

Vol. 5, No. 3 | Fall 2012

Tech Quarterly

TQ

The Magazine of Forsyth Technical Community College

in this issue:

YEAR IN REVIEW

Community Collaborations

STUDENT VETS

Support on the Home Front

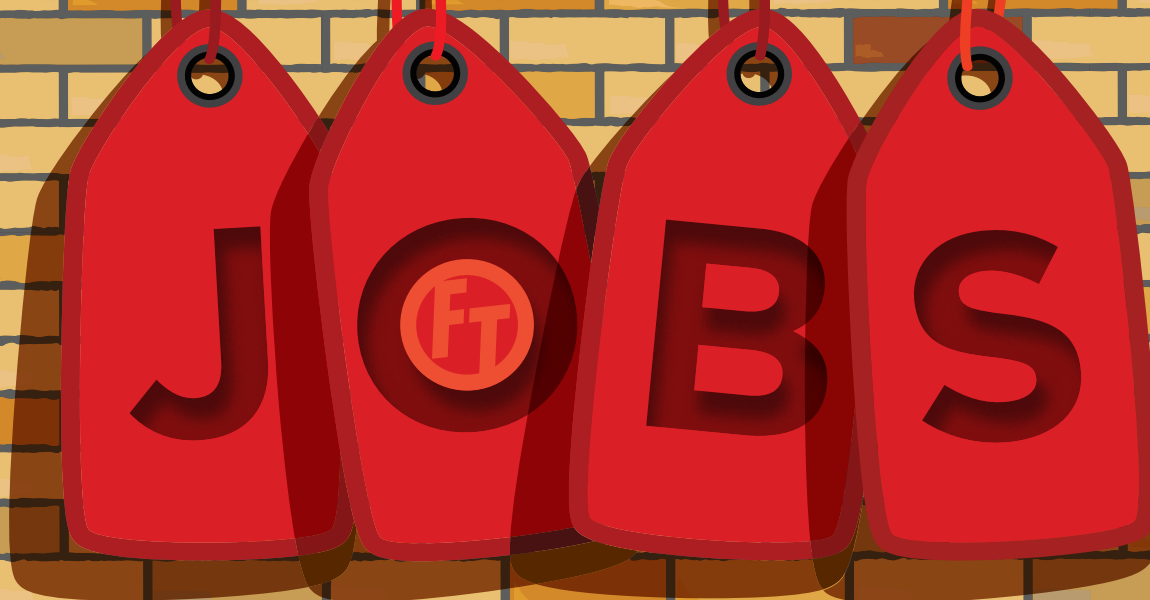
PASSION FOR SCIENCE

Combining Teaching and Research



Building Futures

FORSYTH TECH'S CONSTRUCTION TECHNOLOGY PROGRAMS LEAD THE WAY



ForsythTech

More Than You Know

Dr. Gary M. Green



Construction is truly the backbone of our community. Without it, we would have no homes, no factories, no hospitals or offices. And Forsyth Tech is proud to be the incubator for so many careers in this vital sector of our economy.

But the college aims to do much more than simply train people in these traditional trades. Of course, we relish our role in providing basic skills in plumbing, carpentry, heating and air conditioning, horticulture and electronics. But in each of these trades – as in so many other sectors – the true value of a worker comes not just with skills, but with innovation. All these trades have been affected by two important factors: environmentalism and technology.

From landscaping to plumbing to ventilation, all construction is now judged partly by environmental standards. It's not just a matter of trying to be better global citizens – although that's important – it's also a matter of economics. A greener building reduces costs by using less power and less water, creating less waste that's costly to dispose of. And in each of our programs, students are learning how to build in these values as they acquire new skills.

The skills may be traditional, but each of them is changing as technology takes a bigger role. Heating and cooling systems are now computer controlled. All designs, from landscaping to electronics, can be mapped and calculated by computer programs. And students can test themselves and their skills using online resources.

A tough economy has affected these trades in our region, but by staying abreast of these changes, our graduates are still in demand. Our outstanding faculty ensures that our programs remain flexible and responsive. One example: As new home construction falls off, more older structures are being renovated. Working with Habitat for Humanity, our students are helping to renovate houses in the Cherry Street neighborhood of Winston-Salem and gaining valuable experience in the process.

Many of the students in these programs are career changers, people seeking retraining to make themselves more employable. A significant number are also returning veterans, and you'll read in this issue about our efforts to welcome them to our campus.

These skills have formed a core component of the college's curriculum since its earliest days, and we're happy to note that they are still at the heart of our mission.



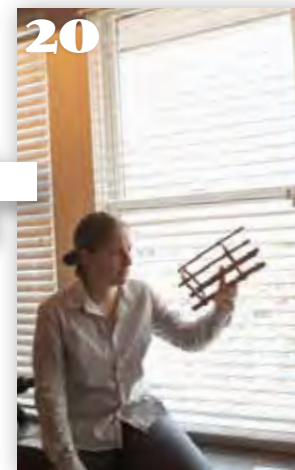
No matter where you look in the Triad, Forsyth Tech graduates are on the job.

On building sites, in homes and office buildings, in large industrial settings, they're maintaining electrical and ventilation systems, framing houses, designing and creating the landscape. Employers in the region know and trust the training Forsyth Tech provides, and after 50 years, these programs are still providing the key to solid careers.

Contents



18



20



28



32

2 Honor Roll

12 2012 Report to the Community

17 Why I Support Forsyth Tech: Elma Menius

18 Suited for Success

24 Who Works Here: TerCraig Edwards, Director, Mazie Woodruff Center

25 Who Goes Here: Chris Gillenwater, Biology Student

27 A Win for Bioscience

28 Take It From Tech: Eric Jones, Horticulture Program Director

Forsyth Tech is proud to be part of the North Carolina Community College System, with 58 institutions serving more than 800,000 students annually. North Carolina Community Colleges are creating success in our state by:

- Offering hope for a better future through vocational training and education
- Providing opportunity by making higher education available to all citizens
- Generating jobs by creating a skilled workforce for business and industry

For information about our "gainful employment" programs as defined by the Department of Education, please go to www.forsythtech.edu/gainfulemployment.

Forsyth Tech welcomes diversity and is dedicated to meeting the needs of students with disabilities, as mandated by the Americans with Disabilities Act. For more information, please contact Sarah Hawks, Coordinator, Disabilities Services Office, at 336.734.7155 or shawks@forsythtech.edu.

Forsyth Technical Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees, diplomas and certificates. Contact the Commission on Colleges at 1966 Southern Lane, Decatur, GA 30033-4097 or call 404.679.4500 with questions about the accreditation of Forsyth Technical Community College. The commission can be contacted to file a third-party comment during the time of the college's decennial review or to file a complaint if there is evidence appearing to support the college's noncompliance with a requirement or standard. All other inquiries about the college should be addressed directly to the college.



Vol. 5, Number 3 | Fall 2012

6 { On the Cover

From electronics to air conditioning, Forsyth Tech is training the people who literally build our community. In the process, the college is offering a pathway to enduring careers.

20 { Alumni Spotlight

DeEtta Famiano uses her training in architectural technologies to manage her own 3D building modeling firm – and hires other Forsyth Tech grads to support the booming business.

26 { A Passion for Science

Forsyth Tech faculty member Lucien Houenou makes his mark, both in the classroom and in the larger scientific community.

32 { Coming Home

For the many returning vets who choose Forsyth Tech to continue their education, the Student Veterans Association is there to help with the transition.

Where would Forsyth Tech be without friends like you?

You're justifiably proud of your community college. You've read stories – here and elsewhere – of the inspiring accomplishments of Forsyth Tech students and alumni. You know how employers of every kind look to Forsyth Tech for exactly the kind of skills training their organizations need to thrive and prosper. And the odds are excellent that people in your family, at your workplace and on your block have learned some of what they know at Forsyth Tech.

What you may not know is that the continuing excellence of your community college depends on the support of people like you. Gifts to Forsyth Tech through the Foundation go directly to the heart of what makes Forsyth Tech essential and excellent:

- > *Scholarships for deserving students*
- > *Technology for classrooms, labs and shops*
- > *Professional development grants for faculty and staff*

Can we count on you to be a friend? You'll find a donation form and an envelope bound into this issue of *Tech Quarterly* for your convenience, or you can give online at www.forsythtech.edu/support.

All of us at Forsyth Tech appreciate your contribution, in any amount. Every gift matters – More Than You Know!



We're Listening!

If you'd like to comment on anything in this issue of *Tech Quarterly*, we'd love to hear about it. You can email us at TQ@forsythtech.edu.



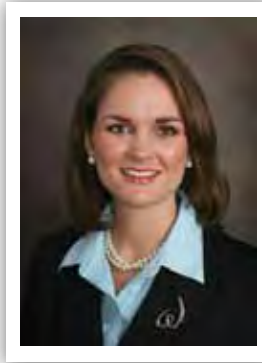
Ready for Takeoff

In October, 6 million airline passengers found Forsyth Tech in their seat pockets. The college was featured in the October issue of *US Airways Magazine*.

The two-page spread, appearing in the magazine's special destination supplement about Winston-Salem, touted the college's many achievements, noting that it "epitomizes the visionary, fast-moving, globally competitive workforce education that our country needs."

More Jobs for the Triad

Forsyth Tech joined a group of sponsors who helped with a project that will result in 340 new full-time jobs as Deere-Hitachi expands its operations with a \$97 million investment at its plant in Kernersville. Deere-Hitachi is one of the largest manufacturers and distributors of excavating equipment in the Americas. Average pay for the new jobs is expected to be \$42,102 plus benefits.



Welcome to Our New VP, Mamie Sutphin

We're happy to announce that Mamie McKinney Sutphin is our new vice president for Institutional Advancement and executive director of the Forsyth Tech Foundation.

Mamie comes to the college after 10 years with United Way of Forsyth County, most recently as Vice President for Resource Development. She says she has long admired Forsyth Tech's success in changing lives through education. "I believe education is the single most important factor in improving lives, both individually and for the community as a whole," she says. In her role with the Forsyth Tech Foundation, she hopes to expand opportunities for students in the Triad.

A native of Ararat, N.C., Mamie holds an MBA from Wake Forest University and earned her bachelor's degree in business administration from Meredith College in Raleigh.

Extreme Vehicle Makeover

"Is your career out of gas?" Not if Forsyth Tech has anything to do with it! You'll see this and other clever messages on Forsyth Tech's mail van and utility truck, which travel around Forsyth County almost every day. Both vehicles have been wrapped in transportation-related messages reflecting the college's widely recognizable brand. Turning vehicles into mobile billboards is just one of the creative ways the college is reminding our community that a Forsyth Tech education can get people on the road to a better future.



A Lifetime at Tech

It all started back in 1968, when a young Florence Owens, working at Forsyth Memorial Hospital, impressed a Forsyth Tech administrator so much that he asked her to come to the college to teach. She's been teaching at Forsyth Tech ever since, touching the lives of countless nursing students. Florence's contribution was recognized in September when Gov. Bev Perdue inducted her into the Order of the Longleaf Pine, one of the highest honors given to North Carolina residents. The award recognizes state employees who have given at least 30 years of exemplary service. In Florence's case, "exemplary service" means total dedication to her students. "I feel their pain; I feel their joys," she told *TQ* last spring. "I think of them as my children."



Forsyth Tech on npr

Forsyth Tech's profile has been raised significantly in recent months with attention from the national media. The college's president, Dr. Gary Green, was interviewed for two stories on the *National Public Radio* "Marketplace" program, highlighting the college's leading role in training workers for demanding high-tech jobs. Reporter David Gura singled out the college as a model of the right approach to education that leads to real jobs in today's challenging economy.

Dr. Green was also quoted in a *Bloomberg* news story about the mismatch between skills and the needs of employers in manufacturing, citing Caterpillar's use of in-house training. Forsyth Tech has partnered with Caterpillar to set up appropriate worker training, leading to high-paying jobs; but as Dr. Green points out in the story, many young people are not aware of these opportunities.

And in the *Daily Observer* of Liberia, an October article noted that Dr. Green, along with Liberian President Ellen Johnson Sirleaf, was inducted into the Community Leaders and Legends Hall of Fame of North Carolina. Forsyth Tech is now collaborating with Grand Bassa Community College in Buchanan, Liberia, on a range of technical support issues.

New Hope for Job Seekers

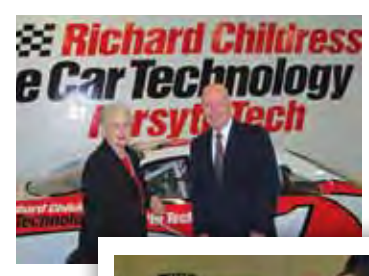
Forsyth Tech is one of three Triad community colleges chosen to participate in the North Carolina Back to Work job-training program. Through this partnership between the N.C. Community Colleges and the N.C. Department of Commerce, the long-term unemployed will receive job training or retraining, including employability skills training. Participants will earn Career Readiness Certificates and other industry recognized credentials.

Statewide, NC Back to Work funding totaling \$7 million (\$5 million state funded and \$2 million federally funded) will be divided among 16 participating colleges.

¡Excelencia!

Forsyth Tech has been named as one of the top educational institutions in the United States in granting certificates in science technologies to Latino students. The group Excelencia in Education published "Finding Your Workforce," a study of the top 25 institutions granting degrees to Latino students in 2009-2010. Forsyth Tech was among the top 25 community colleges in the country awarding science technologies certificates to Latino students – and North Carolina's community colleges ranked second in the United States in this category.





Start Your Engines!

The college showed off its new Transportation Technology Center on October 2 with an event that was part of the Winston-Salem Chamber of Commerce's Technology & Innovation Series. Present at the event were U.S. Representative Virginia Foxx; Chris Harvey, Technical Training Manager for Southeastern Toyota; and Joseph Sakowski of Snap-On Tools.

Mr. Harvey spoke about Toyota's partnership with Forsyth Tech. "We have to start with good people," he noted, adding that the program would ensure a supply of technicians for the 20 Toyota dealerships in the area. "The students get the necessary skills to get a job," Mr. Harvey said.



