

>> Hello and welcome to The Valley. Today I am your host, Janet Michael. Today's topic is education. Of course that means that we are on the screen with Guy Curtis from Laurel Ridge Community College. Joining him today is Dr. Craig Santicola. He is Dean of Professional Programs. Award winning Dean, Professional Programs. I saw a press release recently Craig that, you guys picked up an award that is fairly prestigious because you're the only community college that has earned this.

>> Yeah, it's really cool. This was actually driven by our faculty, one of our faculty members who does a lot with technology, Dr. Melissa Stange. She's the one who created the whole thing with getting all the resources together to submit and all the other faculty projects. It's really been a team effort across pretty much all of the college and actually in our submission materials, there was stuff from credit from my school, there was stuff from the School of STEM and our great faculty. We have Beth Dodson, Sam Dillender, Liz Palffy and then their Dean la Gomez, Dr. Gomez, who have all been doing these technology and science and math and engineering projects across the college and our faculty put in for it. We were very fortunate that we received the recognition. I get the benefit from all the work because I get to go to Memphis and be one of the people that receives the award with our faculty, Melissa Stange. But it's really cool because this is a group, it's the International Technology and Engineering Educators Association. It's really cool because it's us being recognized by other educators that they evaluated this stuff and they said, "Wow, this school is really doing this great stuff." I think there was one of six higher ed across the country and then we were the only community college. It's really a great honor and it's great to be recognized and have our faculty recognized for all the hard work that they do supporting students and keeping them engaged in all these cool projects.

>> Awards are always fun and great to get, but when they are given to you by a group of your peers, they tend to mean a little bit more. We all say particularly in radio, we don't do it for the awards but when we get an award from those that we work with or those that we work for, it just raises the bar a little bit and makes you stand a little taller.

>> Yeah. It's really been great and we get to go to Memphis in March and our faculty member Melissa, she's actually going to bring some of the robots. We get to do a little demo of some of the ways that we infuse STEM across our curriculum. She's actually been programming some of the robots to where they will do a choreograph dance. We have six robots, humanoid robots, and she's choreographing them to some music and all. She'll be able to demonstrate some of the things that our students get to do in programming the robots, so it'll be a fun experience.

>> Guy Curtis was telling us before we started recording that you also have a dog. It's not technically I guess a dog robot. He was telling us about how he stays up to date on what you're doing but following you on LinkedIn, which is

genius. I got to go make sure now that I am also following you on LinkedIn. But you have a wide range of robotic capabilities there at the college.

>> Yeah, we actually just got two quadruped dogs. They're quadruped robots so they look like a dog but without a head. Yeah, they're a little creepy when you see them at first, but they are fully programmable. They're AI and they have attachments that we can add to them so we could have a robotic arm on it and program the quadruped to walk down the hall and then open up a particular door. We're actually debating, how could we use these to do mail delivery on campus or have them walking around the hallways delivering things. They're really cool, but those are a couple of things that our students get some hands on experience and get to work with programming. We have the robots that I spoke of earlier, we have the quadruped robots, and then we actually have a robotic arm and then an automated manufacturing assembly line thing. Students will get to learn robotics in a variety of ways, and that's all part of one of the new certificates that we created and we'll be launching this coming fall.

>> You've got five of those new programs. I know we're going to talk about each of them today in some detail, but you have one that's AI machine learning, which to me seems a little counterintuitive because AI, I think I associate now with the human brain, which probably isn't a good thing, but it also does involve machine learning.

