

BLUEPRINT

THE APPLIED TECHNOLOGY, ADVANCED MANUFACTURING AND WORKFORCE NEWSLETTER FOR VANCE-GRANVILLE COMMUNITY COLLEGE
SUMMER/FALL 2019

INTRO TO WELDING

Beginning September 3, 2019
Tuesdays & Wednesdays
6-9:30 PM
Franklin County Campus Welding Lab

\$185.25 + Supplies (Approx. \$60)

www.vgcc.edu/coned/oex/

FILLING THE EMPLOYEE PIPELINE CLOSING THE SKILLS GAP

*Regional stakeholders
invited to explore
old and new methods
to drive economic
development*

Congratulations to our 2019 Applied Technology Graduates

Austin Finch (Welding) Edwards, Inc
Carrie Johnson (Welding) Air Clean Systems
Troy Little (Welding) Altec Industries
Xavier Eaton (Mechatronics) Dill
Christopher Long (Mechatronics) Sante Fe Natural Tobacco Co
Segun Folajin (Mechatronics) Certainteed



Vance-Granville Community College

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(252) 492-2061
www.vgcc.edu

Stay Connected With VGCC!



Vance-Granville Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Vance-Granville Community College. Vance-Granville Community College is an equal opportunity, affirmative action institution. The college serves all students regardless of race, creed, color, age, sex, national origin, or disabling conditions. Vance-Granville Community College is a Tobacco-Free College.

VGCC Career Training Pathways for the Future

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Hear That?
It's opportunity knocking. Open the door!



Industry Tech Tours Introducing future professionals to the trade

Summer has proved to be a hot time in and out of the welding lab. At the end of the term students submitted certification plates for examination by an outside inspector. Previously the night students achieved a 100% success rate. Not to be outdone this year's summer day students replicated the 100% pass rate on their certification tests. Our graduating students left the nest and began careers in welding. Industry partners continue to welcome VGCC graduates and look forward to turning them into welding professionals. For many this will be the first opportunity to showcase their skills. For continuing students, classes provide a time to hone their skills under the watchful and encouraging eye of our intrepid instructors Allen Tharrington and Rusty Pace. Although the instructional schedule is shortened and reduced in the summer, we encourage students to take advantage of the opportunity to secure experiential learning positions in the form of work-based learning or internship positions with local or regional partners.

Internship or work-based opportunities are vital to the VGCC effort to energize the employee pipeline. In addition to internships and work-based learning, our Tech Talk and Tech Tour program opportunities are specifically focused on exposing students to industry. The insightful opportunities are often the first time students are exposed to industry professionals or the work environments of the trade. Providing a platform for industry to explain who they are, and what the company and industry has to offer is

vital to attracting and developing a skilled professional workforce. We are proud to support opportunities for student access to our industry partners.

Altec Industries is a leading provider of products and services to the electric utility, telecommunications, tree care, lights and signs, and contractor markets. Edwards, Inc. a full-service industrial general contractor providing construction, fabrication, and crane services are two of our industry partners. Altec and Edwards Inc. hosted Tech-tours and Tech Talks previously. Both open their facilities to our students for a Tech Tour on April 23 and July 22 respectively. As VGCC supporters and industry leaders in their respective fields both provide valuable input to the welding program via technical support, curriculum advising, student exposure opportunities and job opportunities for qualified candidates. Several of our partners have donated high quality recycled material that we use to train students. We thank all of our partners who continue to support our students, program and instructors as we strive to be the best training partner for industry.

Pictured above left to right
1. Joel Lee of Edwards Inc tells students what it takes to work at Edwards. 2. Welding demo at Edwards. 3. Laura Brooks Hr-Specialist leads the tour at Altec. 4. Students in the break room at Altec pre Tour.





YOUTH APPRENTICE CONTRIBUTES TO THE BOTTOM LINE.

Although we have extolled the benefits of apprentices and continue to encourage our industry partners to give serious consideration to starting a program to address the skill gap and labor shortage, many still are unwilling to take the leap of faith. As early



Patrick Williams - Hr Director and Micah Peters

adopters of the youth apprenticeship program (NCTAP). Revlon has seen first-hand the growth and impact of their apprentices. During a meeting at

VGCC Shawn Nutter - Director of Controls and Project Engineering related how one of the apprentices impacted the Revlon operation.