Keeping the Block A-Rockin'

Each September, Winston-Salem's downtown gets "all shook up" by the street festival known as Rock the Block. For the third consecutive year, Forsyth Tech sponsored the teen battle of the bands competition, aptly titled "Rock This!" After tallying votes from judges as well as the crowd, Eddie Waddell, Forsyth Tech's director of Recruitment and Student Support Services, presented the winning band, The N.O.R.M., with the \$500 grand prize. The perfect weather and new location – Winston Square Park – contributed to a large turnout and gave Forsyth Tech the opportunity to connect with many high school students and their parents about what the college has to offer.

New Nurses Hit the Street



The new Licensed Practical Nurse program in Stokes County came of age this spring with the graduation of its first class. All nine new graduates passed their NCLEX examinations, administered by the National Council of State Boards of Nursing. Better yet, according to Sharon Moore, Department Chair of Practical Nursing, all now have jobs – and two of the new graduates have gone on to enroll in registered nursing programs. Congratulations to all!



A Therapeutic Achievement

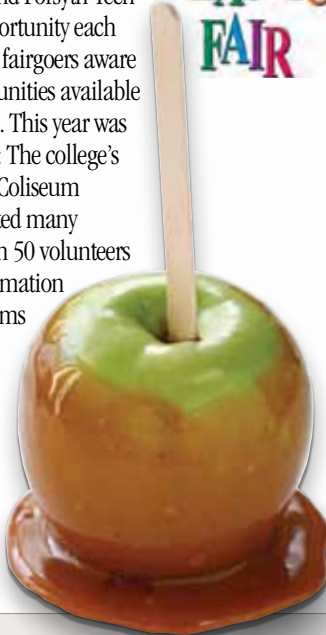
Forsyth Tech's Massage Therapy program is recognized throughout the region as a superior training ground. Now its program director, Kim Moore, has led an effort toward statewide recognition of the profession.

The result: This fall, Gov. Bev Perdue proclaimed September 30 through October 6 as Massage Therapy Week in North Carolina, acknowledging the health benefits of massage therapy. In her proclamation, the governor noted that "a growing body of research confirms that massage therapy can have a significant impact on overall health."



All's Fair

The annual Dixie Classic Fair is a Winston-Salem institution, and Forsyth Tech takes the opportunity each year to make fairgoers aware of the opportunities available at the college. This year was no exception: The college's booth in the Coliseum annex attracted many fairgoers, with 50 volunteers sharing information about programs and courses.



Accreditation Reaffirmation



Every 5-10 years, our regional accreditor, the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) reviews all colleges in the southern region to ensure the institution (1) has a mission appropriate to higher education, (2) has resources, programs, and services sufficient to accomplish and sustain that mission, and (3) maintains clearly specified educational objectives that are consistent with its mission and appropriate to the degrees it offers, and that indicate whether it is successful in achieving its stated objectives.

An eight-member team comprised of peers from institutions similar to Forsyth Tech outside of N.C. provided an on-site intensive informed review of our processes, policies and programs as well as our institutional quality enhancement plan, Information Literacy. This plan will be carried out over the next five years and is expected to have transformative effects on our students and institution.

The final decision regarding our Reaffirmation will be announced by the SACSCOC Board of Trustees in June 2013.

Bringing Down the House

The Forsyth Tech "Star Catchers" name says it all. These compensatory education students have truly caught on to something spectacular. Six years ago, Paul Kindley and Kristine Jonczak founded the program and soon discovered a life-changing outlet for students – performing song-and-dance routines. Focusing on arts-based education has proved to be a valuable tool in building confidence in these special-needs adults.

The group has become quite the crowd-pleaser with its moving shows. Gov. Bev Perdue agrees that these performers have special star quality – the group has been invited to perform for the governor three times. Their most recent performance included a July 4th program, which delighted audiences on Independence Day at the Capitol in Raleigh.

You can view the Star Catchers' July 4th performance and an overview video by going to YouTube and searching for "Forsyth Tech Star Catchers."



Main Campus Expands

Next door to Bob Greene Hall, on the Main Campus, a remarkable transformation has been taking place. January 2013 will mark the long-awaited phase-one opening of the college's expansion into the Winston-Salem/Forsyth County school system's former Career Center. The 90,000-square-foot renovated space will include a new home for the Broadcast Technology program – including radio and television studios – along with computer labs, faculty offices and classrooms. The second phase of renovations, totaling an additional 214,000 square feet of space, is scheduled to open in 2015.

Constructing a Future

Forsyth Tech's Construction Technology Programs Build Up the Triad

When Robert Ruefenacht maxed out his 99 weeks of unemployment without finding a new job, he knew it was time for Plan B. Problem was, he had no Plan B.

Laid off after 13 years in the chemical industry in Greensboro, including two and a half years in management, Rob Ruefenacht already had a bachelor's degree. But he couldn't find a job in his area of expertise, and his resources were running out. It was time to think about retraining.

"I have a son who's a factory-certified Honda technician," Rob says, "and we had serious discussions about opening an auto shop, but I couldn't justify the expense."

A methodical guy, Rob ran the numbers, seeking to find the quickest, least expensive route to job security. He settled on plumbing. "You can get in, get your education in a reasonable amount of time, get one year of work experience and be eligible to open your own business," he observes.

"My son is going to have to spend \$100,000 on tools for his auto shop," he points out. "With plumbing, I could invest \$2,000 or less. I don't have 20 years to get up to speed. And I'm a pay-as-you-go guy; I'm not into taking on a lot of debt at this point in my life."

Then, in a similarly methodical fashion, Rob started looking at plumbing programs in local community colleges. "I talked to instructors in different programs," he relates. One of those was Matthew (Matt) Beverly, the program coordinator for Plumbing Technology at Forsyth Tech. Rob liked Matt's approach right away.

Despite the long commute (from Summerfield), Rob enrolled at Forsyth Tech. It's been a life-changing decision.

Plumbing Technology instructor Matthew Beverly (left) guides a student on plumbing best practices.



Students in the Plumbing Technology program. Statistics indicate a shortage of qualified plumbers at both state and national levels.

"Matt is definitely among the best teachers anywhere," Rob asserts. "He knows what he's talking about. He wants it done right, not just up to code. Code is the minimum – he wants a little bit more."

Rob notes that Matt has to deal with different levels of knowledge among his students. "Some students already have some skills," he notes. "Some have none. He's patient and positive. It makes it worth the commute."

Students Are Serious

Matt himself is a product of Forsyth Tech; in fact, he has a similar story to tell. A maintenance technician at US Airways, he was laid off in the early 2000s. "I needed a trade," he remembers. "I knew office work was not for me – I like to be out doing stuff."

He was also in a hurry. "It was January. The only trade program you could come into at the beginning of the year was plumbing. I said, 'Sign me up!' It's worked out really well." Matt operates his own plumbing business on the side, but he clearly relishes his educational role.

He particularly enjoys teaching students like Rob who are retraining. "They're really motivated," he observes. "Their attitude is, 'I've got to make this work.' They have bills to pay; they're serious."

Matt's observation holds true for all the Construction Technology programs at the college.

A large component of each program's enrollment is made up of career changers or mature students looking for a route to a secure career.

A visit to an electronics class on the Main Campus reveals a group of students of all ages, learning the basics of electrical theory and the details of the National Electrical Code.

Rob Ruefenacht, retraining for a new career in plumbing, is highly motivated and serious about his success in Plumbing Technology.





Electrical/Electronics Technology instructor David Ray (center) ensures that classrooms at Forsyth Tech reflect real-life situations.

David Ray, program coordinator for Electrical/Electronics Technology, explains that most of his students will be aiming for industrial jobs.

“Those are the main folks who are hiring,” he notes. “It’s tougher in residential markets now, but commercial renovation is doing OK.” The depressed real estate market has made the job market tighter, he admits, “but if they’re willing to travel, a guy with electronic and industrial experience can get a job.”

David encourages his students to broaden their skill sets. “If they can learn electronics, plumbing, carpentry, HVAC, welding, hydraulics and pneumatics now, they’ll be ready when the economy picks up.”

Getting Technical



Technology has played a bigger role in the field, David says, just within the past five years. “A lot of electronic systems are now computer controlled,” he points out. “A plant manager can now control lights, HVAC and security from a smartphone.”

It’s a similar story with the Air Conditioning, Heating and Refrigeration programs. Program Coordinator Dwight Cornelison says computer programs now run many industrial buildings’ systems. Some will have heat sensors in the ductwork.

In fact, upgrading those systems presents opportunities for the program’s graduates. “Our industry is in transition,” Dwight observes. “There’s encouragement from government to move toward green technologies.” There’s also a move toward replacing the older refrigerants with new, non-ozone-depleting refrigerants.



No matter what the economy does, equipment needs to be maintained and serviced.”

Dwight Cornelison
Program Coordinator
Air Conditioning
Heating
Refrigeration



Air Conditioning, Heating and Refrigeration Technology graduates often specialize in either installation or maintenance and repair, although they are trained to do both, according to HVAC instructor Dwight Cornelison (left).



Going Green

It might seem like an odd fit at first, but the college’s Horticulture program also falls under Construction Technologies. But many of the program’s graduates, according to Program Coordinator Eric Jones, go on to work in landscape maintenance. “There are multiple routes a graduate can take,” he maintains. “Many start their own business, either in landscape maintenance or in nursery production, running a greenhouse.”

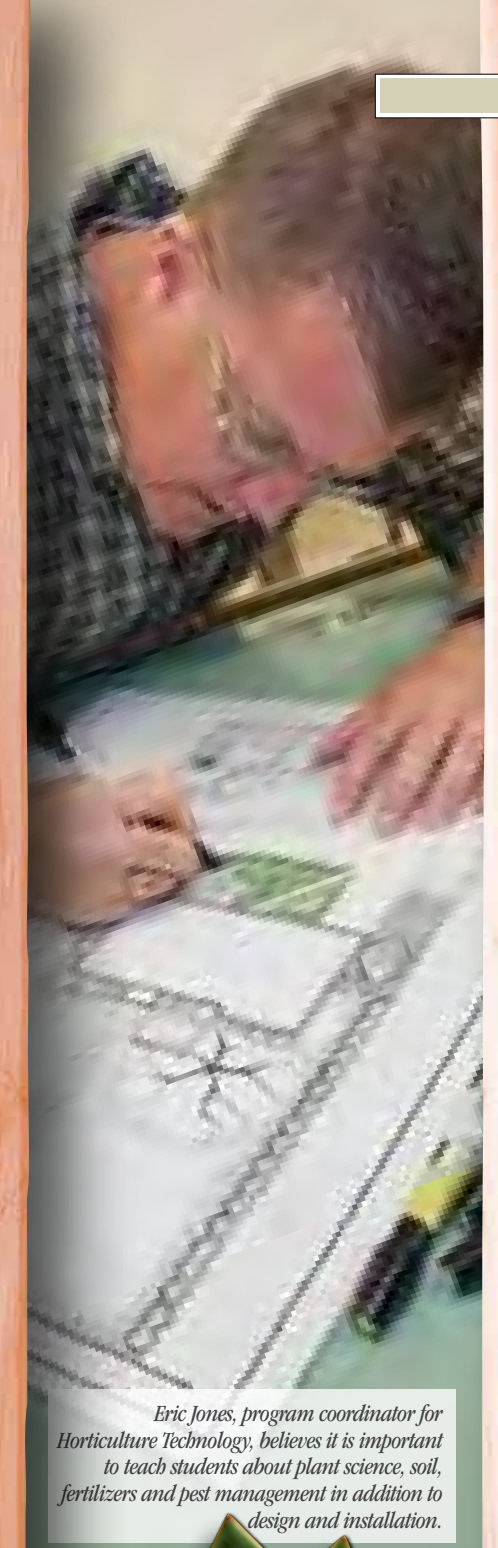
The economy has impacted the business, Eric says, but **“Our students have been blessed to find good jobs. Many of our students are already in the business. They come here to expand on what they’ve learned.”**

It’s an attractive option for career changers, Eric says, because they like having a job that’s varied and allows them to work outdoors. “We do something different every day,” he observes.

Eric grew up in the business and still lives on his family’s farm north of Winston-Salem. He notes that new trends for growing specialty crops provide an opportunity in the field. “My dad grows two acres of strawberries,” he points out.



Eric Jones, program coordinator for Horticulture Technology, believes it is important to teach students about plant science, soil, fertilizers and pest management in addition to design and installation.



Partnering with Employers

For many students in the construction programs, the goal is a job with the Triad's larger employers. The college has a close relationship with these firms, placing their executives on advisory boards that check in regularly to make sure Forsyth Tech's programs are meeting their needs.

And it's working, according to Ed Welch. Mr. Welch, who also serves as chair of the college's board of trustees and member of the Foundation Board, is president of IL Long Construction, a major employer in the Triad. "Forsyth Tech is always proactive and responsive to the needs of our firm," he asserts.

"They make sure they are educating and training the best-quality work-force available."



Carpentry students work with wood, building structures, installing fixtures and much, much more.

"Our experience with graduates of the Construction Technologies programs has been very positive," echoes Jason Mitchell, IL Long's senior project engineer. "Graduates are prepared for their assignments, skilled in their trades and proficient in accomplishing their tasks while adhering to strict safety standards. It's obvious that they have been well trained, not only in the technical aspects of their selected trades, but they are well prepared to meet the demands of rigorous schedules and high productivity while maintaining very high professional standards."

It's not just a matter of good training in specific trades, according to Mr. Welch. "Forsyth Tech's graduates are not just trained in the various codes and in theory," he notes. "They have gone through a comprehensive educational process. They have to be effective communicators; they have to have math and science skills."

The college's graduates are also safety conscious and environmentally aware, he adds. "Forsyth Tech is constantly looking for ways we can protect our environment, to make sure we're being responsible citizens."

Finally, Mr. Mitchell points out, the college fills a valuable role in preparing students for changes in the economy. Cross-training in a number of skill sets can make all the difference, he believes. "As local, national and world economies become increasingly service-oriented and technologically advanced, the need to maintain, upgrade and adjust skill sets will be critical. The ability for employees to be talented and trained with multiple skills and trades, or cross-trained, is a significant advantage," he advises.

The college, he believes, is doing just that. "Cross-training and retraining of highly qualified employees who are changing careers because of economic shifts in industry in the Triad is a significant market for Forsyth Tech — and they have established themselves as the leader in this educational endeavor."



Lending a hand is Carpentry Program Coordinator Justin Draughn (top). Students work on nearly every area of Habitat home construction... both inside and out... as part of their field training.