>> Yeah, so you're actually spot on. We have five new certificates. The robotics and automation is one, and then artificial intelligence and machine learning is one of the other ones. But you're spot on with it. The AI part is using technology to mimic human intelligence. Then the machine learning part is having machines extract the knowledge from data and learn from it. For me, I grew up in the '80s, so when I think of machine learning, I think of the movie WarGames and they had that machine that was learning how to play chess. That would be like machine learning. The AI is more of having the computers, the technology have reason and sense and act like a human. It's interesting because several years ago, Facebook had been working with developing two AI bots. They had to shut the project down because the bots were actually talking to each other in a language that they had created. Nobody else understood the language because the bots did it, the bots created it. Our program is going to be focused more on predicting the decision making, enhancing human capabilities using the data and extracting it, and then turning it into visuals that people can use then for decision making. The whole program, it's 18 credits, six classes but it's geared towards, learning that technology and how we can leverage it for better decision making and better outcomes and that can be across any number of fields. AI and machine learning is being used in healthcare and manufacturing, e-commerce, financial services. It's applicable to a wide range of industries and so that's one of our new cool programs.

>> I would imagine that program is perfect for someone who has critical

thinking skills already. That already is always trying to figure out, if this then that. They would be a shoe in to take this program and go to the next level.

>> Yeah. It's a lot of programming language. You're exactly right. It's programming things, if this equals these things then this happens. People that tend to like the technology programs, AI programs that are detail oriented, that are a logical flow of things, and then that enjoy working with computers and technology but also working as part of a team to create the outcomes. Because you have to get together and brainstorm. What are we trying to gather? What are we trying to do? It is a team thing as well. It's not just isolated, sitting in a room somewhere coding. It's working as part of a team to create the systems that get us the info and the data that we need.

>> How is the robotics and automation program different from that?

>> The robotics and automation, it's a subset of it because our robots are AI capable. But then the robotics and automation focuses more on the entire robotic system as opposed to say a computer system. It's more robotic systems and applications where you learn how to program them in terms of doing a task or like I was saying earlier, mail delivery or assembly line. You have robotic arms that will do pieces of assembly or a robot that'll be programmed like a welder or like a plasma cutter to cut metal in a particular shape. A little bit different, a little bit of a subset but we did buy the AI robots so we could use them across multiple programs. But the robotics and automation program, again it's new but it's a 16 credit career study certificate that has six classes in it and then you learn everything from the history of some of the robots all the way up through maintenance and safety and programming and they get a wide variety. They get some of the industrial setting and then some of the more academic setting with the quadrupeds, Phyto and Spot and the humanoid robots that we have.

>> A third new program you were telling me about was the immersive technology and I too as a child of the '80s, remember playing Pac-Man. That was as immersive as we got with video games, Donkey Kong and all of that. I've had some experiences recently with immersive technology and I thought I wouldn't understand it. I didn't think I'd be able to literally or figuratively wrap my head around it. It is a lot easier than what I think the general public thinks it is and it is amazing what you can do with it.

>> Yeah. When we hear immersive technology, a lot of times people are like what exactly is that? It's essentially an umbrella term for the virtual reality, augmented reality. In this program, our students would be working with programming and creating the game engines and 3D technologies to create those virtual spaces.

>> They would actually be learning how to program all of that. When you put the goggles on and you see some environment, they would be the ones

creating that. Again, this is an up and coming field. It's basically creating experiences by merging the physical world and the digital world together. We're seeing uses of it in nursing, in surge tech. We actually had our students got some experience on a virtual reality trainer to simulate arthroscopic surgery. Nursing is using some of these or testing some of these about doing their simulations for nursing students, so you could have four students in four different cities put on the goggles, and all participate in the same simulation. As we see more and more immersive technology infused in industry, this program would help support the workforce in creating and developing those environments. It's really cool. This is a great certificate for people that are creative, that like to do multimedia pictures, videos, sound. Because when you put on those goggles, it's an immersive environment, students that would excel in this or students that like to be creative like to take art and sound, and a vision of things and create. It's really good for digital creators of today. This would be a great certificate for that.

>> It's important to note that this isn't what our generation traditionally would think of, you want to grow up and be a video game programmer. You mentioned, this has so many uses across so many different industries that you could go into the healthcare field as this type of programmer, you could go into manufacturing as this type of programmer. It's not the funding games that our parents probably thought we were doing when we were kids growing up.