Micah Peters now entering his third year in a four-year apprenticeship is a prime example of the benefits of this time-honored approach to training. After training with a more experienced technician, Micah was tasked to upgrade one of the Revlon labeling machines lines. The project required a complete rebuild of the labeling control system. Micah designed and built the electronic controls panel; programmed the programmable logic controller (PLC); and installed the system on the production line. The machine is running in production today putting labels on Revlon Colorsilk Hair Color products. Congratulations to Micah whose dedication, ingenuity and skill have improved the line performance, reliability, and uptime. Given the classroom educational and practical experiences that the apprentices receive, it is highly likely that we are witnessing the development of the next Revlon management team.

Editor's Corner

Why we do vs. What we do

Much discussion focuses on the "what" of education. How we do things, teaching methods, best practices, training and so forth. But it is our "why" that drives many of my colleagues daily. We prepare individuals for careers so they can take care of themselves, their families and guide them to discover how they want to interact with the world. For many of us the "why" drives the "what". Our focus on energizing the workforce pipeline is the perfect marriage between our "why" and our "what". In this issue we highlight activities focused on growing the workforce pipeline and initiatives designed to strengthen capacity.

In the spring we convened a focus group to test the viability of the Tooling U on-demand training platform developed by the Society of Mechanical Engineers. Our goal is to provide additional training resources to industry via an online, on-demand structure in conjunction with support from our continuing education department. Several of our partners have begun to utilize this resource with employees.

We have received the Gap Analysis commissioned from EMSI and are in the process of digesting the results. The analysis will help guide discussions of future college efforts. Members of our workforce team are pursuing new programming and initiatives in order to refine our "what" to better

accomplish our "why". We have applied for additional grants to support the workforce effort. Planning is underway to host a major employer summit (see page 6) to facilitate discussions, action items and regional collaboration focused on the workforce pipeline and training capacity.

Tackling the employee capacity problem is complex with many pressure points. Collaboration is the only avenue that maximizes the strengths and focus of all entities. We look forward to working with all of our workforce partners.

How to Start an Apprenticeship

Step 1

Contact Ken Wilson to set up an exploration meeting.
wilsonk@vgcc.edu - (252) 738-3259

Step 2

Meet w/VGCC team and The ApprenticeshipNC consultant to discuss business needs and options

Step 3

Gather job description(s) and develop apprenticeship plan with assistance from ApprenticeshipNC (4-6 weeks)

Step 4

Start apprenticeship

You're not blazing trails if you don't climb over obstacles and cut down a few trees!



MARS

SERVING EMPLOYEES, DEVELOPING CAREERS!

In the spring, Mars Petcare reached out to VGCC to examine ways the college could support employee development and training. Over several meetings the team worked to layout apprenticeships, essential skills training and leadership training options by working with a variety of college resources including curriculum, continuing education and customized training.

“Apprenticeships help businesses develop highly-skilled employees and a stable, reliable pipeline of qualified workers, and a reduction in turnover rates as 91% of apprentices that complete an apprenticeship are still employed nine months later”.

Mars has embarked on the development of multiple training and leadership pathways for new and current employees. Apprenticeship options will lead to credentials including degrees, state and Federal certifications. The Journey Worker certification awarded by the US Dept. Of Labor is recognized in all fifty states. The highly regarded certification can only

be obtained upon completion of a registered apprenticeship program and signifies that the awardee is competent and able to perform the functions related to his/her trade.

