Agri-Technology
Agronomist
Aqua culturist
Biotechnology Laboratory Technician
GPS Technician
Truck Driver
Crop Farm Manager
Hydroponics Grower
Microbiologist
Welder
Aquaculturist
DNA Technician
Agricultural Engineer
Irrigation Engineer
Remote Sensing Specialist
Renewable Energy Specialist
Ecologist
Soil Scientist
Toxicologist
Green Energy Specialist
Hazardous Materials Manager
Water Quality Manager
Water Reclamation Specialist

Agri-Technology

Incorporating Agriculture into Academia

It's the mechanics of the industry that can challenge you!

If you have an interest in technology, computers, graphics, machinery, and making things work, then agriculture offers many opportunities for you!

This brochure showcases careers relating to equipment, computers, and technology, introduces you to people working in various careers, highlights Wisconsin colleges and technical schools, and explores other opportunities that agriculture has for you!

It is designed to be used as a guide with the publication "An Agricultural Career for You" from the Wisconsin Agribusiness Council, which showcases the seven agricultural career pathways.

Equipment, computers, and technology are used in so many different ways in agriculture today. From creating websites for agricultural groups to designing the equipment and machinery that farmers and processors use. Keeping equipment and vehicles in good repair is essential.

Manufacturing equipment, welding and woodworking abilities, and fixing machinery all have important roles in the industry. And they are changing everyday!

The list is endless of how you can use your interest in equipment, computers, and technology in agriculture! Your skills and knowledge can lead to an exciting career!

But I'm not from a farm . . .

A common misconception is that you must be from a farm in order to pursue an agricultural career!

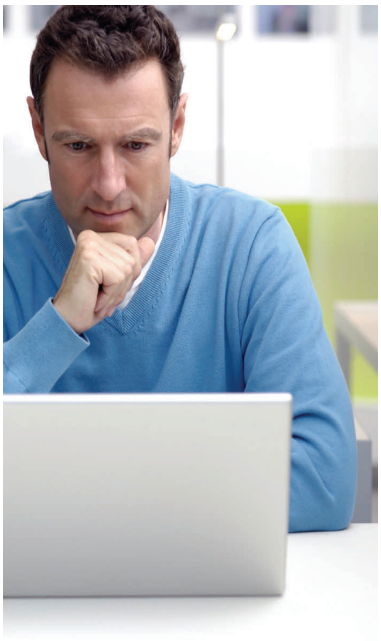
That's not true!

Understanding agriculture will certainly help you pursue a career in agriculture.

How do you learn about agriculture if you're not from a farm?

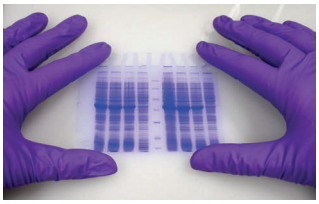
- If your school offers agricultural education classes take some.
- Get involved in FFA activities that offer you chances to develop your skills such as the website design contest or agriculture mechanics career development event.
- Develop a supervised agricultural experience program around your interest.
- Get a job working on a farm or in a related interest.

What classes should I take?



If you like equipment, computers, or technology, then a combination of classes from your technology and engineering departments, and computers and agriculture education department will prepare you for further education

Take various classes that are offered. Your school might offer classes ranging from graphic communications to product manufacturing to



audio and video technology to drafting and design to transportation technology and vocational construction and more.

If your school offers agriculture education, an introductory class to agriculture will help you find areas that might be of particular interest. Many agricultural education programs also offer hands-on classes in their agricultural laboratory and shop areas. Most agricultural programs also offer specialized courses so you can find out what interests you.

Your school might offer a variety of computer and technology courses. Learning to use a variety of software and application programs will be useful in many different careers.

I like to

- **Work with computers**
- **Design websites**
- **Use high technology machines**
- **Work in laboratories**
- **Do science experiments**
- **Build and design things**
- **Make machines work**

Check out this industry

For example, Biofuel production

Biodiesel is an alternative to petroleum diesel that is made from vegetable oils and animal fats through a process called transesterification. Biodiesel can be used as a pure fuel or blended with petroleum and can be used in any diesel engine with little or no engine modifications.