>> I'll be honest, some of it is the fun in games. But there are real world applications of it. But to me that's the beauty of it. Because it is fun and there are industry applications, there's just a variety of career options. To me, that's like a win win, because you get a really creative course sequence and you get to do some pretty cool, pretty fun stuff, it's a lot of hands on, and then you get to apply it to a really cool industry and potentially solve problems or help develop better nurses. One thing that a lot of welding programs are doing, they're doing immersive technology with welding. You can put on like 3D goggles and simulate like your welding on a skyscraper. There's just a wide variety of options for people who understand the level of programming to create that 3D environment.

>> You've got two other programs that you're introducing in the fall, financial services and HR. Let's take a break. When we come back, can you explain a little bit about what those are, and then let's get in the weeds a little bit about funding and how do people apply, and all of the logistics of actually taking one of these programs.

>> Absolutely.

>> We are on the screen today with Guy Curtis. He is Director of Marketing for Laurel Ridge Community College. Joining him is Dr. Craig Santicola. Craig is Dean of Professional Programs. We're going to talk about a couple of the new programs they have coming out when we come back in just a couple of

minutes.

>> This Saturday, Henry Mueller will change the world. He has no idea that's what he's going to do. He only knows that he went to justserved.org and signed up to spend time at a senior center Saturday morning. As he browsed through service opportunities in his own community, he remembered the words of Paul to the Galatians, "By love, serve one another." Little does Henry know that Saturday morning he'll end up speaking to one senior in particular who hasn't seen his family in several weeks, and is feeling especially lonely. Henry doesn't know the short time he'll spend with this man will lift his spirits, cheer his heart, and make his life just a little better through love and service. This Saturday, Henry Mueller will change the world. See the difference you can make. Sign up for service opportunities in your community. Visit justtserve.org.

>> Welcome back to the Valley today. I am your host, Janet Michael. We are on the screen today with Guy Curtis, he is Director of Marketing for Laurel Ridge Community College. Joining him is Dr. Craig Santicola. He is Dean of Professional Programs. Those programs are what we've been talking about. We got in the weeds somewhat on three of the five new programs that are available in the fall. The Craig, not just AI and robots and technology, you've got financial services, you've got HR. There are other new programs that you're releasing this fall as well.

>> Yeah, absolutely. Two of the new ones on the business side are the financial services career study certificate and the HR management career study certificate. Both of these were developed in alignment with needs in our region. We did some industry analysis and looked at our region. Both of these have above average growth potential in our service region, which is seven county area. Both of these are great opportunities for people that may be either a traditional college student coming in for the first time or these are also great add on certificates if somebody is already a professional and already has a degree and they may find themselves in a new job in HR, and they want to come and learn some concentrated info on the employee recruitment, selection, retention of employees, training and development, compensation models that would help them in that role as a new HR person. Both of these are 16 credit certificates but they also align with a degree, so you can actually take them as a standalone certificate, but if you're interested in getting an associate's degree, they align with those as well.

>> Which makes it nice from a financial perspective and from a time perspective, because you can do it at your own pace. If you're in HR, for example, and you're trolling the help wanted, so you're on indeed one day and you see this other position that you're thinking, man, I'd really love to do that but they require more education than what you have. This is great to just go get that nugget for now and then maybe start transferring it into an associate's once you've landed that job, maybe that company will pay for that.

>> Absolutely.

Absolutely. Again, these are fairly short term. There are six classes, so they can be done pretty quickly, and what we normally recommend with these certificates, we have them staggered over two semesters, so you can do three classes one semester, three classes the next semester, so it's not too much workload if you're already working. You can take these as a part time student and still though, knock it out relatively quickly, less than a year. Earn the career study certificate.