"Forsyth Tech has been working with Habitat as long as Habitat has been in Winston-Salem. I'm pretty sure we've built more houses than any college in the country."

Justin Draughn
Program Coordinator
Carpentry

Partnership for Humanity

To talk to a visitor, Justin Draughn has to climb down from the roof. On a sunny fall morning, Justin's students in Forsyth Tech's Carpentry program are swarming all over a half-built house in a Kernersville subdivision.

As his students hammer away in the background, Justin explains the college's partnership with Habitat for Humanity. "We've been working here in Smith Farms for three years," he says. "We've built three houses, and we've worked on six." A casual observer could not tell the difference between the Habitat houses and the others along the suburban streets, he points out. They are designed to fit in with the existing community.


That community would be in trouble without the efforts of Habitat for Humanity and the Forsyth Tech students. The original contractor went bankrupt, leaving a scattering of vacant lots. Habitat for Humanity was able to acquire the vacant land, and began filling in the gaps with attractive houses. Today, Justin's carpentry students put up siding, while Matthew Beverly's Plumbing students install piping in the house's bathroom.

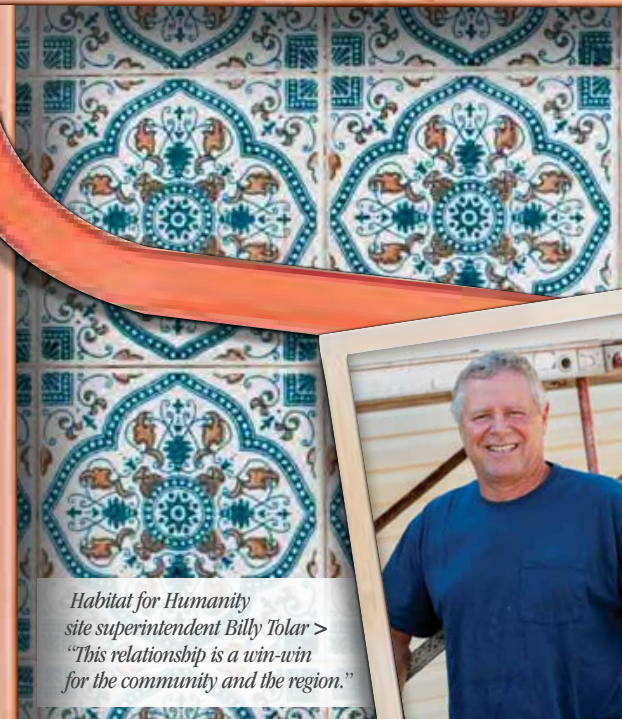
"It's great for us, and it's great for the students," Justin maintains. "I'm not having to go out and search for work for them."

Billy Tolar agrees. The site superintendent for Habitat for Humanity in Forsyth County, he is responsible for all the organization's construction in the Winston-Salem area.

"It's a great relationship," he says. "Forsyth Tech students get to learn outside the classroom, and there are huge benefits for us." Mr. Tolar points out that in good weather, the organization doesn't lack for volunteers. But many don't come out in the hot weather or in the cold winter months.

"Forsyth Tech undergirds us when the numbers go down or when we're in a crunch," he says.

Habitat for Humanity is also getting into the renovation business, rehabbing older housing in the Cherry Street neighborhood in Winston-Salem. Justin points out that as the housing market experiences hard times, renovation becomes more popular. His students will get valuable experience with these projects. 



Habitat for Humanity site superintendent Billy Tolar > "This relationship is a win-win for the community and the region."



Students build camaraderie while perfecting their carpentry skills during a siding project on the Habitat house.

2012 Report to the Community: A Continuum of Cooperation

A glance at the significant achievements of Forsyth Tech over the past year – or any year – is a fast lesson in the vast benefits of partnerships. Over and over, your community college collaborates with the Winston-Salem/ Forsyth County Schools, the Winston-Salem Chamber of Commerce, our local universities and dozens upon dozens of employers to benefit thousands of individuals. For elementary school children through middle-aged career changers, cooperative ventures pave the way to a rewarding future – and frequently become models for the nation.

GIMME 5IVE

Every year, Forsyth Tech adds new degree, diploma and certificate programs, always in line with what local employers need in the way of knowledge and skills. New this fall:

Associate in Fine Arts degree

Radio Broadcasting and Production
Technology associate degree

Television Broadcasting and
Production Technology diploma

Business Administration
Human Resources certificate

Medical Office Administration
Medical Transcription diploma

ForsythTech

JAMES A. ROUSSEAU II MINORITY MALE MENTORING UNLOCKING THE POSSIBILITIES

The Force of Encouragement

Forsyth Tech is gaining a reputation for creating programs and events that become models for other community colleges. One such venture is Eminent Force, an initiative aimed at recruiting and retaining minority male students.

With a grant from the Winston-Salem Foundation to provide scholarships, the James A. Rousseau II Minority Male Mentoring Program worked with three local high schools to identify minority male students who would be likely to succeed in college, but who were unlikely to be planning to go to college. For the first phase of Eminent Force, 10 young men were selected. After a formal induction at the end of the school year, they spent a week on the Main Campus over the summer preparing to take placement tests and generally being oriented to the new world of college. A powerful part of the summer program was a ropes course experience designed to create a cohesive and mutually supportive group.

As of mid-semester, all 10 were still at Forsyth Tech, receiving ongoing encouragement and support services from the Minority Male Mentoring Program. "It's hard for them to believe they're here," said Greg Young, the program director. These are young people who never expected to be able to attend college, and who are now learning about the good jobs and the strong career paths that will be open to them with an associate degree.

A second group is being recruited now, and it's highly likely that Eminent Force will be a model for other Minority Male Mentoring Programs, of which there are 43 in the state.

Global Connections

Professional Development, International Style



Summer 2012 saw delegations from China and Belarus spending lengthy stays at Forsyth Tech. A delegation of 10 faculty members from Zilang Vocational and Technical College visited from May to July. They learned about teaching information technology, business and global logistics in one-to-one peer mentoring by Forsyth Tech instructors. The delegates were also introduced to setting up online courses, as Zilang so far has no online course offerings.

Forsyth Tech continued its relationship with Belarus in welcoming a delegation of 10 Belarusian arts professionals who were touring the state in July. That country's rich artistic and cultural tradition was essentially devastated when Belarus was under Soviet rule, and a new generation of creative people is looking for ways to express their ideas and promote their art. The delegation included people who work in film, the performing arts, television and radio among others, and they visited both Forsyth Tech and the UNC School of the Arts through a program of the U.S. Agency for International Development called Community Connections.

Training the Trainers – in Liberia

Not only do Forsyth Tech students have opportunities for travel to other countries, faculty members are also taking their teaching skills overseas. Forsyth Tech has entered into a partnership with Grand Bassa Community College in Liberia. That college, which is about five years old, received a grant from the World Bank for building capacity. That will involve having students learn construction skills, business skills and computer skills to build up Liberia's infrastructure. Forsyth Tech will provide course syllabi and will send faculty members to Liberia to help train the instructors in various disciplines.



A HIGHLAND FLING: OVER THE PAST SEVERAL YEARS, FORSYTH TECH HAS BEEN BUILDING UP AN IMPRESSIVE ARRAY OF FORMAL RELATIONSHIPS WITH COLLEGES AND UNIVERSITIES IN OTHER PARTS OF THE WORLD. NOT LONG AGO, THE UNIVERSITY OF DUNDEE IN SCOTLAND, RANKED AMONG THE TOP 200 UNIVERSITIES IN THE ENTIRE WORLD, APPROACHED FORSYTH TECH ABOUT BECOMING ITS FIRST COMMUNITY COLLEGE PARTNER. NOW, THE ARTICULATION AGREEMENT HAS BEEN SIGNED, AND STUDENTS FROM EITHER COLLEGE MAY GO ABROAD, TAKE COURSES AND RECEIVE CREDIT FROM THE OTHER INSTITUTION.



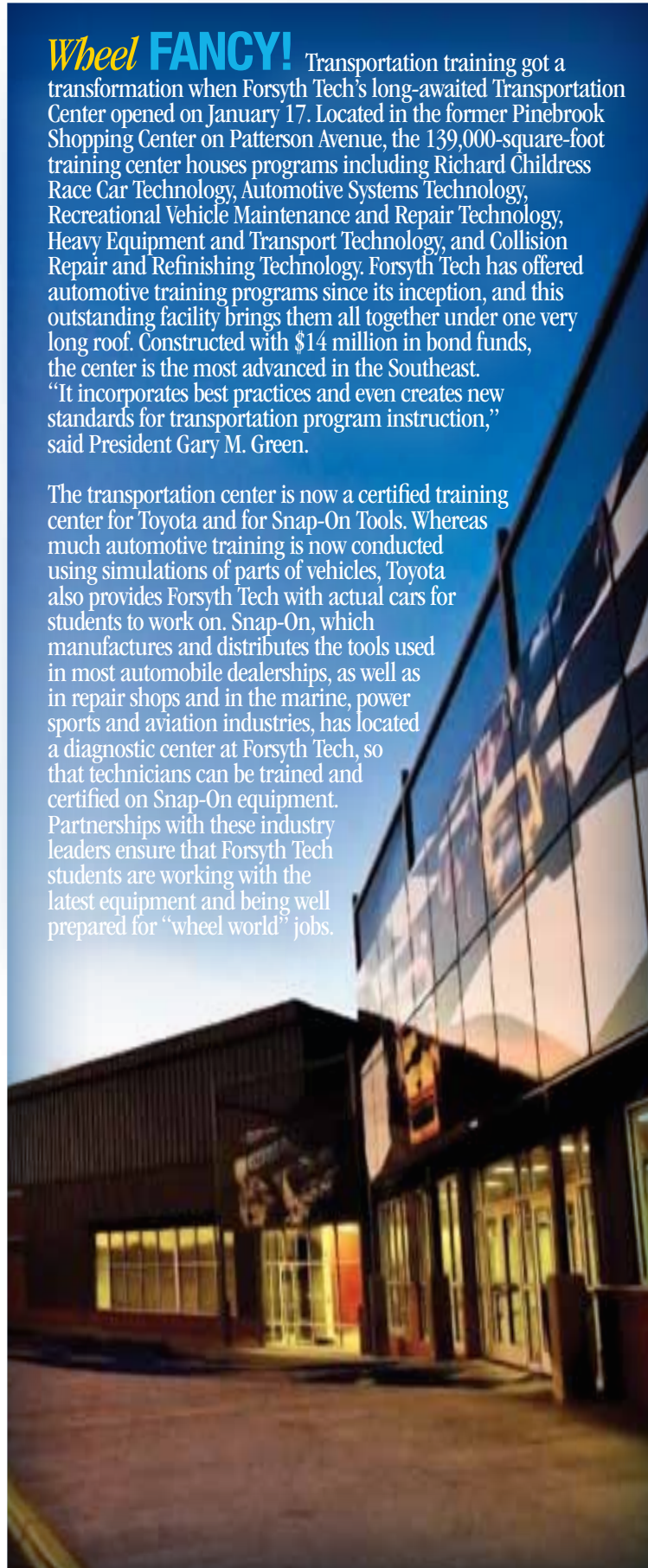
And the Envelope, Please

Forsyth Tech earned many awards, honors and accreditation over the past year. Among them:

- **The National Association of Career Pathways Leaders** awarded its National Award for "Tech Prep/Career Pathways" to the Forsyth Tech "Tech Prep Consortium" for its work with high school students. The Construction Trades Council, which included the Winston-Salem Chamber of Commerce, Forsyth Tech, the Winston-Salem/Forsyth County Schools and more than 48 employers, held a Career Fair in spring 2012, which drew more than 3,500 high school students, and made them aware of the many, many careers in the construction trades and of the local companies that have jobs just waiting for people with the right skills.
- **A team of three Forsyth Tech students took top honors** in the prestigious Natural Talent Design Competition held in Raleigh in April. Architecture student Tony Alonso and Interior Design students Brittany Frenette and Renate Grose designed a teen center for the Boys and Girls Clubs of Wake County, using what they had learned at Forsyth Tech about integrated design, sustainability, innovation and social consciousness. Forsyth Tech students have entered this competition, which includes teams from four-year universities, for the past 13 years. This was the first time a Forsyth Tech team took home first prize.
- **Forsyth Tech's Pharmacy Technology program**, which was started in 2008 in response to a need expressed by hospitals in the area, received national accreditation from the American Society of Health System Pharmacists. It's the first program in the state to earn this accreditation. People who earn this degree can become technicians who do some of the more routine work that has been done by hospital pharmacists.
- **Forsyth Tech Broadcasting and Technology students** Samantha Sharp and John Reece won first place in the national Audio/Radio competition at the Skills USA 2012 National Leadership and Skills Conference. The competition drew 28 teams from across the country, and was held in June in Kansas City.
- **Forsyth Tech was host to the inaugural Robot Run 2011 Invitational Tournament in December.** More than 200 children in teams from middle schools and one elementary school gathered on the West Campus for a tournament that stressed teamwork, technology and problem-solving skills. Organized by the Technology Council of the Winston-Salem Chamber of Commerce and sponsored by local businesses, the tournament has become a model for such collaborative competitions around the state. **This just in – the Robot Run won the 2012 Employer Partnership Recognition National Award from the National Association of Career Pathways Leaders.**

Wheel FANCY! Transportation training got a transformation when Forsyth Tech's long-awaited Transportation Center opened on January 17. Located in the former Pinebrook Shopping Center on Patterson Avenue, the 139,000-square-foot training center houses programs including Richard Childress Race Car Technology, Automotive Systems Technology, Recreational Vehicle Maintenance and Repair Technology, Heavy Equipment and Transport Technology, and Collision Repair and Refinishing Technology. Forsyth Tech has offered automotive training programs since its inception, and this outstanding facility brings them all together under one very long roof. Constructed with \$14 million in bond funds, the center is the most advanced in the Southeast. "It incorporates best practices and even creates new standards for transportation program instruction," said President Gary M. Green.