Wisconsin actively promotes the production and use of biodiesel as an alternative transportation fuel and is positioning itself to be a leader in biodiesel technology innovation, production, and consumption.

According to the 2008 Wisconsin Biofuels and Alternative Fuels Use Report completed by staff at the Wisconsin Office of Energy Independence, there are eight operating biodiesel production facilities in Wisconsin, two under construction, and eight proposed. By 2010, Wisconsin has the potential to produce 183 million gallons of biofuels annually.

With all of these biodiesel and ethanol plants, what types of jobs are found in this industry?

Electrical design engineer, analytical chemist, biofuel process operator, water treatment engineer, production supervisor, computational biologist, operation manager, truck driver, fermentation specialist, crop scientist, plant operator, and more!

Pat Sternitzsky, Wisconsin Ag Connection

"When it comes to computers and technology, taking classes are important—but nothing compares with getting hands-on experience," said Sternitzsky. "The world of technology changes so fast that the only way you can keep up with it is if you spend some of your own personal time reading websites about the industry and keeping up with trends."

A variety of classes will prepare you best.

"I took a lot of agriculture classes in high school, and one of them focused on agri-marketing," said Sternitzsky. "I still use many of the skills that I learned in that class when I develop websites or advertising banners for my business. Agriculture education and the FFA also helped me with my public speaking skills, which is vital in my job because I have to sell my product to the customer. A good salesperson needs to be an effective speaker."

Sternitzsky also recalls that when he was in elementary school, they offered a typing class.

"I liked doing the various lessons, but I honestly didn't think I would ever need to know how to type once I was older," he said. "But here I am! I spend more than 90 percent of my day on the computer and it wouldn't be as much fun if I didn't know how to type."

Wanting to be a dairy farmer but realizing that he couldn't afford to buy his own farm, Sternitzsky started working for a radio station—doing farm reports and reading the news.

"It was while working for the radio station that I realized that there was a need for Wisconsin agricultural news to be published on the Internet," said Sternitzsky. "At that time, there were a few farm news websites online, but none of them focused on Wisconsin issues. So I left the radio business to start *Wisconsin Ag Connection*. Soon after, I started building websites for other agricultural companies and it took off from there."

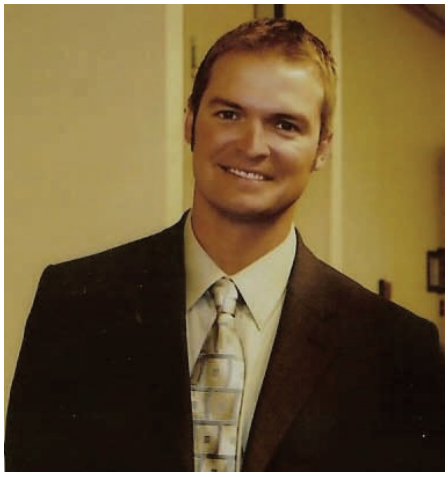
Seth Nicholson, The Bruce Company

"I was fortunate enough to have a combination of interests," said Nicholson. "What I thought was my first interest—the study of chiropractics—didn't work out; my back up was something that I had worked with my family ever since I was young."

Furthering your education provides you time and helps you explore your interests.

"I can't stress enough how beneficial education is to students and the ability to explore any interests that you may have and the availability of careers in agriculture," said Nicholson.

One doesn't realize how many choices one has especially in the area of agribusiness.