Guy Curtis Craig mentioned something a minute ago about doing the research for what's needed and what's in demand in our area. We talk about that fairly frequently on the show because there are very few programs or classes that are offered at Lower Ridge Community College. That some business or industry in the Seven County area hasn't come to you and said, we need more skilled labor in this particular thing. This is just part of the course with the college.

Yeah, absolutely. With professionals like Craig and others supporting our programs that are in need of the region. That's our goal of a community college, meeting the areas demand for a skilled and talented workforce. The state of Virginia and the Virginia Community College system has spoken to a few things that are specifically critically in demand, and the Craig is already hitting on a lot of those. Healthcare, manufacturing, skilled trades, information technology, all those high

demand areas is what a college is aiming to support and fulfill.

To be able to scale those programs more regionally across our service region, meeting those needs. That's the key in success as you're thinking about your next step, coming out of high school, or perhaps recertifying or rescaling retooling for the new career that you're pursuing. Our college meets those local and demand needs. If you think about return and investment, time and energy spent as well as opportunity to get a job right away, that's where the goal is of our college and how we support the programming locally. Absolutely Janet.

I feel like there's probably a larger market than most of us realize of people who retired a year ago, maybe during the pandemic and thought this was going to be the life they were living in retirement and realized that maybe they don't like their spouse as much as they thought they did and they don't want to spend that much time with them day in and day out or their board, or their income now has changed in some way and they worked in an office before and now they want to come back. But they're a little hesitant because they don't know what their skill sets are to do with these programs will be perfect for them.

It would be great. Whether it's a boredom situation at home or if you're looking to leverage the advanced technologies, we talked a lot about AI and how that's

supporting some change in a lot of different industries, specifically healthcare and manufacturing. Things are rapidly changing if you want to catch up to speed to it. I think I'm more of a glass half full a guy. I'm very optimistic about what AI can do, specifically in my role in marketing at the college. But I can't imagine how fun that could be for other different industries that are really leveraging it and benefiting it for the society as a whole. Like we're going to see some really cool things and we were mentioning all fair to what healthcare is doing with surgeries and other technologies to do things virtually as well as through automation and effort and so it's a scary thing, but I think we can embrace it. If you are bored at home or whatever it might be or if you're looking to just advance your career, these new programs coming to market later this summer are just going to be an awesome opportunity for those who want to take advantage.

How does that work, Registration wise, if somebody is listening today, when is the soonest that they could register and sign up? Or can they still come by the college in the next couple of weeks and say, look, I heard some of this on the radio, but I have a couple of questions and I'm not really sure this is right for me. What timeline are we looking at?

Those listeners is a little of a sneak preview, if you will. What's to come? Many of the programs will be actually advertised in our academic course catalog that's later going to be released in March. Our website will also be reflecting those updates and changes as well too. But if you are in the point where you're exploring and wanting to see a little bit more about these programs and wanted to reach out to perhaps a coach or someone who's on our front lines who could help you through some of that decision making. We definitely have a great team. I think we have four or five dedicated enrollment coaches. We call navigators, or career coach college coaches if you will. Dedicated right in the college itself that can support students who are looking to explore, figure out what's best for them and also help them point towards some of our financial opportunities. The college itself is just a third of the cost of an average four year college or university attending in Virginia. In other words, if you were to go to another four year institution or university in Virginia, or about a third of the cost. We're already affordable and we're right in your back door, right where you work and live to come to college. It's a great opportunity, but also we have a number of different funding solutions that are out there. Some programs are G-3 eligible, others are fast forward eligible. But scholarships, we give over \$400,000 worth of scholarships every year and other up to eight million or more annually in non loan financial aid. If you think about that, depending on your financial situation, we have coaches and staff that can help you navigate what those options are. But there are some scholarships that are on tap, but we do give away many. Every year you are coming up to a deadline to either inquire and if you become a student, you apply to the college and initially for some of these programs, April 1st is a deadline to apply for some of these scholarships up the priority deadline to get started. But we'll enroll students up until late August for that first start of the 14 week semester. But

anytime you can inquire when you're ready, we have coaches and staff to help you navigate the programs they have available, but also the funding options that are also out there.