The transportation center is now a certified training center for Toyota and for Snap-On Tools. Whereas much automotive training is now conducted using simulations of parts of vehicles, Toyota also provides Forsyth Tech with actual cars for students to work on. Snap-On, which manufactures and distributes the tools used in most automobile dealerships, as well as in repair shops and in the marine, power sports and aviation industries, has located a diagnostic center at Forsyth Tech, so that technicians can be trained and certified on Snap-On equipment. Partnerships with these industry leaders ensure that Forsyth Tech students are working with the latest equipment and being well prepared for "wheel world" jobs.



15 MINUTES OF FAME? NOT FOR KATHY.

REMEMBER WHEN FORSYTH TECH STUDENT KATHY PROCTOR EXCLAIMED "THAT'S ME!" FROM HER SEAT IN THE AUDIENCE DURING THE 2011 STATE OF THE UNION ADDRESS? WHEN PRESIDENT OBAMA REFERRED TO HER BY NAME, CAMERAS CAUGHT HER LOOK OF AMAZEMENT AND BROADCAST IT FOR ALL THE WORLD TO SEE.

THE STORY OF HOW KATHY, WHO HAD WORKED IN THE FURNITURE INDUSTRY SINCE AGE 18, WAS PURSUING A DEGREE IN BIOTECHNOLOGY IN HER MID-50S WAS A POWERFUL TESTAMENT TO THE ROLE COMMUNITY COLLEGES ARE PLAYING IN THE CHANGING ECONOMY AND IN INDIVIDUAL LIVES.

SO IT WAS NOT TERRIBLY SURPRISING THAT ONE YEAR LATER, ON THE DAY OF THE 2012 STATE OF THE UNION ADDRESS, *CNN* TRACKED KATHY DOWN FOR AN ON-AIR UPDATE. THE NEWS WAS ALL GOOD. KATHY GOT HER DEGREE AND GOT A JOB IN QUALITY CONTROL AT A HEALTH PRODUCT COMPANY IN LEXINGTON. SHE ALSO TOLD *CNN* THAT HER TWIN DAUGHTERS HAD GRADUATED FROM HIGH SCHOOL AND WERE BOTH ENROLLED IN COLLEGE. AND SHE LET THE WORLD KNOW THAT SHE STAYS IN TOUCH WITH HER ALMA MATER, AS A VOLUNTEER WITH FORSYTH TECH'S MATH AND SCIENCE TECHNOLOGY CLUB.

Lab Coats Required

Giving kids a real taste of what they might want to be when they grow up requires a cooperative effort. In the case of Triad BioSummer, the partners are Forsyth Tech, the Winston-Salem / Forsyth County Schools and the Winston-Salem Chamber of Commerce, along with sponsorship from several local businesses. Here, high school and middle school students who are interested in science get real-world exposure to the kinds of work that might be waiting for them, like stem cell research, pharmaceutical development, forensics and bioethics.

In June 2012, Triad BioSummer was housed at Forsyth Tech for the first time. Twenty high school students and 18 middle school students were selected for weeklong workshops. They performed experiments in Forsyth Tech's state-of-the-art labs under the direction of some of the college's faculty members along with three



high school teachers and four recent high school graduates who acted as coaches. They took field trips, listened to scientists and entrepreneurs and worked up team projects, which they presented at a luncheon on the last day of the week.



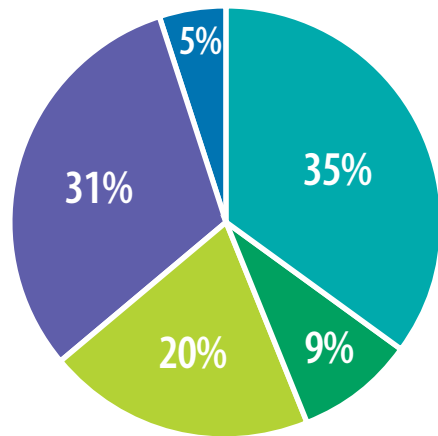
Rise

What Makes a Resume to the Top?

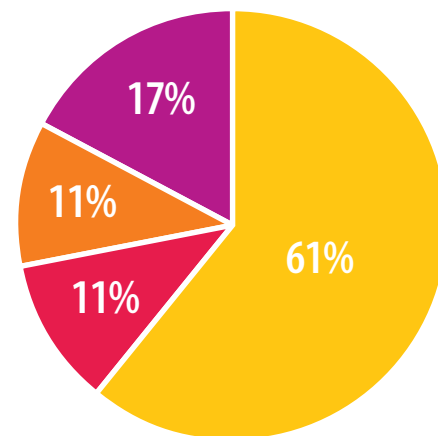
Increasingly, what separates the ready to work from the rest is certification. Many industries now require or prefer to hire people who have passed national exams that attest to their proficiency in a particular field. Forsyth Tech is responding to that trend by enabling students to obtain certification before they graduate.

This year, certification from Microsoft, Cisco and other big players became more accessible for information technology students. Until recently, students had to go to a testing center in Greensboro. In July, the Davis iTEC Testing Center on the Main Campus opened, after months of planning and preparation. It is the only such center in Forsyth County, and in January it will be open to employees of local businesses.

Forsyth Tech Community College
Revenues and Expenditures
For the Fiscal Year Ended June 30, 2012

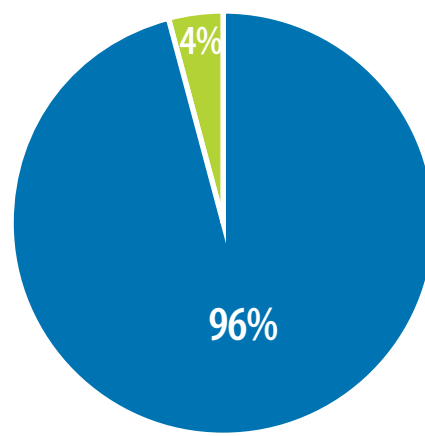


Revenues	Dollar Amount	%
State	31,357,568	35%
Tuition	8,358,341	9%
County	18,167,753	20%
Grants	27,077,375	31%
Other	4,064,237	5%
Total Operating Revenues	89,025,274	100%

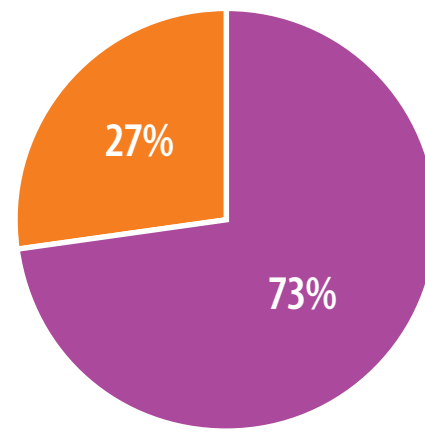


Expenses	Dollar Amount	%
Instruction and Support	47,793,292	61%
Auxiliary Enterprises	8,770,694	11%
Physical Plant Operations	8,844,073	11%
Student Service & Financial Aid	12,761,089	17%
Total Operating Expenses	78,169,148	100%

Forsyth Tech Foundation
Revenues and Expenditures
For the Fiscal Year Ended June 30, 2012



Revenues and Other Sources	Dollar Amount	%
Contributions	1,180,220	96%
Interest & Gains on Investments	51,680	4%
Total Revenues & Other Sources	1,231,900	100%



Expenses	Dollar Amount	%
Scholarships/Contributions to Forsyth Tech	751,419	73%
Other Supporting Services	273,017	27%
Total Expenses	1,024,436	100%

Forsyth Technical Community College Board of Trustees
2012-2013 Membership Roster

Edwin L. Welch, Jr., Chair
R. Alan Proctor, Vice Chair

Ann Bennett-Phillips
James W. C. Broughton
J. Donald deBethizy, Ph.D.
Nancy W. Dunn
Gordon B. Hughes
Andrea D. Kepple
Arnold G. King
Jeffrey R. McFadden
Dewitt E. Rhoades
Kenneth M. Sadler, DDS

Sonia M. Yancey, Ex-Officio, SGA President

Gary M. Green, Ed.D., President

The Foundation of Forsyth Tech
Board Members 2012-2013

Mr. Paul H. Hammes, Chair
Mr. C. Douglas Cross, Vice Chair
Mr. David C. Hinton, Member-at-Large
Mr. Murray C. Greason, Jr., Past Chair
Gary M. Green, Ed.D., Secretary
Wendy R. Emerson, Treasurer

Mr. Louis B. Baldwin, Jr.
Mr. Walton T. "Walt" Carpenter
Mr. Algenon L. Cash
Mr. Rusty Davis
Mr. David C. Eagan
Ms. Aurelia G. Eller
Mr. Jimmy Flythe
Mr. Omnia Fowler
Ms. C. Lynn Gargis
Ms. Beverly Godfrey
Mr. Michael L. Hauser
Mr. Charles R. Helsabeck
Ms. Beth Hopkins
Mr. Gordon Hughes
Mr. James "Jim" R. Nanton
Mr. Dewitt Rhoades
Mr. Scott J. Sewell
Mr. William W. "Will" Sutton
Ms. Mary Tucker
Dr. Ramon Velez
Mr. Edwin "Ed" L. Welch, Jr.

Mr. Salomon Pinargote, SGA/Student Ambassador

Victor I. Flow, Director Emeritus

Paul M. Wiles, Director Emeritus

Mamie McKinney Sutphin, Executive Director



Elma Menius: In My Own Words
Why I Support Forsyth Tech

Elma Menius can see the results of her garden club's support of Forsyth Tech from her doorstep. The names of students who have been recipients of scholarships donated by the club are emblazoned on the trucks they use in their landscaping businesses.

"Every week I see people who have started their own businesses driving through my neighborhood," she said. "They're doing very well, because everybody needs to have their grass cut."

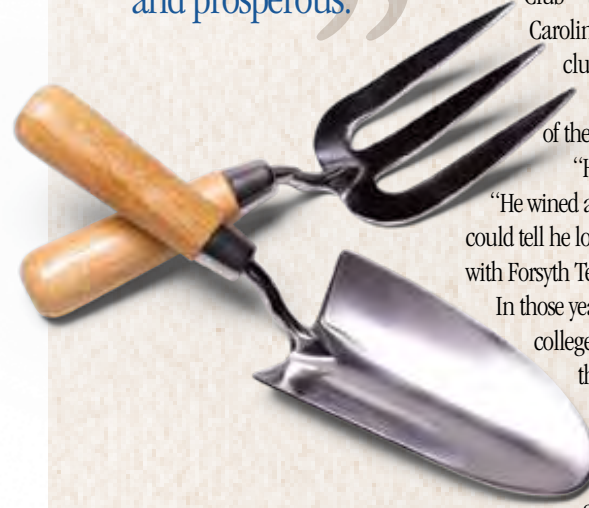
"I think it's wonderful that people can go to Forsyth Tech and become successful and prosperous," she said. "I didn't have much when I was growing up."

Mrs. Menius and her late husband moved to Winston-Salem in 1957 from Salisbury, and soon after that she became a member of the Garden Study Club – the second-oldest garden club in North Carolina. In 1978, she was president of the club, which by that time had come to the attention of Harold Atkins, then head of the Horticulture program at Forsyth Tech.

"He was so nice to us," she remembers. "He wined and dined us once a month, and we could tell he loved what he was doing. We fell in love with Forsyth Tech."

In those years, few people knew that community colleges needed private support. Few realized that small grants were enough to enable people to go to college who otherwise wouldn't have a chance. Through Harold Atkins, the Garden Study Club came to understand that they could give people that opportunity.

"I think it's wonderful that people can go to Forsyth Tech and become successful and prosperous."




Under Mrs. Menius' leadership, the garden club held an auction in 1978 to raise money for scholarships for horticulture students. Auctioning items from the estate of Mary Kate Dixon, a founding member, the club raised \$200 to present to Forsyth Tech. Since then, the club has been regularly making donations that support up to three Horticulture students a year.

Mrs. Menius still lives in the house that she and her husband moved into in 1957, one of the first three houses on their street. She remembers how she had to go to Wake Forest University – itself a newcomer in Winston-Salem – to pick up their mail, until they had enough neighbors to justify mail delivery. She remembers the boxwood seedlings that her father gave her, which she nurtured until they were a foot high and then planted in a landscaping design laid out for her by Harold Atkins. Those mature boxwood shrubs continue to thrive in front of her house.

Over the decades, Mrs. Menius has seen Winston-Salem and Forsyth Tech grow steadily. The Garden Study Club, however, has had a strict 34-member limit. Now that is changing too, as the club moves from meeting in members' homes to gathering at the Cricket's Nest at South Fork.

"I can visualize how our garden club will grow to have 50 members," Mrs. Menius said. "We're getting the next generation now."

And another landmark is on the near horizon. The Garden Study Club will soon reach its goal of contributing a total of \$25,000 to endow a horticulture scholarship in perpetuity. 



How you can be a rainmaker, too.

Rainmakers like Elma Menius understand that the Foundation of Forsyth Tech, a nonprofit organization, is the fundraising arm of the college and depends on private contributions from people like you to support:

- > Scholarships for deserving students
- > Technology for classrooms, labs and shops
- > Professional development grants for faculty and staff

Give online @ www.forsythtech.edu/support/giving-to-forsyth-tech.

Send a check payable to Forsyth Tech Foundation at 2100 Silas Creek Parkway, Winston-Salem, NC 27103-5197.

Learn more about the many giving opportunities available.