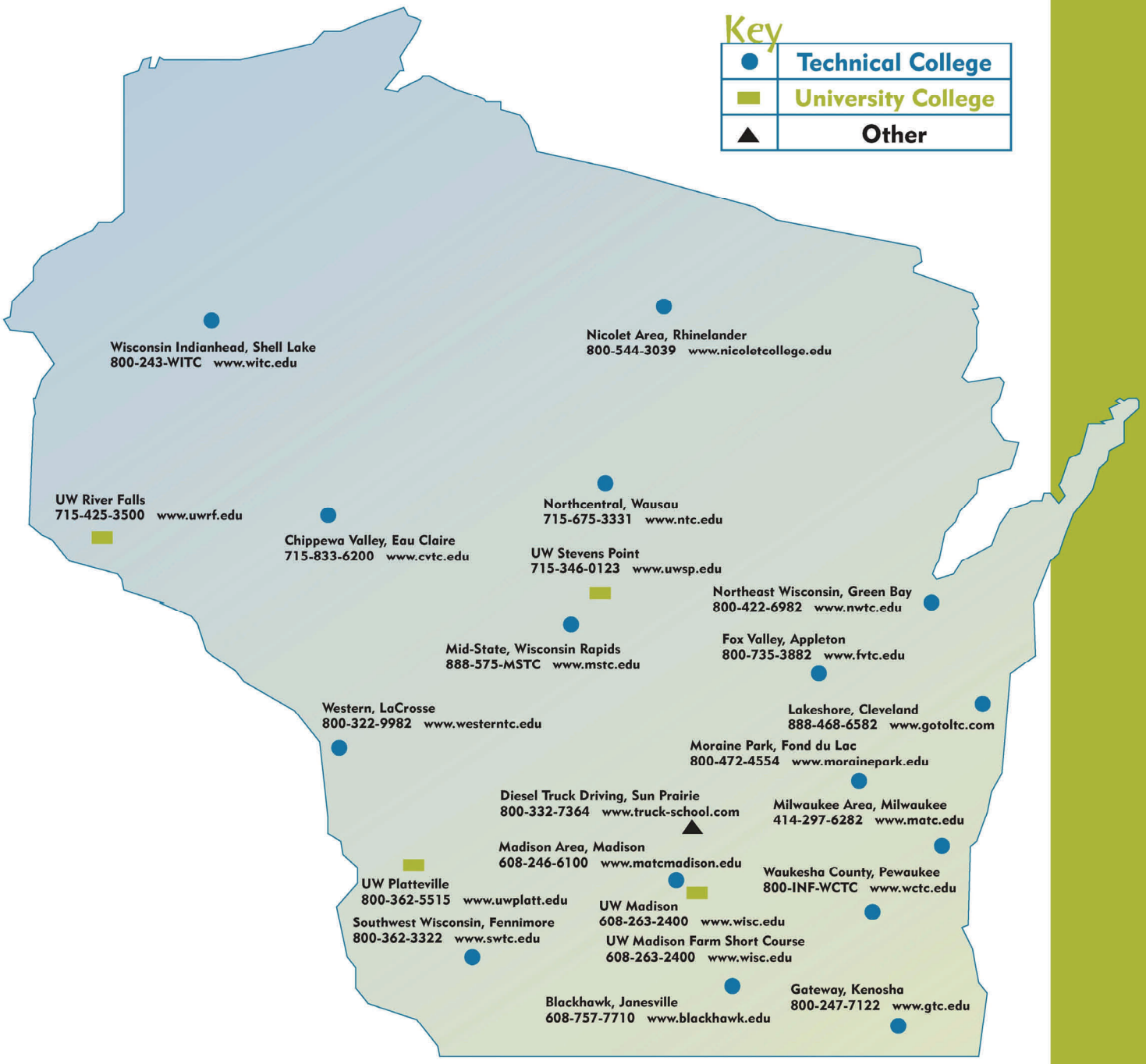


"There is a lot more to agriculture than just working on a farm," said Nicholson. "Working with computers, agribusiness, innovative and new processes, biotechnology, and the list goes on."

As one of the leading landscape firms in the USA, The Bruce Company offers landscape design and building, landscape management, irrigation, aquatic services, golf services, specialty services, and home and garden supplies.

"Technologies that are put to use in our line of business include AutoCAD, which is specific to landscape drafting and design, developing our own programs to serve out needs, and technologies that aid in making communication between the customer and our staff or among our employees easier," explained Nicholson. "Now and in the future we are exploring the ideas of professional networking so that we don't wait for annual conferences to see what is up and coming. We can see what the industry is welcoming as innovations."

After You Graduate



"Incorporating Agriculture into Academia" is a project coordinated by the Wisconsin Farm Bureau– Ag in the Classroom Program and the Wisconsin Agribusiness Council. The project was funded with a USDA Ag in the Classroom Enrichment Grant. To learn more about these programs, visit their websites–

www.wisagclassroom.org

www.wisagri.com

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