



# INTERSECT™

2 Professionals 2 Opinions 2 Points of View

## Geomatics Education

Should I start, continue, finish, or forget it?

### ■ GIS JANET says ...

It's been said, "You can take away everything from a man *except* his education." And I agree. Obtaining an education is a responsibility that lies solely with the individual. Once received, the knowledge can never be taken away.

For many, however, getting that knowledge can be a multi-directional path. Many of today's professionals began their search for a formal education *after* they tested the waters. Seeing or doing the cool or fun stuff, or having a close friend or relative show you the ropes, is a common way to begin the lifelong process of being a professional—especially in the field of surveying.

As with many things in life, your search for formal education may begin with a plan. A well-thought-out, step-by-step plan that helps you gain the necessary concepts, skills, and experience is what schools call a curriculum. For every area of study—including GIS, surveying or geomatics—colleges and universities have a custom-designed curriculum to get you the professional credentials you need to be successful, especially in today's global workforce and economy.

Several colleges and universities throughout the United States offer degrees in GIS, surveying, and/or geomatics. One of those schools is North Carolina Agricultural and Technical State University in Greensboro, North Carolina. A recent visit and interview with NC A&T faculty gave Surveyor Randy and me a firsthand view of how 21st-century students are learning to intersect the studies of GIS and surveying.

According to its website, NC A&T offers the "first and only four-year program in North Carolina to serve the surveying and geospatial community." Jerry Nave, PLS, Ed.D., assistant professor for the NC A&T geomatics program, explained how the non-traditional student, A&T's largest enrollment sector, brings a wealth of experience to the classroom setting. "Usually their biggest area of deficiency is math and science," stated Jerry, "so our first objective is to carefully evaluate their skills and knowledge, give them well-deserved credit for what they already know, and quickly move them to the classes they need."

Peggy Fersner, PE, associate professor, added, "Geomatics is so much more than surveying. It includes GIS! It's not about pushing buttons. Students need to understand the math ▶

**Remember that once you have completed your geomatics education, no one can ever take it away.**

### ■ SURVEYOR RANDY says ...

Starting, continuing, or finishing your geomatics education are the correct answers. If you are beginning a career in geomatics or intend to weather out the current economic storm and continue your career as a surveyor or other geomatics professional, forgetting your education is not an option.

When I began my career almost 40 years ago, a high-school education and progressive experience under a licensed surveyor were the requirements to submit an application and be seated for the Fundamentals of Surveying exam. Upon passing the FS exam and obtaining two years of additional experience, you could be seated for the Land Surveyor exam. When you passed that exam, you became a licensed Professional Land Surveyor.

Today, education is critical to a new surveyor entering our field. In just a few years, a B.S. degree will be required to sit for the FS exam in North Carolina. Other states already require a B.S. degree or will in the future.

**That degree could be the difference between staying in business or being forced to "pursue other opportunities."**

If you have been employed in the surveying or mapping field for very long or have studied the history of those fields, you are aware of the amazing technological advances in field and office equipment and the various software programs that power that equipment. The knowledge needed to understand the math and science principles behind this technology—and the knowledge necessary to use this equipment efficiently

and to benefit you and your client—requires education and a four-year degree. In today's highly competitive market, as well as in the foreseeable future, that degree could be the difference between staying in business and being a successful geomatics professional or being forced to "pursue other opportunities."

GIS Janet and I learned some good news during our visit to NC A&T. There is more flexibility in how you can obtain your degree than I ever imagined. Distance learning is an entirely new arena. What better way for a non-traditional, independent, probably somewhat introverted individual in the surveying or mapping field to get his or her education? You can see and listen to the lectures at your convenience. Therefore, living within a reasonable commute of a university that offers a geomatics degree is not a requirement. And other opportunities exist to take all or most of your first- and second-year classes ▶

► and science behind what is happening—it's a thinking focus. Our variety of summer internships offers the students the technology-driven experience required, but our classroom time keeps a sharp focus on the skills and concepts that come directly from math and science."

Of course, the term "classroom" takes on a whole new meaning in today's age of technology. Peggy and Jerry were very excited to show Randy and me how their distance education courses combine audio and visual so that any student can have a front-row seat to any lecture, via his or her computer. What a smart, efficient and wonderful way to prove the point that anyone, given the right mix of resources (scholarship, financial aid, or payment plan), can further his or her education during this age of technology.

So if you are one of the lucky ones who fell into the field of surveying or GIS by accident but think now is the right time to turn your school of hard knocks into a four-year geomatics degree, you are not alone. Enrollment and opportunities at local colleges are expanding every day. Whether you want to start, continue, or finish your geomatics education, just remember that once you have completed it, no one can ever take it away. It's yours, forever! ♡

**JANET JACKSON, GISP**, is certified as a GIS professional and heads McKim & Creed's GIS activities.

► at a community college.

While the demand for both surveying and GIS professionals is less than it was a couple of years ago, the opportunities in these fields are still there. In North Carolina, both the governing board (North Carolina Board of Examiners for Engineers and Surveyors) and the state surveying society (North Carolina Society of Surveyors) have recognized the need for new professionals in the field and the necessity of an appropriate education to prepare those professionals. These groups have chosen to financially support both the profession and the only university offering a four-year degree in geomatics in the state. That financial support has allowed NC A&T to fund a full-time recruiter to educate potential students on the available careers and opportunities in the geomatics world.

Best of all, it is a win-win situation. The profession needs new and younger professionals entering the field as we older surveyors retire. And the university needs the students in order to justify its program, deliver a quality curriculum, and retain knowledgeable and dedicated professors such as Ms. Fersner and Dr. Nave. ♡

**RANDY RAMBEAU, PLS**, is the geomatics office manager in McKim & Creed's Raleigh, North Carolina office, overseeing conventional land surveying services. He is also a licensed professional surveyor in North Carolina, Arkansas, and Tennessee.

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**While Janet and Randy may not see eye-to-eye on all surveying and GIS issues, they do work together on a daily basis, respect each other's perspective and point of view, and attempt to "intersect" their professions whenever possible. Randy and Janet invite you to submit your questions to "Intersect." Contact them via email at [intersect@mckimcreed.com](mailto:intersect@mckimcreed.com) or at 919-233-8091.**

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