Call Angela Bryant, director of annual giving and special events, at 336.734.7618 or email abryant@forsythtech.edu or

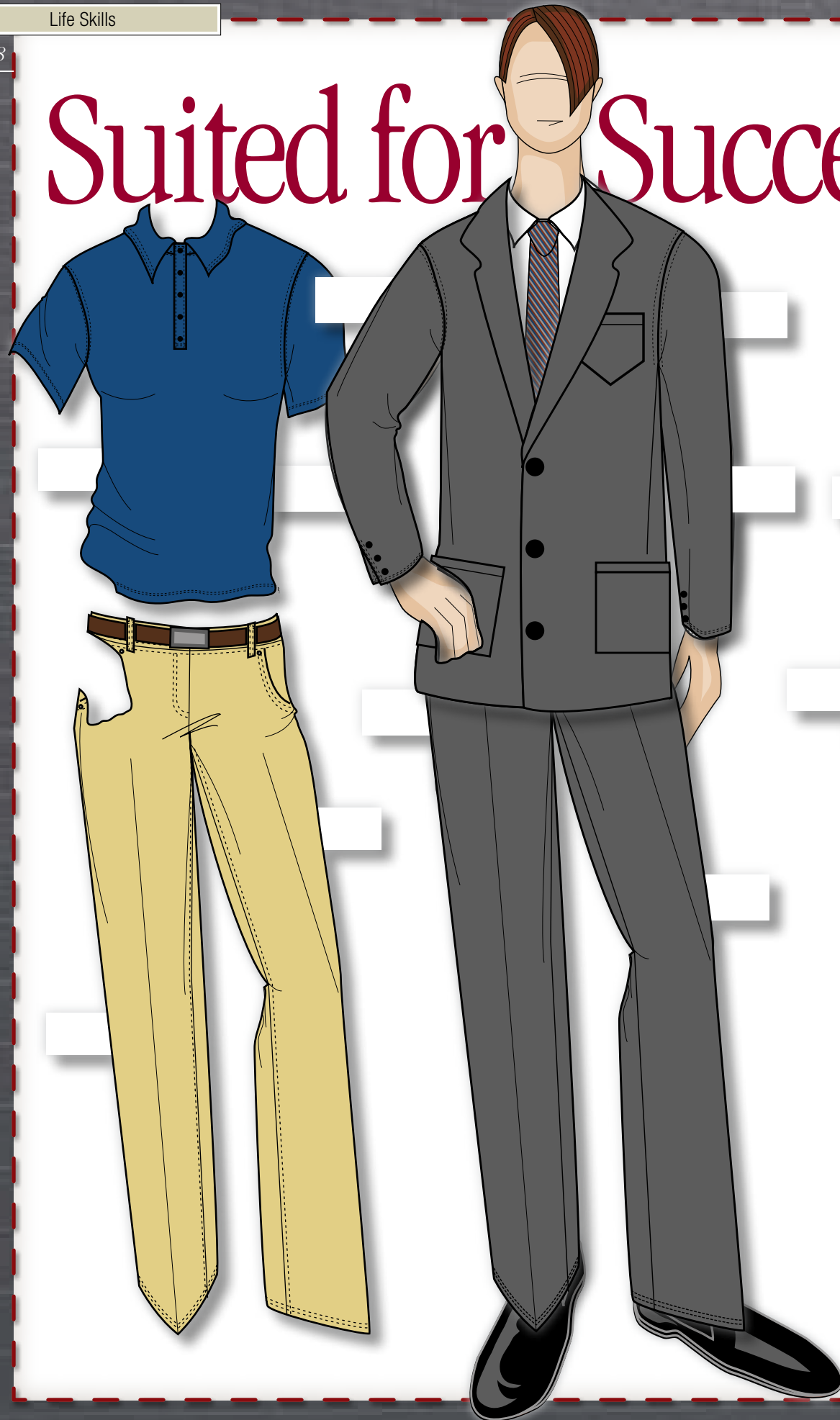
Edye Elworth, director of major gifts and planned giving, at 336.734.7296 or email eelworth@forsythtech.edu.

Choose your level of support:

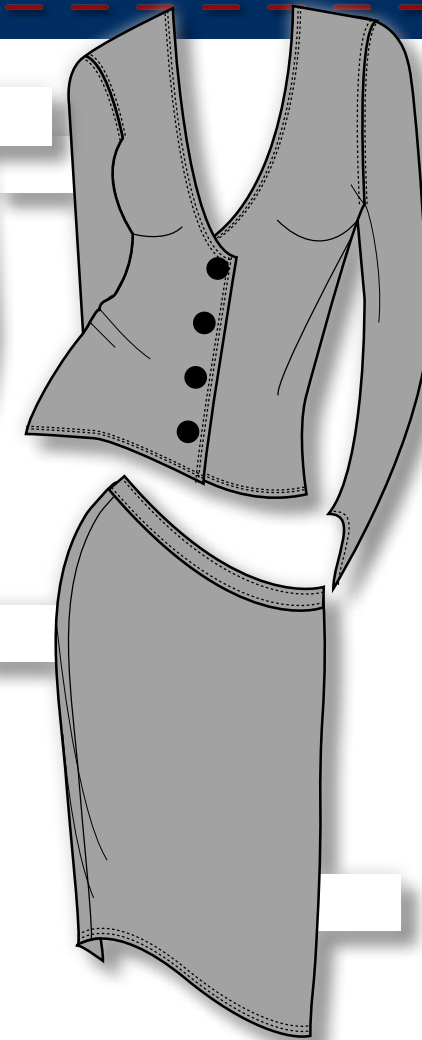
President's Club	\$10,000 and up
Pinnacle Club	\$5,000 – \$9,999
Dean's Club	\$2,500 – \$4,999
Pacesetter's Club	\$1,000 – \$2,499
Directors	\$500 – \$999
Leaders	\$250 – \$499
Champions	\$100 – \$249
Friends	Up to \$99

Your gift creates a strong college and a strong community.

Suited for Success



Among the many hats that Sherraine McLean and Greg Young each wear is that of fashion consultant. Among the assets they oversee are clothes closets. And among the arsenal of tools they deploy to help Forsyth Tech students find employment are suits, shirts and shoes.



Sherraine McLean is director of the Shugart Women's Center, which promotes educational, personal and professional development of women students at Forsyth Tech. Greg Young is program coordinator of the James A. Rousseau II Minority Male Mentoring Program, which provides similar services for male students, with the particular goal of increasing retention and graduation rates.

It's no secret to people of Sherraine and Greg's generation that job seekers need to show up in professional attire for their interviews. They can attest that this is a novel notion to many young people today, including students at colleges and universities of all kinds.

"This generation wants to express themselves," said Greg. "They think they know what they should wear. I'll schedule a meeting with a student and tell him to come dressed the way he would dress for an interview. I see a lot of jeans and pullover shirts, but no ties, no dress shirts and no dress slacks."

An important component of the male mentoring program is attendance at professional conferences, where business casual or professional attire is required. Greg saw a need among the students he counsels for appropriate outfits, and last year he established a clothes closet, which is housed in the office supply closet of his office suite.

The closet at the Shugart Women's Center, called the Enhancement Center, has been in use for more than a decade, and fills a whole room. But the challenge with young women is the same as with young men.

"I do reality counseling," said Sherraine. "I tell them they can get on the train and ride or they will fall off the back. Regardless of what you see around you, there is still a standard in the workplace. I don't need to see your undergarments. My job is to advise and encourage; it is up to them if they want to implement."

It takes some time, she said, for students to understand that their appearance really does count and that prospective employers will look on them more favorably if they are wearing fairly conservative clothing – suits or dresses, neutral or subdued colors, closed-toe shoes.


Close encounters with the world they want to enter help students see that clothes make a difference, Greg said.

"Last year, we were invited to an award ceremony for Dr. Maya Angelou that was semiformal," Greg said. "Then they saw that these workshops we do on etiquette and attire are not just for fun."

Both Sherraine and Greg are clearly compassionate and don't blame students for not knowing the professional dress code or not being able to adhere to it. Many of the young women Sherraine counsels are single mothers, she said, who may have perfectly dressed children and no money to spend on their own wardrobes.

Greg's father taught him to tie a tie, and he wore a tie to church as far back as he can remember. But he knows that the young men he counsels have most often never been to any event where ties are required. And they, like the single mothers, often don't have the means to buy a suit or blazer, even when they know what not to wear.

Where jeans and t-shirts are the norm, both Sherraine and Greg help students see what fits them and what flatters them. They also encourage their students to start dressing the part while they are in school.

As Sherraine said, "If you want to be an accountant, dress as if you're already there." 

Special Dressing

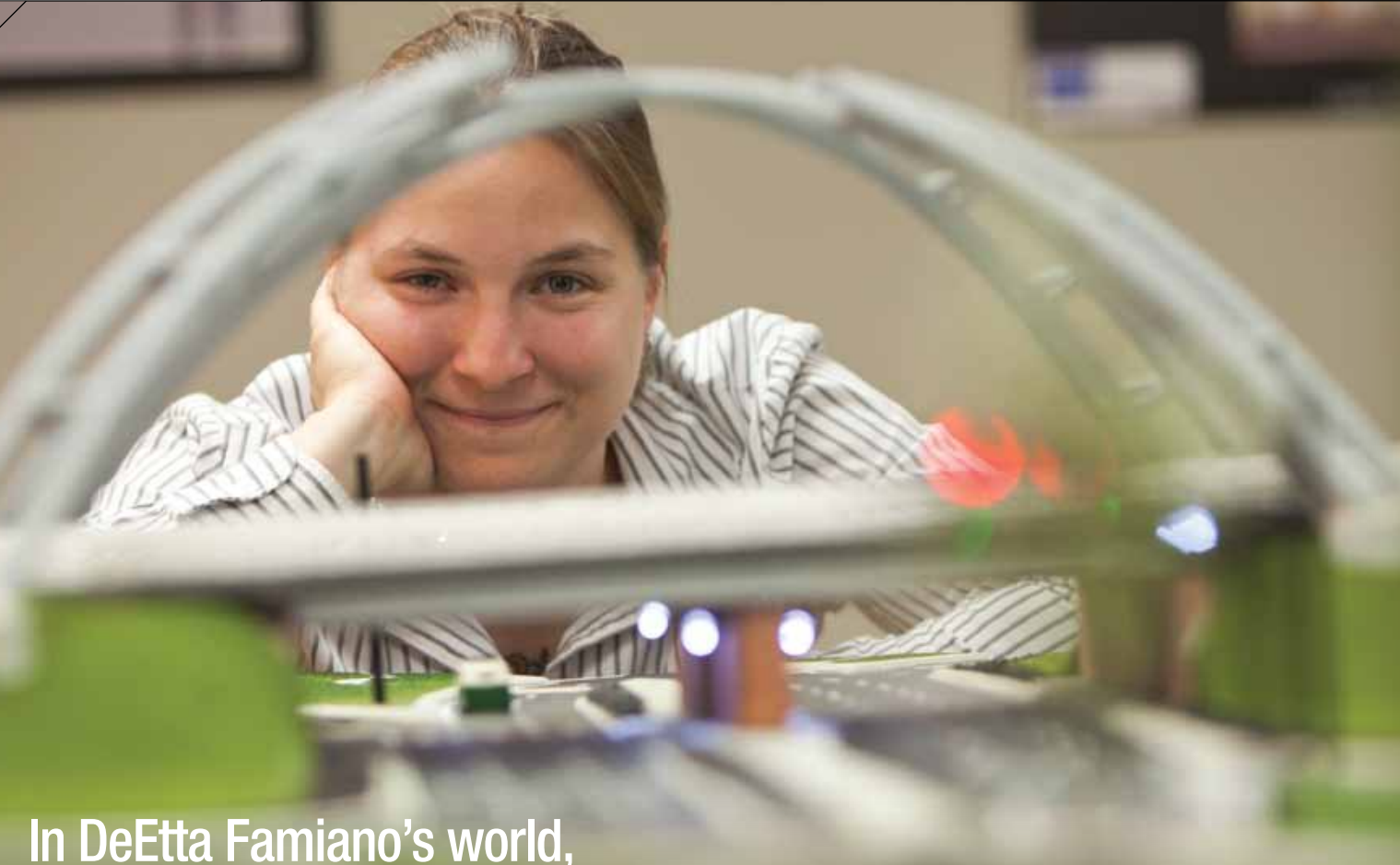
The clothes closets at Forsyth Tech provide work-suitable clothing to students free of charge. A consignment shop donates clothes to the women's closet, but both closets rely primarily on contributions from individuals.



If you would like to support this essential component of employability, here are some guidelines:

- > Donate new or gently used, clean clothes that are suitable for job interviews or other professional settings.
- > Donate clothes that you would wear yourself, not old, out-of-style items that you want to get rid of.
- > Donate accessories like belts, shoes and ties, as well as suits, slacks, shirts, jackets, skirts and dresses.
- > Or donate cash. As Greg said, being able to buy an outfit for a specific student helps ensure a good fit, which isn't always possible when working with what's at hand.

For more information, contact Sherraine McLean at kmclean@forsythtech.edu, 336.734.7280, or Greg Young at gyoung@forsythtech.edu, 336.757.3385.



In DeEtta Famiano's world,

THERE'S MORE THAN MEETS THE EYE

DeEtta Famiano might well be described as a savvy and successful entrepreneur, as solid evidence for Winston-Salem's claim to be the City of Arts and Innovation, and as clear proof that bootstraps are still a viable means of achieving upward mobility.

It was just seven years ago that DeEtta made her way to North Carolina by Greyhound bus with less than \$100 to her name and no particular plan. Her destination was Davie County, where her sister and brother lived. Even with a place to stay, with no car or driver's license, it was immediately apparent that she was going to have trouble getting a job. She looked to her past for inspiration to build her future.

DeEtta grew up in Traverse City in northern Michigan. Like many people there, her parents hadn't gone to college, and neither she nor

they had any expectation that she would go beyond high school. At 16, she got a job in a spiritual bookstore and she stayed for six years, rising to the position of manager, a valued employee with considerable job security.

Even though her environment felt nurturing, DeEtta said, "I knew I was going nowhere fast."

"Traverse City was a little slice of heaven," she said. "Are you familiar with Ocracoke Island? It was like permanently being in Ocracoke. There were amazing artists there, and I'd always known I was an artist. I didn't understand then that art can be an economic driver. I thought I would have a mediocre job and do my art on the side. That was the game plan."

Her first job when she got to North Carolina at age 21 was sweeping floors. Her brother, who was in the business of framing houses until the residential construction industry tanked, told her she could come along and sweep the floors at his job sites. Almost the first thing she noticed was that he really loved his work.

"We would be in a stick frame house and he would say things like, 'This is flush; this is a well-made house.' He got really excited. I thought he must be nuts; he really loved what he was doing. I thought he was a bit of a loon."

Before long, her brother decided she could move some lumber, and she became a junior member of the construction crew.

"It was culture shock, being at a job site with a bunch of southern men," she said. "But I learned a lot. I learned about my ability to push through exhaustion and heat. Working construction started out as survival and then I fell in love with it. After two years I was ready to take it to the next level."

By then the recession had hit, and DeEtta, who now possessed a driver's license and a truck, got a job with a big home improvement store. She moved to Winston-Salem and found a roommate. In her new job, she learned a great deal about all the materials used in construction. She also learned that she wasn't cut out for the corporate world, that she wanted to work for herself.