Apprentices demonstrate an increased productivity rate and reduce the cost of recruitment over traditional new hires. According to Department of Labor, apprenticeships help businesses develop highly-skilled employees and a stable, reliable pipeline

of qualified workers, and a reduction in turnover rates as 91% of apprentices that complete an apprenticeship are still employed nine months later. Longevity statistics support the assertion that apprentices remain with their companies at far greater rates than other hires. Additional benefits include: company designed training tailored to the specific needs of the business, knowledge transfer through on-the-job learning from experienced mentors combined with education courses resulting in highly-skilled employees. Workplace safety which is a major concern is enhanced due to the program’s emphasis on safety training. Apprenticeship programs establish the ground work for a systematic training approach that ensures employees are trained and certified to produce at the highest skill levels required for the occupation. Businesses may qualify for state tax credits available for apprenticeship program sponsors. Workforce systems and other community partners may also choose to contribute funding for training, supplies or other aspects of programs.

Mars is pursuing two apprenticeship options: Industrial Maintenance and Mechatronics technician. Based upon the employer agreements in place with our apprentice partners, we have designated several related program classes as “pre-apprenticeship”. Pre-apprenticeships are designed meet the basic qualifications for entry into an apprenticeship and help students succeed in an apprenticeship program. Pre apprenticeship designation will enable students and employers determine the “fit” for apprenticeship and energize the pipeline of students interested in securing apprenticeship placement with one of our industry partners. Pre-apprenticeships are designed to meet the basic qualifications for entry into an apprenticeship and help students succeed in an apprenticeship program.



VANCE-GRANVILLE



COMMUNITY COLLEGE

— Established 1969 —

UPCOMING 50TH EVENTS:

Inauguration of Rachel M. Desmarais, Ph.D.

Tuesday, August 6 at 2.00 p.m.

Civic Center

Community Wide Celebration

Wednesday, September 4 - 4:30 p.m. - 7:30 p.m.

Main Campus

(local chamber members, former employees, current employees, students)

Entertainment by

Liquid Pleasure

Food Truck Rodeo

For More Information, Contact:

Eddie Ferguson, Director of the Endowment Fund

fergusone@vgcc.edu, or (252) 738-3264

THE NEXT GENERATION VGCC SUMMER CAMP PROVIDES EXPOSURE TO TECHNOLOGY



“The goal of the camp is to expose teenagers to the many facets of robotics design which include, 3D modeling, programming, electronics, mechanical design, and safety.”

VGCC hosted its 2nd Annual Summer Robotics Institute held at South Campus in Creedmoor, NC - June 24th - 28th.

The camp serves high school students from Franklin, Granville, Vance, and Warren counties and beyond. Camp participants built and assembled robots using software, hand tools, hardware, wires, and electronic components. Students modeled a bracket for one of the sensors using Siemens Solid Edge software and used a 3D printer to fashion the part. The robot brain is built around the open-source Arduino micro controller roller board. Campers learned to program the Arduino to give the robot instructions to stop, start or move based on feedback from attached sensors. “The goal of the camp is to expose teenagers to the many facets of robotics design which include, 3D modeling, said Wesley Williams (Program Head Electronics Engineering Technology, Electronics Engineering Technology), who supervises the camp every year. In addition, campers programmed the robots to follow a line, detect an obstacle, or retreat from a source of light. At camp end, students competed against each other to see whose robot finished the obstacle course first.

“We want to generate a strong interest in the STEM career fields and robots. Additionally, we want students and parents to know that you can learn about robots right here at Vance-Granville.” said Williams. Every registered participant received a robot chassis kit, sensors and electronic parts, flash drive to store programs, and a T-shirt. The robotics camp will return again in June 2020 along with an additional STEM related camp that has yet to be determined. Any industry or educational partners interested in helping to plan next year’s camp is encouraged to contact Wesley Williams, Program Head of Engineering Technologies at VGCC. More information about the summer 2020 camps will be available in April 2020.

WELDING INSTRUCTORS PURSUE TRAINING

The welding department continues the pursuit of programmatic excellence. This summer instructor Luke Gravel earned the much coveted Certified Welding Inspector CWI® certification. The AWS Certified Welding Inspector credential is a national and internationally recognized certification that signifies excellence in the welding trade. Certified Welding Inspectors must pass a vision test and demonstrate with supporting documentation a combination of qualifying education and work experience. Luke joins Allen Tharrington and David Bullock as VGCC Certified Welding inspectors. The VGCC welding team continually strives to give students the best practical and educational exposure to



raise the proficiency of VGCC Welding students.

