

"Modern agricultural professionals need to master a diverse set of skills to be successful. They have to understand everything from farming's foundations to how technology is moving the field forward."

Bruce Erickson, education distance and outreach director in Purdue's Department of Agronomy

The business of agriculture in all its forms is challenged by advancing science and rapidly changing technology along with societal demands to increase production, enhance sustainability, lessen environmental impacts, and decrease costs – all at the same time.

Internationally renowned for its cutting-edge agricultural research, education and outreach, Purdue University is a global leader in addressing those challenges, and many others, in the field and in the industry. In 2023, QS World University Rankings ranked Purdue's College of Agriculture #3 in North America and #5 in the world.

Purdue is focused firmly on building a globally competitive workforce for the information age and for the agribusiness industry's knowledge-based future, incorporating the latest applications of science and technology to make faster and more informed decisions and to bring value-driven innovation and disruption to the agriculture and food ecosystem.

A dynamic set of skills is needed to lead in today's agribusiness industry. That's why we're here. We understand the industry you serve, and we can help advance your skillset and transform your thinking through the educational experiences we offer.

Purdue's research, education and outreach programs deliver innovation and new businesses that meet specific industry needs, and in turn, provide consumers with access to healthy, affordable, sustainable, and transparent food.

By choosing Purdue University for your upskilling needs you are choosing a partner with deep roots in agriculture's past, an unmatched grounding in its present and branches extending well into the future.







WHY PURDUE?

Professional development programs along with graduate degrees and certificates from Purdue University Online prepare agriculture and agribusiness professionals for the work of tomorrow and are delivered in a flexible and convenient format, with the same academic rigor and eye to practical application for which Purdue's flagship West Lafayette, IN, campus is internationally known.

Our best in class online offerings are taught by academic and industry subject matter experts, including world-renowned researchers in plants, animals, forestry, natural resources, human well-being, and the science, business, and economics of agriculture. Plus, you will network with a group of your peers from across industry sectors.

Corporate partners and entrepreneurs also can work with us to design, develop and deliver programs that apply directly to their company's educational needs and offer the benefits of team learning. We're happy to discuss tailoring a program to your specific needs.

Our faculty and staff, including expert instructional designers, are passionate about providing the best learning experience possible. The design of our courses matches the quality of the subject matter knowledge and research behind them, employing tested pedagogy and best practices for online learning, with an emphasis on accessible, logical navigation, interactivity, and student engagement.

With Purdue University's online programs you get the same Purdue University that is ranked among the Top 10 Public Universities and the Top 10 Best Value Schools in the U.S. (Wall Street Journal/Times High Education) as well as the Top 10 Most Innovative Schools for five years running (U.S. News & World Report). Newsweek ranked Purdue #3 among America's Top Online Colleges.

TOP TOP US. News & World Report, 2025

ONLINE PROGRAMS FOR AGRICULTURE AND BIOSCIENCE

MASTER'S DEGREES

BIOTECHNOLOGY INNOVATION AND REGULATORY SCIENCE

Teaches important aspects of biotechnology innovation within the context of regulatory science and quality assurance, focusing on advanced topics such as drug development, good regulatory practices, quality management and regulatory compliance.

APPLIED GEOSPATIAL ANALYTICS

Explores in depth the science and application of geospatial analysis techniques using GIS software and other tools to make judgments and solve problems in, among others, the agricultural, engineering and environmental sectors.

FOOD AND AGRIBUSINESS MANAGEMENT (MS/MBA)

Provides in a single online program the general business management expertise and industry-specific knowledge needed to successfully lead in today's complex food and agribusiness marketplaces, while allowing industry professionals to continue their careers as they learn.

GRADUATE CERTIFICATES

AGRICULTURAL SCIENCES EDUCATION, EXTENSION & COMMUNICATION

Completion of the certificate prepares learners for Extension-type jobs or Agriculture teaching positions and provides an opportunity for students to apply credits toward the master's degree program.

BIOTECHNOLOGY QUALITY AND REGULATORY COMPLIANCE

Focuses on the regulatory aspects of drug development, good regulatory practices, and quality management with emphasis on advanced concepts such as the molecular basis of manufacturing pharmaceuticals.

SPATIAL DATA SCIENCE

Teaches mastery of technologies used in the field including data sources, projections, spatial data processing and analysis methods, data and metadata creation, and foundational skills in scripting languages, data types, databases, and data visualization and analysis.

PROFESSIONAL DEVELOPMENT

AGRONOMY ESSENTIALS

Provides fundamental knowledge of crops and soils and a thorough understanding of agronomy and crop production practices – even for those who do not have an agronomy background.

ANIMAL NUTRITION

Explores the classification and function of nutrients, deficiency symptoms, digestive processes, characterization of feedstuffs, and formulation of diets for domestic animals..

ASEPTIC PROCESSING AND PACKAGING

Covers both science and technology in a thorough introduction to the scientific and engineering principles behind aseptic processing and packaging, knowledge that is vital for food and pharmaceutical safety.



FOOD AND BEVERAGE PRODUCTION & BUSINESS PLANNING

A suite of online courses for business development support to enable and empower producers of agricultural commodities to bring novel food products to market.

HEMP ESSENTIALS

Takes a comprehensive look at the biology and agronomics of growing and using hemp, its history, legal and social issues, and uses for food, fiber, building products and medical applications.

NUTRIENT MANAGEMENT

Covers fertilizer sources, methods of measurement and assessment, placement, timing, rate of application, and adjusting for soils and weather.

PEST MANAGEMENT

Offers through a variety of online courses the latest in Integrated Pest Management (IPM) and pesticide use practices from entomologists and botanists at Purdue, which has a more than 50-year history in the field.

PRECISION AGRICULTURE

Explores the technical science of digital agriculture to help agriculture professionals employ exams tools and techniques and keep up with technology changes.

TIPPING POINT PLANNER

Teaches anyone involved in land use planning or water quality issues how to use an online tool designed to identify and address environmental challenges before they reach a critical point.

URBAN AGRICULTURE

Provides in-depth instruction for urban crop production, from farm design through harvest techniques.

WINE CERTIFICATE

Provides comprehensive technical knowledge for professional winemakers and wine industry employees, as well as serious noncommercial winemakers looking to take their pastime to the next level.

"By taking these courses I am trying to be the best that I can be at what I do."

Ryan Roccio, Crucible Ag, on Purdue's Agronomy e-Learning Academy

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"It is about accelerating learning and preparing students for being better equipped regulatory people, so they can hit the ground running. You're teaching and educating a generation of talent that can provide necessary medicines for their country. I think that's fantastic."

Todd Chermak, CellCarta on Purdue's online graduate certificate in Biotechnology Quality and Regulatory Compliance





"I needed something on demand. When I was completing the course, there were a lot of times when I was traveling for work, and I would be doing classwork at 9:30 at night in a hotel room. I was able to sit down at the end of the day and devote a couple hours to it."

Dan Hendricks, senior business development manager at Topcon Positioning Systems, on Purdue's Precision Agriculture course

"As input prices continue to rise with world population, it becomes increasingly important that growers take advantage of the technological advances precision agriculture offers to maximize production and efficiency while minimizing cost and labor intensity."

Sue Bennett, project manager Purdue's Agronomy e-Learning program





MORE INFORMATION: purdue.edu/online *APPLY:* POapply@purdue.edu *QUESTIONS:* (765) 496-5646

YOUR NEXT GIANT LEAP