Eyes Wide Open

She visited Forsyth Tech and asked what courses she would need to take to become a general contractor. About the same time, she was offered a better job at the store — a raise and a promotion. School or a steady job? Take a risk or play it safe? DeEtta struggled with the dilemma.

Finally, one morning she announced to her roommate that she had made up her mind. She was going to stick with the store and accept the promotion, because she needed the money.

At work that same morning, she encountered an unusual customer who opened her eyes to things she had never considered. DeEtta was an expert on windows, and she was used to serving customers who knew little about windows; most were concerned only with the cost. Before her was a young man who asked all sorts of detailed questions about U factors and R values, and who was clearly as enthusiastic as she was about the fine points of windows.

"I said, 'What are you doing, man?' It turned out he was a Forsyth Tech student and he was working on a project for a sustainable design competition. He was so happy with what he was doing.

"In that moment my life changed. The fall semester at Forsyth Tech started two weeks later and I enrolled, still thinking that I wanted to be a general contractor. That idea fell away over the next six months, and I majored in architectural technology."



DeEtta Famiano's work is about as high-tech as it gets, but she understands her life as spirit driven. Back in Michigan she worked at a spiritual bookstore, beginning at age 16, and she sees her life story as a spiritual journey. To her, some of the clearest indications of how the spirit works have come through her experience of people who have appeared at critical junctures to guide her.



A Whole New World

As soon as DeEtta became a college student, she was immersed in an exciting world of new ideas, new degree programs, new technologies and enthusiastic instructors from a variety of fast-changing industries. Thoroughly familiar with the concrete, solid materials of building structures, she began to learn how computer technology played into design and construction. Seeing how designs could be presented in 3D on a computer screen showed her what her future would look like.

It helped that she was a quick study and a determined learner. “I’ve always had a competitive streak. I wanted to be a star student,” she said.

Along with the hard skills of futuristic design, Forsyth Tech instructors modeled and taught her the people skills she would need to start her own business.

“Todd Shoaf (now Architectural Technologies program coordinator) taught me about cultivating relationships,” she said. “Todd and Rosa Otero (former coordinator of the Interior Design program) introduced me to my close friend, Jan Detter, a local professor and artist, who helped me understand the creative economy and social entrepreneurship.”

After graduation, DeEtta, the star student, had opportunities to actually work in her new field. Todd, who was an adjunct instructor at the time, gave her some project work in his own company. When he had surgery, she filled in for him in the classroom, trying out a skill she hopes to develop and use.

As soon as she got her associate degree in the spring of 2009, DeEtta went to work for herself, initially doing 2D and 3D drafting. When she had been in business a year and a half, she went into partnership with an

investor who provided capital for the purchase of a large-scale laser scanner, which allowed the business to expand into 3D modeling. In the summer of 2012, DeEtta bought out her partner’s share of the business, and began operating as Famiano Design Group, with offices on Trade Street in the heart of Winston-Salem’s arts district. By that time, business was booming and DeEtta had four full-time employees and one Forsyth Tech cooperative education student, and was in the process of finding another co-op student.

Life on the Fast Track

Looking back on her business’s rapid growth, DeEtta says, “Forsyth Tech prepares you for the real world. You dive into the skills you need from the first semester on. I thought if I could get a group of fellow students together, we could rock it out.”

One of the cutting-edge skills she learned at Forsyth Tech was BIM, or Building Information Modeling, and that led to the partnership’s first contract.

“Right out of the gate we got a job from Blum Construction,” she said. The task was to model Wake Forest University’s new School of Business building, Farrell Hall, using BIM. DeEtta explains: “Up until 10 years ago, all architectural drawings were 2D. Now it has all gone to 3D. BIM is the next level of 3D. You can click anywhere on the virtual model, and it tells you, for instance, that that is a piece of gypsum.”



Builders, architects and engineers are reaping huge benefits from these information-filled designs. BIM allows them to easily share information with others, including the customer. It’s much faster than older technologies, like AutoCAD, which allows for a series of views of plans, sections and elevations. BIM incorporates all the views and information into one computer-generated model. Having such detailed information compiled in one space saves time and money, leads to better decisions, and helps prevent miscalculations and mistakes. It’s helpful at all stages of a construction project.

DeEtta and her team also apply clash detection software to every part of the building design – to the ductwork, floors, lights and all spaces. That enables the builder to know, for example, whether the space allotted between the ceiling and structure above will actually fit all the HVAC, electrical, plumbing and fire protection equipment intended to go there.

Envisioning the Future *The Famiano Design Group built a scale model (left) of the twin arches that may soar over the future Salem Creek Connector at its junction with U.S. 52. The dramatic entry to the Twin City is the vision of the Creative Corridors Coalition, a non-profit organization that is raising money to make the arteries that run to and through downtown Winston-Salem artful, environmentally sound and conducive to community. The Famiano team constructed the intricate model, which was unveiled in October, from laser-cut CAD files. To see a video of the development of the model, and other Famiano work, go to www.fdg-us.com.*



“BIM is a new version of coordination and it saves contractors a lot of money,”
DeEtta said.

Getting the first Blum Construction job enabled and required DeEtta to hire her first two employees. BIM is still the major source of income for the company, but DeEtta is looking ahead.

“I think we’re the only ones doing what we do, locally,” she said, “but that window is closing. Eventually, the larger construction companies will have that capability in-house, and we will be consultants to them.”

Meanwhile, she is building up another side of the business, 3D realization and product visualization, which requires somewhat different skills, and allows people to visualize future spaces, buildings and even products in a richly detailed way.

“The artist came roaring back,” she said happily. “Now we do a lot of 3D realization graphics, primarily for the architecture industry.”

While staying on top of – and slightly ahead of – technological advances, DeEtta has all the concerns of any employer. Having witnessed what she considers poor treatment of employees in large corporations, she’s particularly concerned with making Famiano Design Group a great place to work.

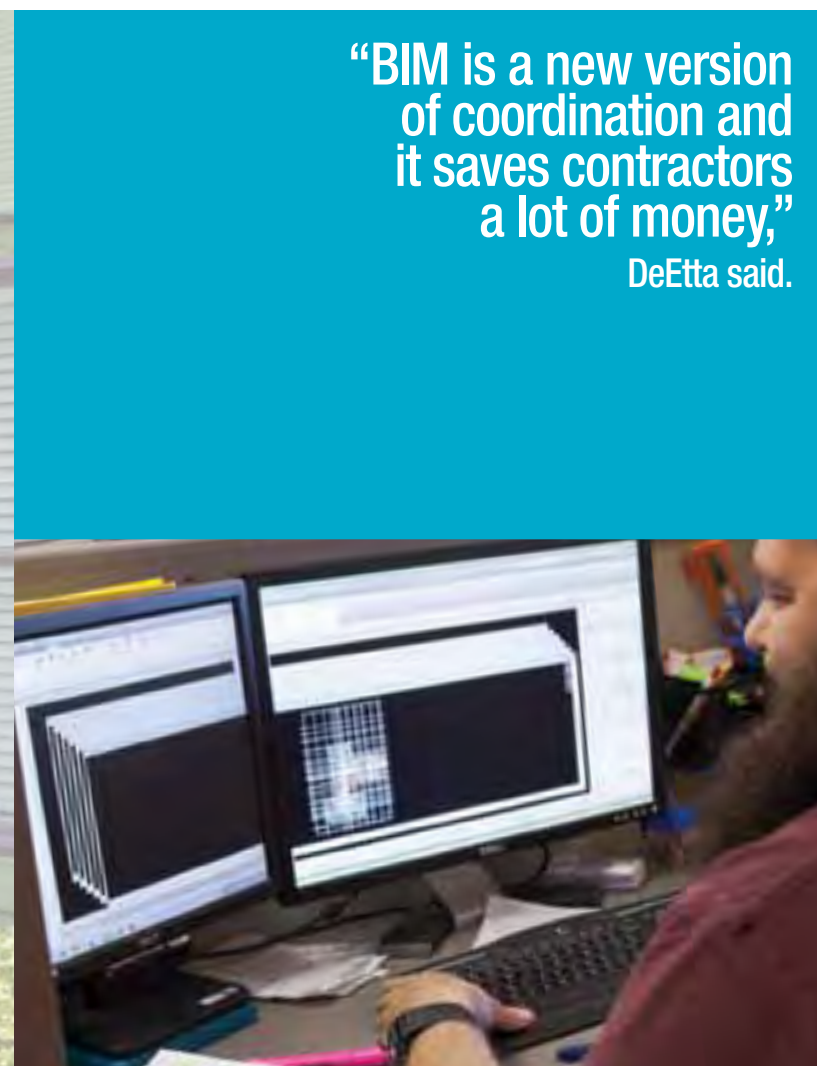
“Everything we do here takes the whole team,” she said. **And it’s pretty apparent that DeEtta Famiano is the same kind of loon her brother, her Forsyth Tech teachers and all her mentors have been: She loves what she’s doing.**

The Talent Pool

Many employers these days are hard pressed to find employees who have the skills they require.

So far, DeEtta Famiano hasn’t had that problem. For the most part, she has hired people she went to school with and people she taught at Forsyth Tech.

The Famiano Design Group consists of Forsyth Tech graduates DeEtta Famiano, Scotty Church, Brian Rose, Chelsea Helton and Daniel Morton, and Appalachian State University graduate Shelton Clinard.



TERCRAIG EDWARDS

Director, Mazie Woodruff Center

Ask TerCraig Edwards what drew him to Forsyth Tech, and he'll talk about his family. The college's mission — and the mission of the Mazie Woodruff Center in particular — is all about support, and building the community. And those are values passed down to him through his family.

"There's no such thing as a self-made man," TerCraig asserts, sitting in his sunny office at the center. "My family were third-generation farmers. My parents, grandparents and great-grandparents grew food for the whole community. I never saw them buy anything from the grocery store that they could grow in their garden."

Much as he loved his family, TerCraig couldn't wait to see more of the world, so after graduating from high school, he left his native Greenville, N.C., and headed to Winston-Salem State University. From college, he went on to join the Marine Corps.

"I wanted to get a larger view of society," TerCraig explains. "I wanted to build meaningful relationships with people from different backgrounds." He did two deployments in Iraq and a training assignment in Korea.

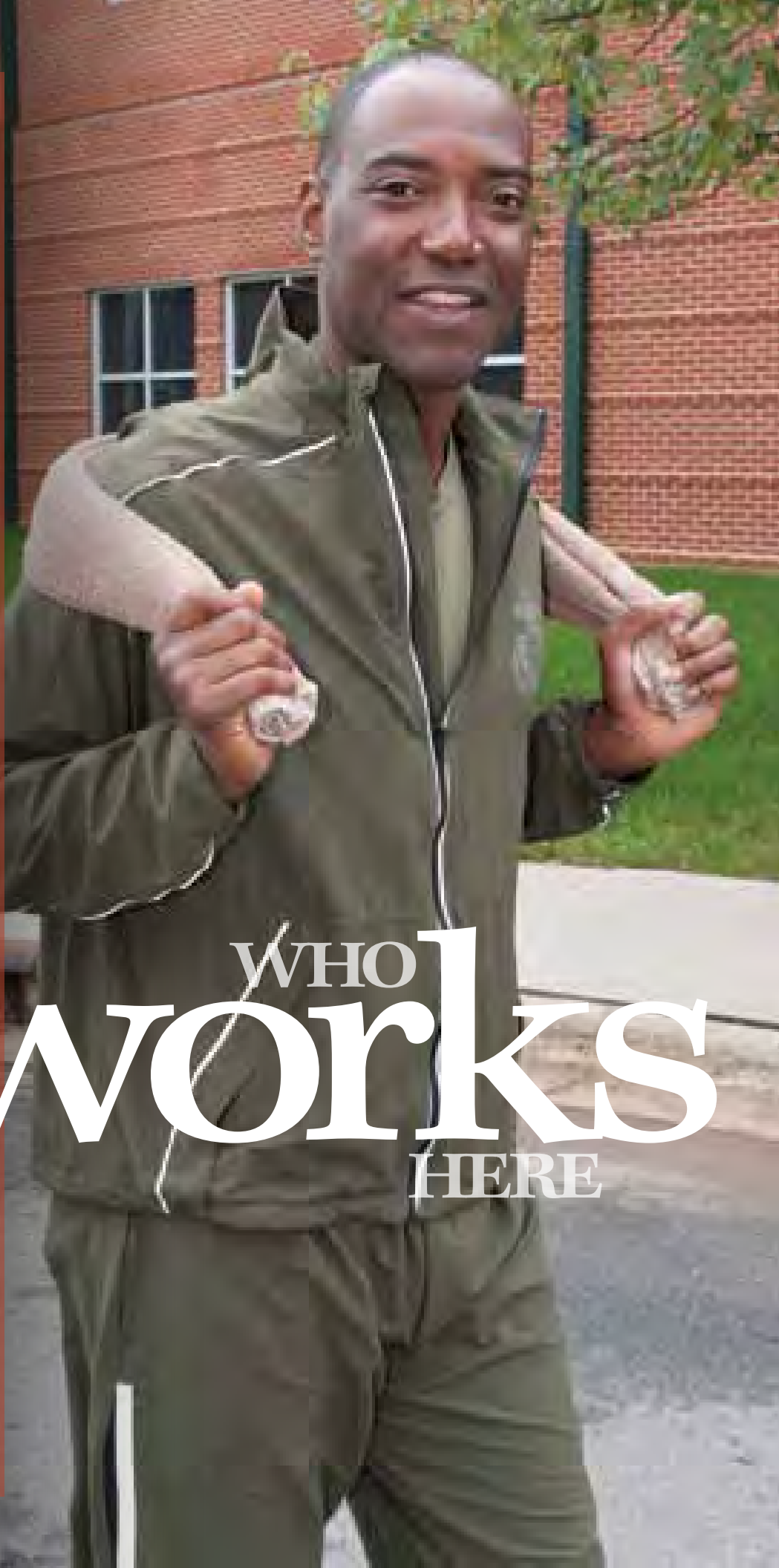
Now, he says, he takes some of the lessons learned in the military and puts them to work at the college. His job, he says, gives him the opportunity to practice the Four Ms: mold, mentor, motivate and multiply. "I learned those principles from one of my commanding officers who was a mentor to me," TerCraig explains. "With staff and students, I want to create an environment where you can talk to people and establish positive relationships."