In addition to Luke’s success, Allen Tharrington received instruction to obtain his American Petroleum Institute (API) 1104 endorsement. The endorsement will facilitate more in depth instruction in pipeline welding for those students looking to enter the petroleum industry or other fields requiring pipe welding. Once secured, the endorsement will be added to his CWI certification.



THE ROBOTS HAVE ARRIVED!

VGCC adds Robotic Training to the Welding Curriculum

Robotic welding trainers arrived at the Franklin and Main campuses in June. The trainers will facilitate student exposure to the basics of robotic welding.

Robots and automation continue to make big impacts upon everyday life and the manufacturing industry. The continued growth of automation and robotics is highlighted by the recent expansion announcements in NC. ABB based in Switzerland has its US headquarters in Mebane. The company focused on Electrification, Industrial Automation, Motion,

and Robotics & Discrete Automation, recently announced an additional 40 million dollar investment and creation of 400 jobs at the facility.



The addition of robotic training into curriculum will increase the skills and capability of students entering an evolving manufacturing workplace. Exposure to robotic equipment will be integrated into both night and day programs.

Beginning in **September 2019** anyone interested in exploring welding can enroll in the “Intro to Welding” course offered at the Franklin county campus on Tuesdays and Wednesdays from 6 p.m. to 9:30 p.m. Upon completion, students who enroll in the curriculum can receive transfer credit toward the diploma or degree.



BUSINESS AND INDUSTRY REPRESENTATIVES
JOIN US FOR AN ENGAGING MORNING ON NOVEMBER 1, 2019!

Visit the link below to reserve your spot.

Help us chart the path forward to energize the workforce pipeline.

[Register Here!](#)



VGCC Business/Industry Connect 2019

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Sunrock of Butner, NC, an innovative construction materials supplier producing asphalt, concrete, aggregates & recycled materials, is looking forward and preparing for continued corporate growth. A long time supporter of VGCC, Sunrock has supported the Heavy Equipment Operator camp for the last several summers. Opportunities in the Heavy Equipment Operator (HEO) career are both lucrative and plentiful as growth and attrition have far outpaced supply. Predictions for future employment are bright. Thousands of positions will go unfilled unless steps are taken to address the shortfall.

The VGCC Heavy Equipment Operator camp provides exposure for individuals (male or female) looking to start a career. After evaluating the results of several camps and working with the VGCC team, Sunrock realized that students needed additional technical and essential skill development beyond the short duration training course in order to successfully transition into the career and add immediate value to operations. To address the training



need, Sunrock has turned to apprenticeship as a means of training employees. Working alongside VGCC and ApprenticeshipNC, Sunrock is currently developing two additional levels of Heavy Equipment Operator training for new, current and future employees. The proposed pathway will include a level one pre-apprenticeship and provide students a viable entry pathway to be considered for available apprenticeship spots.

Training will be comprehensive, combining classroom simulator and on the job training for individuals chosen to participate. As part of the regional outreach effort, Sunrock will work with the VGCC team to provide company and career information to our K-12 educational partners and students looking for a rewarding career option.

Information about Sunrock can be found by visiting www.Sunrock.com.

Other industry partners with HEO needs are encouraged to contact Ken Wilson at wilsonk@vgcc.edu - (252)738-3259 for information on becoming a partner.



VGCC ESSENTIAL SKILLS TRAINING

GET A JOB - KEEP A JOB
 ADVANCE YOUR CAREER

The lack of essential workplace skills is a primary factor that limits the success of new hires. Skills can be taught, but deficits in work ethic, communication and problem solving are a barrier to continued employment and career advancement. Vance-Granville Community College can help integrate essential workplace skills training into the hiring process or industry professional development plan. The main areas that encompass essential skills training are:

- Self-Assessment
- Self-Management
- Problem Solving
- Communication Skills
- Work Ethics/ Employer Awareness Skills

These courses can be taught in short 1-5 hour modules or all together in one 24 hour class depending on employer needs. Vance-Granville offers skill building through our Human Resources Development department. "Essential Skills, Get a Job and Keep a Job".