laurel Ridge now for a number of years. In the beginning, you would train the students and you would say, OK, when you get back to your facilities out in the real world, this is what I showed you on. But this is probably what it's going to look like, right? Because we didn't necessarily have that cutting edge equipment. That's not the case anymore. Now with the upgrades and equipment, we can actually teach them and show them the latest and greatest. Technology that they're gonna be probably working hands on with when they get out in their field. Can't put a price on that.

Janet Michael

For someone who's listening today and they're thinking this is really something that I've thought about for a while, but they've hesitated maybe to pull the trigger and make that next step, is there the ability for them to reach out, maybe to sit in on a class or do a visit and have one of your instructors walk me through what's involved. Because if they're anything like me, they gotta see it to really understand it versus just listening to it on the radio or in a podcast.

Guy Curtis

Yes, absolutely. As far as exploring opportunities with the mechatronics program, we do have a number of trades information. Sessions will be scheduled later this year that folks will can stop by and look to visit. However, our website has a tremendous amount of resources at lower rates workforce.com. Forward slash mechatronics soon to be posted is that we just actually did a video with the Wayne to help highlight some of the programs and that highlight video about to show more about what we have to offer locally. You get to see some of the pictures and things of the space, so we would recommend a couple of sites in terms of our mechatronics website there is also a great resource, our online career coach that can help folks look at. Some of those visual elements, but certainly anytime during our operating office hours who can come into our offices and talk with someone about. Program about the different job opportunities and how to get started. Fortunately, if those who are listening now and want to get started in March, we do have our first level one course. It's the fundamentals of electricity that

starts on March 5th and that program will fall just before other courses throughout the summer and spring to help them get them ready. So there's an opportunity to go and get started. As early as March, it's a great. Opportunity to take advantage. Of the funding as well in terms of G3 and Fast forward. So if you're a local Virginia resident, or if not, we have other locality scholarships that could be explored based on where you live. Are opportunities for you to get started right away.

Janet Michael

And we've talked about this many times too, and Duane even mentioned it earlier with the classes that are two nights a week in the evenings, they're class times and options for just about anybody. If they still have a full time day job, they can still do classes in the evenings. If they're working somewhere and need to do a virtual option you guys have. So many options to be able to take different classes at Laurel Ridge. There's really no excuse to say, Oh no, I'm not gonna do that.

Guy Curtis

Yeah, exactly. Our first course in Mechatronics, for example, is Tuesdays and Thursdays from 5 to 8. Knowing that well in advance, hopefully you could balance your work. People and or busy kids schedule at home, whatever it might be. That's the flexibility and beauty of these courses. They're taught in the evening, sometimes weekends. There are some courses that are virtual, but for the most part these hands on courses you definitely want to be there in person. The line for for time and energy to invest in yourself, as in, in learning those hands on things, Dwayne, he's a professional and the others that are part of the. Instructor crew is it's important to be there to learn that really soak it in because obviously you're doing that hands-on once you get out into the to the job market. So yes, that flexibility, the fast track training timeline, so that's perfect for an individual looking to switch quickly.

Janet Michael

So tell me one more time. Where do they? Go on the. Website to start getting all of their information and doing their research.

Guy Curtis

[Laurelridgeworkforce.com/mechatronics](http://Laurelridgeworkforce.com/mechatronics) or just Google search mechatronics, Laurel Ridge and a lot of that information will come up. There's a couple of stories about and news releases around success of students, as well as our expansion of the Smith Hall, so you'll find a bit of information about that, but definitely reach out and give us a call at 5 four. 0868. 7021 and we'll be glad to walk through all the options for you and where to get started.

Janet Michael

Guy Curtis. Duane mcalexander. Thank you both so much for telling me about this program. Today it sounds really, really cool.

Dwayne McAlexander

Yeah, it was a pleasure talking to you.

Guy Curtis

Thanks, Janet. It's another exciting new program to add and we're very excited to have it coming forward. So thank you. For having us today.

Janet Michael

I will be back tomorrow. I don't know how many. Of you knew. This but February is library lovers month, so tomorrow I am speaking with Michelle Ross from Samuel's Public Library. Over in Front Royal, they have a big fundraiser giving day that's coming up next week and one of their donors is matching donations. Up to \$3500. So we're going to talk hopefully with Lewis, who is that big donor, but definitely with Michelle Ross on tomorrow's show. Meet me back here for that just a few minutes afternoon.