Outside of his administrative responsibilities, TerCraig works with community partners to make sure the center is providing the needed opportunities in environmental science, human services and early childhood development, along with the college transfer program.

On the Run

TerCraig supports a number of veterans' organizations, including the Hope for the Warriors Foundation, which serves disabled vets. He also likes to stay in shape by running. In October, he combined those two interests by participating in the 5K Run for the Warriors in Greensboro.

He also participates in the annual Homeless Veterans Stand Down, an event that gathers homeless vets to give them clothing, medical and dental care, showers and haircuts, and help with finding housing and other benefits. 🏠



WHO **works**
HERE

CHRIS GILLENWATER

Student, Biology

"I was a real wild child growing up," Chris Gillenwater admits. "I always seemed to be in the wrong place at the wrong time." But at 26, he has turned his life around. He credits a helping hand, a dose of healthy country life — and Forsyth Tech.

"I kind of messed my life up," Chris explains. "I wasn't going anywhere, and I lost my job. Then a friend of mine brought me out here."

"Out here" is the Thoroughbred Training Center in Mocksville, known affectionately in the horse community as TTC. Chris was introduced to Beth McCashin, who presides over the sprawling farm with her husband and who has a soft spot for young people needing a nudge to get their lives on track. "The McCashins started talking to me," he recalls. They gave him a job on the farm and urged him to go to college. He enrolled at Forsyth Tech, and he was on his way.

At first, Chris enrolled in business courses, but his love of the outdoor life on the farm inspired him to switch to biology. He credits his instructors at Forsyth Tech for helping him find his life's direction. "If you need something, they're always willing to give you a hand," he observes. "It's nice when someone shows you a little compassion. And there are a lot of good teachers. I've been really impressed."

At the farm, Chris helps with everything from handling the horses to slinging bales of hay. He does landscaping and repairs the jumps on the extensive cross-country course. "If there's anything to be done out in the woods, I can do it," he notes.

He hopes to transfer to North Carolina State University. As for a career: "I want to be either a wildlife officer or a park ranger."

Discovering the Mountains

With his girlfriend, a veterinary student at North Carolina State University, Chris likes to take off on weekends and go hiking in the mountains. "We'll go camping — we've been to Hanging Rock, Mount Airy, Linville Gorge, Black Mountain," he recounts.

He has recently acquired a book that lists all the notable waterfalls in North Carolina, and together, the couple is trying to see as many of them as possible. 🏞️



WHO **goes**
HERE

A Passion for Science

A Forsyth Tech Faculty Member Makes His Mark

It's no big deal.

After all, Dr. Lucien Houenou has already published 43 articles, including 38 in peer-reviewed scientific journals – so the publication of two more this year is not unusual. But for a faculty member at a community college, it's still a little startling.

Many members of the Forsyth Tech faculty have traveled interesting roads to the college, and Lucien is no exception. Growing up in Benin, a French-speaking country in West Africa, he was fascinated with science from boyhood. "Since I was a child, I wanted to be in the medical field," he recalls, sitting behind his desk in a small office in the Tech Building.

His father was a physician's assistant in Porto Novo, Benin's capital. "I used to play with my father's instruments. I'd dissect small animals."

Lucien went on to college in neighboring Ivory Coast, then to Paris, where he earned double master's degrees in biochemistry and embryology, then a Ph.D. in developmental biology. He came to North Carolina as a postdoctoral scholar at Wake Forest University School of Medicine, where, as faculty member, he taught for 10 years.

Then he was asked to substitute for an instructor at Forsyth Tech, teaching a class in genetics.


"I loved it," he remembers. "I loved the interaction with the students. I could see how my contribution was valuable because they came here not just as students but as people with other lives – jobs, families – it was completely different from medical school."

So he stayed. He currently teaches genetics, microbiology and research methods, but he has also continued his life in research. The last two papers, published this year, demonstrate the breadth of his interests.

In one, published in the *European Journal of Obstetrics & Gynecology and Reproductive Biology*, he describes an innovative technique for isolating fetal DNA from a sample of the mother's blood to detect gender, rhesus (RH) factor and potential genetic anomalies. The procedure would eliminate the need for amniocentesis, the usual method for detecting these characteristics, which involves introducing a needle into the mother's womb, an invasive procedure that carries some risk of miscarriage.

He also co-authored an article, published in the journal *Recent Patents on DNA & Gene Sequences*, that reviews current genetic research on spinocerebellar ataxia, one of the group of debilitating degenerative brain diseases that include Lou Gehrig's disease, Parkinson's disease and Alzheimer's disease.

Lucien makes frequent international trips to collaborate on research and has just applied for a Fulbright scholarship to work with colleagues in Brazil.

It's clear, however, that his real passion is teaching – though he would describe it differently. "I don't consider that I'm teaching," he asserts. "I see myself more as a mentor. I tell my students every semester: 'I'm not here to teach you. I'm here to help you learn.'" 

A WIN FOR BIOSCIENCE



Forsyth Tech Awarded
\$15 Million
and a VIP Visit



Above > Seth Harris, U.S. Deputy Secretary of Labor, views various solutions prepared by Forsyth Tech biotech students during a lab class.

Below > Mr. Harris delivers the good news of the \$15 million grant. Seated left to right are student Hannah Sanders, Forsyth Tech President Dr. Gary Green, U.S. Rep. Mel Watt and Russ Read, executive director of the National Center for the Biotechnology Workforce.

"You, the students, are making an investment in yourselves."

Seth Harris, U.S. Deputy Secretary of Labor, nodded in the direction of Forsyth Tech Biotechnology student Hannah Sanders, who had just introduced him to an audience of college presidents, politicians and other luminaries in the Tech Building foyer on a sunny late September day.

Mr. Harris was at the college to announce that Forsyth Tech will lead a consortium of community colleges receiving a \$15 million grant through the Trade Adjustment Assistance Community College to Career Training initiative. That's a very long title for a program that will support community colleges nationwide to train workers in biotechnology.

Before making his remarks, Mr. Harris toured the college's state-of-the-art science labs, donning a white lab coat and protective goggles to chat with students and faculty members. He visited the lab of Dr. Aju Lekwauwa, chatting with students and encouraging them.

Mr. Harris also visited the labs of Dr. Lucien Houenou and Dr. Alan Beard, where students were getting their first experience with animal cell cultures. The students were learning to count and catalog moth ovarian cells – a type of cell often used in biotech research settings.

Before he addressed the gathering in the foyer, Mr. Harris was preceded by a range of VIPs, including U.S. Rep. Mel Watt; Forsyth Tech President Dr. Gary Green; Phil Shugart, president of Carolina Liquid Chemistries; and Russ Read, executive director of the National Center for the Biotechnology Workforce.


Praising the college's achievements in training high-tech workers, Congressman Watt remarked, "We seem to keep coming back to Forsyth Tech over and over." He spoke of the importance of retraining displaced workers, noting that "This transition is a painful process for a lot of people."

Dr. Green pointed out that Forsyth Tech has been in the business of retraining workers for 50 years, starting with its Machining, LPN and Auto Mechanics programs. Since then, the college has continued to add programs as the economy has shifted from tobacco and textile manufacturing to biotech and advanced pharmaceutical manufacturing.

"We've grown from serving the community to serving the state and the nation," Dr. Green noted, adding the new credentials that are so important to employers today.

Phil Shugart of Carolina Liquid Chemistries shared a bit of family history, pointing out that his own family's 400-acre tobacco farm had once supported 100-odd families. "Now that 400 acres supports one family," he pointed out. "We've gone from tobacco to biotech."

His company, Mr. Shugart said, would also benefit from the grant to the colleges: "We need educated people with specific skills. I started the company with one employee. Now we have 80. It won't be long before we have 200, and we will need a lot of people with technical backgrounds."

Mr. Harris reinforced those points, adding that "I'm always happy to come to North Carolina and meet folks who are doing the work that will propel the economy of the twenty-first century." 



An Interview with Eric Jones,
Program Coordinator, Horticulture

GROUNDS FOR IMPROVEMENT

Eric Jones grew up on his family's farm outside Winston-Salem, and he lives there still. A graduate of Forsyth Tech himself, he has served as the Horticulture program's coordinator for a year. Here, Eric shares his favorite landscaping tips for homeowners.

Q What can a homeowner do to make a house more "green" – more environmentally friendly?

A One step a homeowner can take is to have water barrels to catch the runoff from your gutters. You can then use that water to wash your cars or water your plants. It's also a great step to take because it will get your neighbors talking. You can reduce the amount of water that just ends up in the storm drains. One inch of rainfall on a 1,000-square-foot roof generates 623 gallons of runoff. And in the summer, 40 percent of your water use will go to watering your gardens and lawns.

Q What would be an example of a common practice that's environmentally unfriendly?

A Tree topping. I sometimes call it "crepe murder." For some reason, people like to lop off the tops of their trees – crepe myrtles, oak trees, maples. A lot of homeowners' associations and municipalities are trying to discourage it now. It's terrible visually and it's bad for the trees.

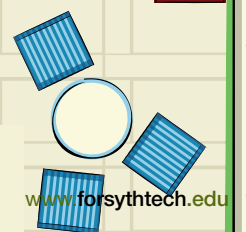
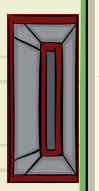
Q What's a project a homeowner could take on to upgrade a house, to add to its value?

A If you're looking to sell a home, one easy upgrade that could add to its value would be to create an outdoor room. You can take an existing patio, or create a patio floor using brick pavers. You can use shrubs to create walls, and for a roof, you can use existing tree canopy or make a pergola or an arbor, creating a sense of enclosure. You can install a barbecue area or a fire pit. Some people even put in a flat-screen TV.

Q What's a common landscaping task that homeowners could do by themselves but usually hire someone else to do?

A You can easily fertilize your own lawn. All the big-box stores sell fertilizer spreaders and fertilizers. Doing that also helps the environment, because good turf reduces carbon dioxide in the atmosphere. It's also easier to mow. I'd much rather mow heavy turf.

You need to fertilize more than once a year. You should do it now, and then again in the winter, spring and late spring. For now, you need a seed starter; in winter, you need a winterization fertilizer. In spring you need a pre-emergent type that will prevent weeds, and then a low-nitrogen type going into summer when it starts getting hot.



Q What's a task a homeowner should not try to do him- or herself?

A Irrigation. In the first place, you have to be licensed in North Carolina to tap into a city water meter. In the second place, it's a lot of manual labor, digging trenches. And it's not easy to get all the zones right. It's definitely one thing I'd recommend that you hire out.

Q What are some innovations you can tell us about in landscaping?

A Xeriscaping. It's a form of low-water-use landscaping. You use plants that typically need less water and you plant them in such a way that the whole garden needs less water. A couple of good plants for this would be smoketree and sweet bay magnolia.

You can also create rain gardens, collecting rainwater on-site and placing plants that absorb the water, rather than just dumping it into the city sewers. Good rain garden plants would include river birch, pampas grass and muhly grass.

Q What's a trick of the trade that you could pass on to our readers?

A Striping when you mow your lawn. It's not hard to do at all, and you can end up with a lawn that looks like a baseball field. Instead of mowing in a circular pattern, like most people do, you mow back and forth in a checkerboard pattern. You need to use the same path every time you mow; if you use the same pattern each week, it sets the pattern in your lawn. It looks great, and it doesn't cost anything.

Q What's a common landscaping mistake?

A In the fall, people will get into "weed and feed" fertilizing. They'll buy a product that is a combined fertilizer and weed killer. What they don't realize is that these products are designed to be used in the spring. If they're used in the fall, they'll prevent the grass seeds from germinating. Then, in the spring, they'll say, "Why is the new seed not coming up?"

Q What can a home gardener do to save money?

A I've found that the biggest money-waster can be the lack of a landscape plan. Often, people will go out on a whim, go to a nursery and buy a bunch of plants. They may buy good-quality plants, but then they'll plant something under an oak tree that needs full sun and get frustrated when it doesn't bloom.

It's so much better to hire a garden designer or study on your own, learn your plant materials before you start buying. In the long run, you will save money by hiring somebody to help you plan. You can do projects in pieces: Start with the front yard, then do the back, then the sides.

Q Are there some underappreciated plants that you really like?

A My personal favorite is the loropetalum. It's a shrub with deep burgundy foliage. You can get lower-growing ones, or taller ones that can be used for screening. The bloom is pink or white, based on the variety. It's a plant that likes full sun. And most people don't realize this, but it's a plant that you can espalier (controlling plant growth on a flat structure). If you train it to grow on a trellis, it looks spectacular. I also like the Indian hawthorn. It blooms later in the summer, and gives you shrub color after the azaleas are finished blooming.

Q What are some garden tasks to do in the late fall?

A Now is the time to plug and seed your lawn. I'd use a transitional blend of grass seed: fine fescue, red fescue, a small percentage of a perennial like rye grass, and maybe creeping red for shady areas. You can fertilize with an 18-24-12 fertilizer. The 18 refers to nitrogen, the 24 is phosphorous and the 12 is potassium. You want that middle number to be high – that's your seed starter that helps get the grass growing.


Q What can we do to keep our yards from looking dreary over the winter months?

