PURDUE UNIVERSITY | College of Agriculture

AGRONOMY ESSENTIALS EUROPE

ONLINE COURSE

EUROPEAN AGRONOMY EDUCATION OFFERED IN A CONVENIENT FORMAT

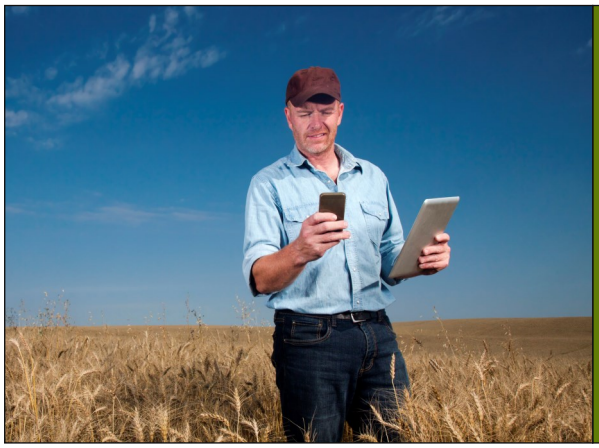
The business of growing crops has become increasingly complicated in recent years. Agriculture has been challenged with growing demands to increase production while minimizing the environmental impact. New technologies and a knowledge-based future will require a more thorough understanding of the entire production system.

Launched in 2019, Agronomy Essentials Europe continues the award winning precedent set by the original Agronomy Essentials course. This 27 module course supports learners seeking a broad-ranged understanding of European soils, crop nutrients, cropping systems, pest management, crop growth and development, diagnostics, and a host of other topics. Available through Purdue Online Education and specifically designed to meet off campus learner needs, you will gain a solid base of European specific agronomics regardless of your professional role.

Course content is provided in a convenient online learning management system allowing participants to access the recorded video segments, reading materials, graphics, glossary and assessments at their convenience. Courses are offered in defined sessions, but students have the flexibility to work whenever and wherever they have time and access to the internet.

Successful Completion Earns a Personalized Professional Education Certificate

Learners will gain a basic knowledge of European agronomy and will grow in understanding of management challenges of crop production. The course will equip them to more effectively communicate, helping build customer confidence and trust.



Contact Us

For more information about this or other online agronomy courses designed for the needs of sales staff, farmers and other agricultural professionals.

Email: noncredit@purdue.edu

Webpage: https://purdue.biz/agronomy

AGRONOMY ESSENTIALS EUROPE

ONLINE COURSE

Designer and Instructor

Bruce Erickson, PhD, CPAg

Bruce Erickson, PhD, is Purdue University's Agronomy Education Distance & Outreach Director. In this course, Dr. Erickson shares from his wealth of experience in agronomy and distance education.

Dr. Erickson completed his undergraduate degree at Iowa State University in agronomy, then began his professional career as an agronomist at Corteva. After completing his Master's Degree at Iowa State University in crop production & physiology and his Doctoral Degree in agronomy at Purdue, Dr. Erickson joined the staff of the Purdue Department of Agronomy.

Dr. Erickson previously served as Senior Technical Designer at Agri-Business Group in Indianapolis. He was Director of Cropping Systems Management and Associate Director of the Center for Commercial Agriculture at Purdue where he worked extensively with precision farming and crop production economics research.

Most recently, he was the Agronomic Education Manager for the American Society of Agronomy, where he was responsible for the International CCA performance objectives and development of the International CCA Exam, the India CCA Exam, and the Mexico CCA Exam.

Course Syllabus

UNDERSTANDING THE LAND/ FIELD PREPARATION

- Soil Texture & Structure, Biological & Chemical Properties
- Water & Solute Movement in Soils, Irrigation, Drainage Methods
- Site Characterization, Legal Land Descriptions, Understanding Soil & Field Maps
- Tillage & Residue Management, Soil Restrictive Layers
- Soil Conservation, Water and Air Quality

PLANT NUTRITION/ SOIL FERTILITY

- Essential Elements, Plant Functions & The Nitrogen Cycle
- Soil & Plant Nutrient Assessment
- Fertilisers & Manures
- Fertiliser Application, Placement and Timing
- Fertiliser Additives & Soil Amendments

CROP AND VARIETY SELECTION/ PLANTING

- Crop Types & Cropping Systems, Crop Improvement
- Seed Selection & Characteristics of Maize, Soybeans & Wheat Crop Testing
- Planter & Drill Operation
- Maize, Soybean, Wheat & Forage Management Practices
- Precision Farming

CROP GROWTH/ DEVELOPMENT/ DIAGNOSTICS

- Maize Growth & Development
- Soybean Growth & Development
- Small Grains & Forages Growth & Development
- Photosynthesis & Plant Growth, Cell & Leaf Anatomy
- Crop Diagnostics & Troubleshooting

CROP PROTECTION/ PEST MANAGEMENT

- Weed Identification & Management Principles
- Insect Identification & Management Principles
- Disease Identification & Management Principles
- Pesticide Application & Stewardship

HARVESTING AND MARKETING THE CROP

- Crop Harvest, Storage & Quality
- Marketing & Basic Economics