You touched on something I think that is a huge misconception among the general public is I think everybody knows understands and appreciates that community colleges in general, particularly Laurel Ridge, is less expensive to attend. But I think with that knowledge comes the misconception so they must not offer scholarships and they must not do the same types of funding mechanisms that a four year university would do. That's just not the case. You have all of the same options, in some cases, more options than what a four year university would offer. Don't think that because it's less expensive out of the gate means you're not getting other options to make it even less expensive.

I think there's a lot of opportunity to know to the classroom size, the volume of curriculum that you're getting. Certainly the industry professionals who are teaching these courses, the faculty and staff that are supporting the program. I think the value is certainly there and of course, depending on your situation and the opportunities you have in front of you, I think you should know all your options. I think it's a lot of what society has probably left behind thinking I want to go to a four year, and sometimes that is the right path for a lot of folks who definitely want to add more to their degree and become a stackable, skilled, talented person for that workforce need. But otherwise, the college locally has so much to offer and the programs that are available, heck, we're award winning. We just got to recognize recently for those opportunities and so as a community college, one of the five for that particular award of bringing some great program opportunities that can help you in your current profession or profession you aspire to be into.

That's a good point guy is with the award, we were recognized because our students do a lot of hands on, we have a lot of applied engaging learning. They get to play with the robots and program them and see how they would be used in a business setting or in an industrial setting. They get to explore that professional level equipment and get that experience with it. Then when they do graduate, when they do finish the program, they have some things that they can put on their resume that, oh, I have experience with this and this, or I have this credential for the robotics, we have it aligned with an industry credential. When they graduate, they have things that they can put on their resume that will help set them apart from a lot of other people. That's one of the things that we're trying to be more cognizant of and provide very specific opportunities for our students to get those hands on experiences that set them apart from a very crowded applicant pool in a lot of cases.

Where can people go get more details for these programs, but for all of the different programs that you have at Laurel Ridge Community College?

The best place to visit is Laurel Ridge D U Ford Explorer. If you are looking to visit with us, we also have a page as well, Laura, which that DU Ford visit, or you can actually book a time to meet with a coach or take a tour of our campuses. They'll give you more details, information about the programs we have available. We also have a wonderful website too, as you explore and look at programs. Many of the programs have different Career Outlook widgets. I call them a website widget kind of thing. That opportunity allows you to see the career Outlook in some of these programs. What are the local jobs available? In some cases we do have some sponsored employers. We're posting directly to our career website. That's another tremendous resource students can learn, explore more, take a free career assessment, whether it's a six question or 60 question assessment tool and then also to use that tool to build a resume, as Craig talked, as they're working through our programs and developing their skill sets and building a resume, we actually have a fun tool that builds resumes for folks. If you are looking for another free resource besides our coaching staff, that Laurel Ridge career coach site is also a great resource to begin exploring, finding jobs, building a resume, taking assessments, and everything else.

Thank you both for taking some time to give me the rundown on these today. I may have to come back to college.

It's fun stuff to do.

It's something worth to consider with all this technology out there and how you do the radio show. It'd be great to put a skill set on top of it. Little credential or something.

Yeah, I want to get to where Craig is and have people have to call me doctor. But I think that's a whole lot longer of a process than just that.

Just I was like glutton for punishment and kept going to school.

Nice. I will be back tomorrow. It is a conversation with Jenny McDonald from the City of Winchester. There is a long list of things that are happening in Oldtown, Winchester, and across the city for black history month. There's a chocolate escape happening this weekend, where you get to walk around downtown and eat chocolate. Who wouldn't want to do that? She's going to give us all the details for that tomorrow. Just a few minutes afternoon.