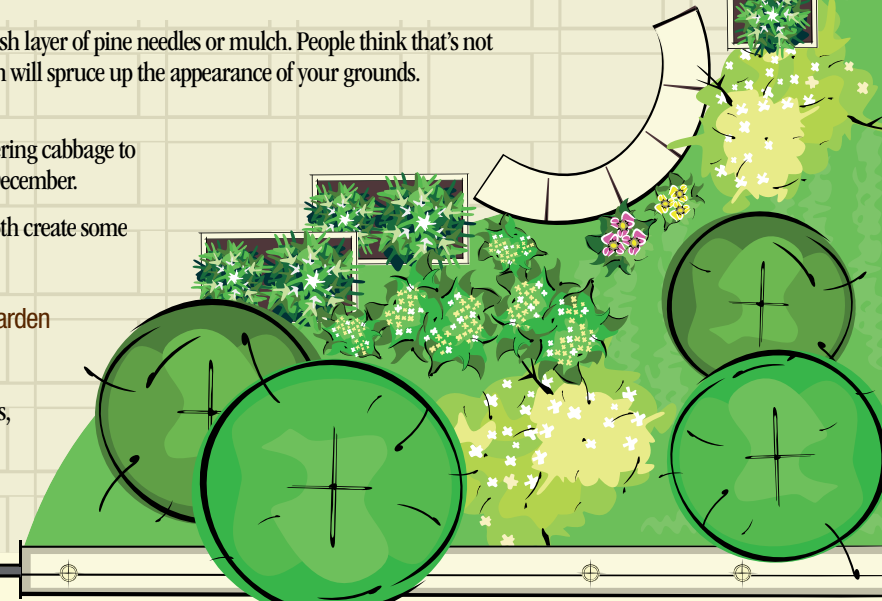
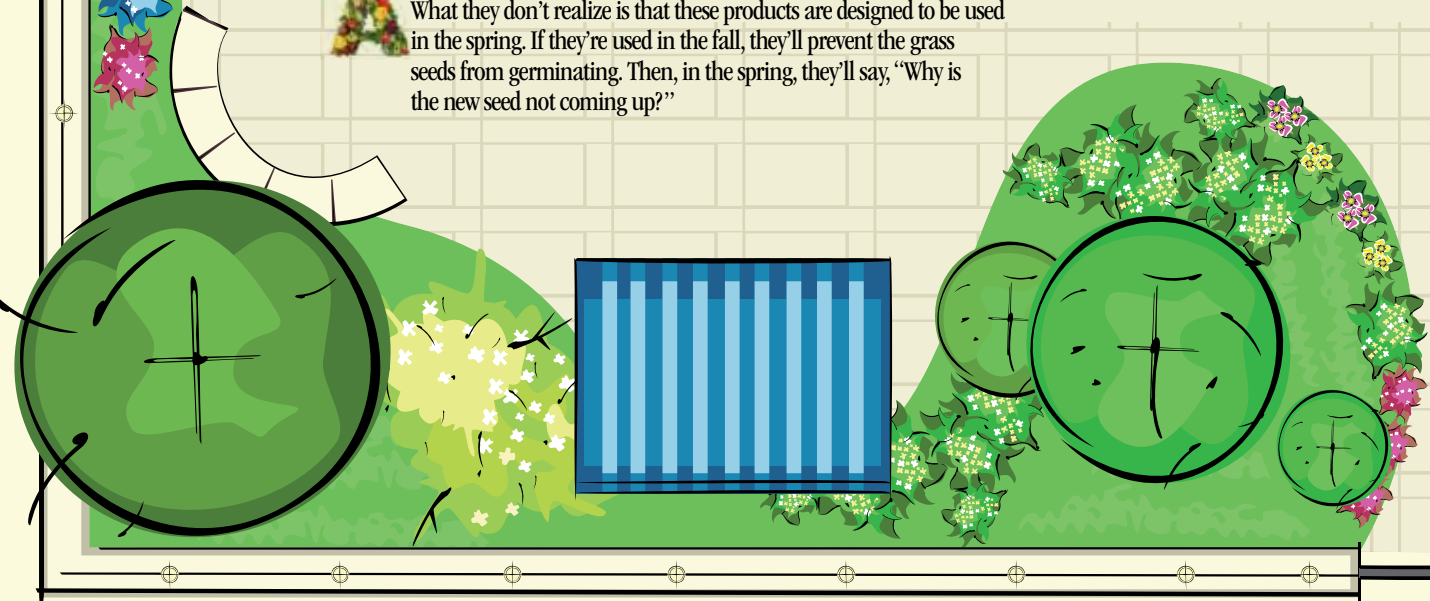
A After the leaves drop, you can cover the beds with a fresh layer of pine needles or mulch. People think that's not significant, but it's amazing how a fresh coat of mulch will spruce up the appearance of your grounds. This is also a good time to do some pruning.

You can use annuals such as pansies, violas and flowering cabbage to give color in the winter. And camellias will bloom in December.

I'm a big fan of crepe myrtle and river birch – they both create some interest in the winter with their bark.

Q What's a good plant to include that will make a garden smell beautiful?

A I love the Carolina allspice. It has very fragrant flowers, and if you scratch the stem, it gives off a scent like cinnamon. You can set them around a patio to create a nice aroma. 



LANDSCAPING RESOURCES

Home gardeners can find some good advice on plants and landscaping projects online. Here are a few suggestions:

Peaceful Backyards – Ideas for Creating Your Own Private Retreat:

<http://www.hgtv.com/landscaping/peaceful-backyard-makeover/pictures/index.html>

Landscaping Ideas:

www.landscapingideas.com

www.landscapingnetwork.com

www.yardshare.com

Landscaping Projects:

<http://www.bhg.com/gardening/landscaping-projects>

Xeriscaping:

http://eartheasy.com/grow_xeriscape.htm

<http://xeriscape.sustainablesources.com>

Lawn Care:

www.lawn-care.org

www.lawn-care-tips.com

www.yardcare.com

Rainwater Harvesting:

www.rainharvest.com

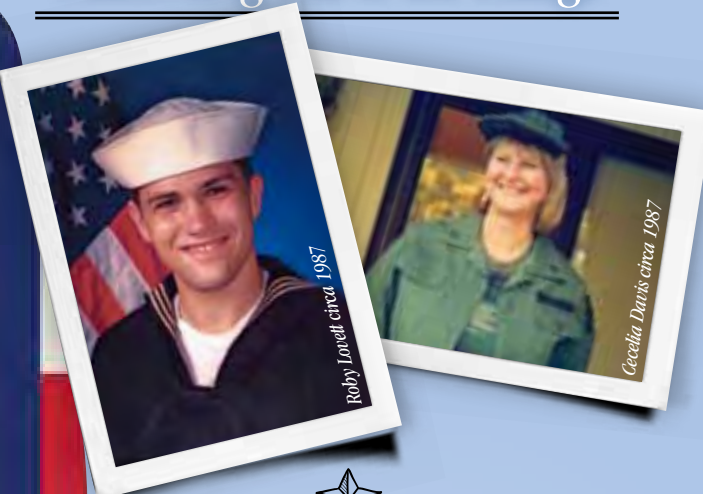
<http://rainwaterharvesting.tamu.edu>

www.rainxchange.com

<http://www.arcsa.org>

Coming Home

Welcoming vets to the college



Culture shock. That's how Navy veteran Roby Lovett described his experience when he first arrived at Forsyth Tech. "It was kind of overwhelming," he remembers. "It's a tough transition." In the military, people work in teams, he points out. In college, "You're left to find things on your own."

Arriving in the fall of 2009, Roby survived those first few weeks, and he's now well on his way to his associate degree. He's also president of the newly formed Student Veterans Association of Forsyth Tech (SVAFT), organized at the college to help vets with the difficult transition from the armed services to the college campus, and to support them through their college years.

Acting as adviser to the group is Cecelia Davis, a counselor at the college and an Army vet herself. "Statistics show

that vets drop out of college at a higher than normal rate," Cecelia notes. "Often, they just don't feel they belong." She's hoping the new organization can help reverse that trend.

Roby's story is typical of many vets. He joined the Navy in 1987 and retired in 2007. In those 20 years, he worked as an aviation electrician's mate, serving on the USS John F. Kennedy during Operation Iraqi Freedom and on the USS Midway during the first Gulf War, as well as several tours to Japan. He met and married his wife and started a family. When he retired from the service, they settled in Winston-Salem because they saw it as a family-friendly community.

Now Roby works full time as an electronics repair technician, along with his studies, and goes home to his four kids, aged 5 to 16. He's a science major and hopes to transfer to a four-year program in engineering.



Making vets feel at home

Roby has thought a lot about what it would take to help vets feel at home at Forsyth Tech. "In the military," he points out, "when you get a new assignment, there's always someone assigned to guide you, to get you where you need to go." He's excited that SVAFT has just gained permission to set up a table at spring walk-in registration, to make themselves available to any vets who show up and to provide that guidance.


The new organization, formed last spring, has 88 members. There are 370 vets or vets' dependents who are receiving benefits at the college, according to Cecelia, "but that doesn't include vets not receiving benefits."

Some vets, according to Roby, are not receiving all the benefits they're entitled to. "Some of them just don't have time," he says, along with going to classes and going to work, to go downtown and find their way through the bureaucracy.

So SVAFT is bringing the services to the vets on campus. As part of the college's Constitution Day celebration in September, representatives from the Vet Center in Greensboro visited the campus with their specially equipped RV, which has soundproof counseling rooms. Vets were offered help with post-traumatic stress disorder (PTSD) and other personal issues. At the organization's October meeting, the regional office of the U.S. Department of Veterans Affairs was invited to send guest speakers to update the student vets on the benefits available to them.

In honor of Veterans Day, the Greensboro Vet Center's RV was on campus all day, and one of the counselors was the guest speaker at the SVAFT's November meeting. And in December, the organization is planning a panel discussion, including representatives from all the veterans groups in the area.

Roby also envisions a mentoring program, with older vets mentoring the younger ones. "Some of the older guys went through the same thing," he asserts, "even going back to the years after World War II."

He recounts a conversation at a local Navy recruiting station, where he met a Vietnam vet. As soon as the man found out Roby was a fellow vet, "He started talking to me about his experience in Vietnam. When vets get together, it doesn't matter what generation you are or where you served. We all served, and we all came back. We have that common bond." 



1 > Forsyth Tech counselor Cecelia Davis, a veteran herself, talks to students about the college's newly formed Student Veterans Association of Forsyth Tech (SVAFT) during Constitution Day Celebrations in September. **2** > Roby Lovett, president of the SVAFT and a Navy veteran, proudly sports one of his most cherished possessions: his grandfather's "Retired U.S. Navy" cap. **3** > Mobile Vet Center representatives from Greensboro offer information and confidential counseling to student vets at Forsyth Tech.

The Student Veterans Association of Forsyth Tech meets the first Wednesday of every month in Tech 301 from 3:00 p.m. to 5:00 p.m. Cecelia Davis is available to help veterans at Forsyth Tech. She can be reached at 336.734.7368 or cdavis@forsythtech.edu.

ForsythTech

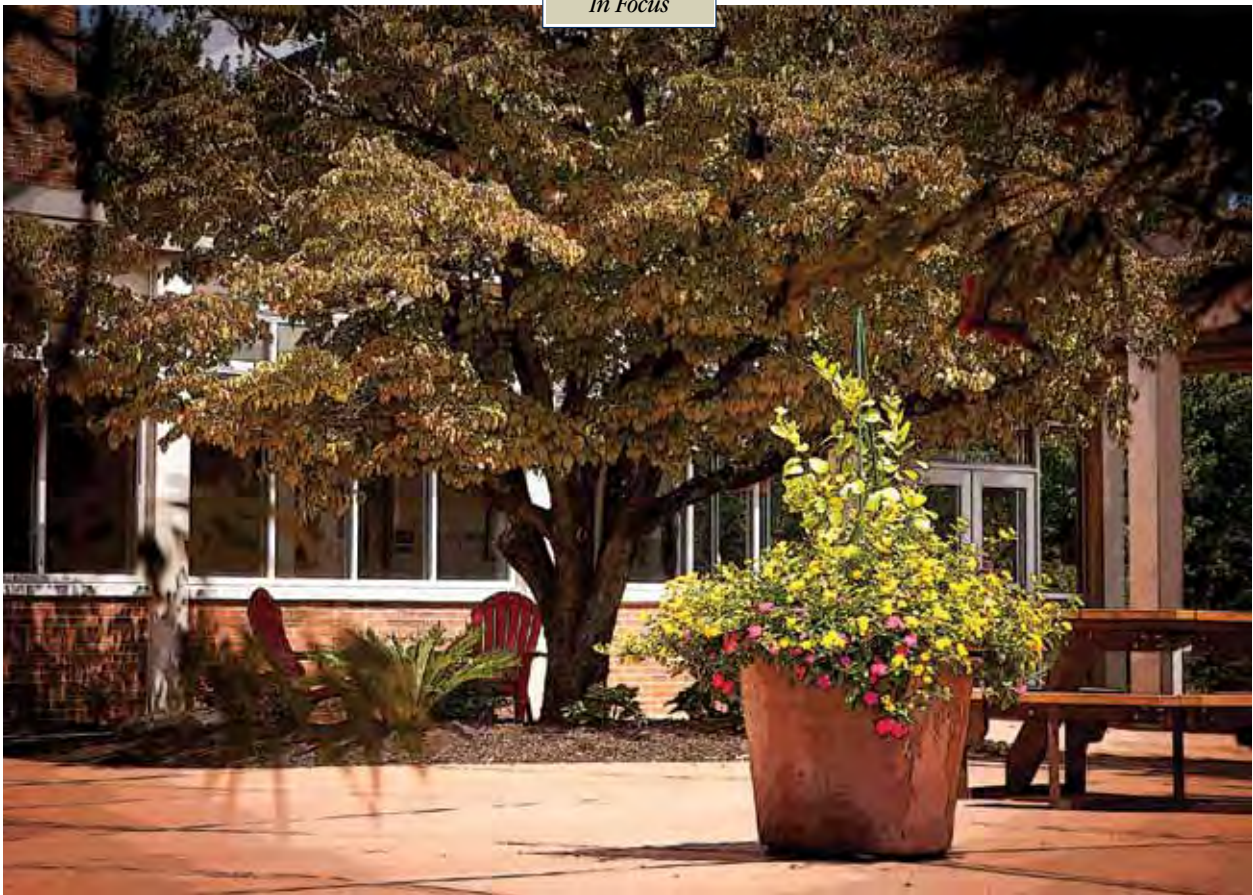
More Than You Know

2100 Silas Creek Parkway
Winston-Salem, NC 27103-5197

Non Profit
Organization
US POSTAGE
PAID
Greensboro, NC
Permit #1068

50,000 copies of this document were printed at a cost of \$0.64 per copy.

In Focus



Landscape Transformation. When the West Campus wanted to “spruce” up its exterior concrete courtyard, Tom Pratt, Forsyth Tech’s supervisor of Grounds Maintenance, knew just what to do. He created an outdoor “room,” featuring a variety of new shrubbery and trees, tropical and shade plants, aromatic flowers, a fountain, benches, picnic tables, one-ton accent boulders, peach-colored walkways and Adirondack chairs to convey a sense of relaxation, serenity and welcome. 