

The Professional Science Master's (PSM) program in agricultural production prepares students for careers in agribusiness or environmental management. While developing an in-depth understanding of agricultural sciences, students learn the skills necessary to transform rapidly changing scientific knowledge into meaningful, sustainable products and services. This is critical, as food production and resource management become increasingly important. Food production capacity must double if we are to feed the burgeoning world population expected by 2050.

Agricultural innovation requires understanding and managing relationships – the connections among laboratory, field, farmer, consumer, regulator, investor, and more. The depth of the science curriculum plus the breadth of the business curriculum enables students to not only understand these connections, but to create strategies, innovate, and make decisions that will enhance food production.

Business curriculum includes courses in technology management, marketing, entrepreneurship, finance, process management, and more. The cross-disciplinary industry seminars offer opportunities to personally interact with industry and government leaders.

The program can be completed in 18-months of full-time study on the Urbana-Champaign campus. Summer enrollment is required while completing the internship. A thesis is not required.

CAREER OPPORTUNITIES

- Breeding manager
- Production farm manager
- Sales/Marketing representative
- (e.g. pharmaceutical or seed company)
- Natural resource manager
- International development analyst or advocate
- Sustainability coordinator
- Laboratory manager
- Consultant in water, energy conservation
- Wildlife biologist
- Sustainable farming consultant

SPECIALIZATIONS

- Crop Production
- Food Animal Production
- Sustainable Production Systems

PROGRAM ADVISOR

Dr. Robert Knox Department of Animal Sciences rknox@illinois.edu (217) 244-5177

Coordinated by the University of Illinois College of Agricultural, Consumer and Environmental Sciences (ACES) in cooperation with the Graduate College.

ADMISSION REQUIREMENTS

- Bachelor's degree from a regionally accredited U.S. Institution or a comparable degree from a recognized institution abroad,
- Grade point average of 3.0 or higher (4.0 scale) for the last 60 hours of undergraduate work and for any graduate work,
- Graduate Record Examination (GRE),
- Test of English as a Foreign Language (TOEFL) for non-native speakers of English, and
- Three (3) letters of recommendation.

SAMPLE PROGRAM OF STUDY (SUSTAINABLE PRODUCTION SPECIALIZATION)

Year 1: Fall

Science Curriculum

NRES 403 Watersheds and Water Quality NRES 477 Introduction to Remote Sensing NRES 510 Adv. Natural Resource Economics

Business Curriculum

Two 2-hour courses in Business Fundamentals, , and Management and Marketing PSM 501 Industry Seminar I This is a sample curriculum; your courses will depend upon your individual interests and career plans. For additional course offerings, visit www.psm.illinois.edu/agricultural-production

Year 1: Spring

Science Curriculum

NRES 446 Sustainable Planning Seminar NRES 474 Soil and Water Conservation

NRES 500 Graduate Seminar

NRES 592 Sustainable Urban Systems

Business Curriculum

Two 2-hour courses in Project Management, and

Finance

PSM 502 Industry Seminar II

Summer Internship

PSM 555 PSM Internship

Year 2: Fall

Science Curriculum

NRES 430 Comm. in Env. Social Movements NRES 454 GIS in Natural Resource Mgmt.

NRES 488 Soil Fertility and Fertilizers

Business Curriculum

One 2-hour course in Science and Regulatory Policy PSM 503 Industry Seminar III

December Graduation

"The growing demands on our food production and environmental systems will provide tremendous opportunities for students with advanced education in the business of agricultural and natural resource biosciences."

--Dr. Rob Knox

Students have interned at:

- Illinois Farm Bureau
- Los Angeles Country Club
- Jefferson Conservation District, CO
- Wild Bear Mountain Ecology Center

Graduates have been hired by:

- Illinois Farm Bureau
- Soil & Water Conservation District, Onondaga County, NY
- University of Illinois Extension



SAMPLE PROGRAM OF STUDY (FOOD ANIMAL PRODUCTION SPECIALIZATION)

Year 1: Fall

Science Curriculum

ANSC 401 Beef Production ANSC 524 Nonruminant Nutrition Concepts

ANSC 452 Animal Growth and Development

Business Curriculum

Two 2-hour courses in

- Business Fundamentals, and
- Management and Marketing PSM 501 Industry Seminar I

Year 1: Spring

Science Curriculum

ANSC 403 Pork Production

ANSC 404 Poultry Science

ANSC 444 Applied Animal Genetics ANSC 520 Protein and Energy Nutrition

Business Curriculum

Two 2-hour courses in

- Project Management, and
- Finance

PSM 502 Industry Seminar II

Summer Internship

PSM 555 PSM Internship

Year 2: Fall

Science Curriculum

ACE 432 Farm Management

ANSC 420 Ruminant Nutrition ANSC 523 Techniques in Animal Nutrition

ANSC 592 Environmental Stress Physiology

Business Curriculum

One 2-hour course in Science and Regulatory Policy

PSM 503 Industry Seminar III

December Graduation

This is a **sample curriculum**; your courses will depend upon your individual interests and career plans. For additional course offerings, visit. http://psm.illinois.edu/ agricultural-production

Students have interned at:

- Carthage Innovative Swine Solutions,
- Lallemand Animal Nutrition,
- JBS,
- PAWS Chicago,
- The Maschoffs,
- Tribute Farms,
- Tyson Foods,
- and others.

Graduates have been hired by:

- Boehringer Ingelheim Vetmedica, Inc.
- Deli Star Corporation,
- Farmers National Company,
- Prairie State Semen Supply,
- Tyson,
- and others.



SAMPLE PROGRAM OF STUDY (CROP PRODUCTION SPECIALIZATION)

Year 1: Fall

Science Curriculum

CPSC 407 Diseases of Field Crops

CPSC 426 Weed Mgt. in Agronomic Crops

CPSC 466 Genomics for Plant Improvement CPSC 598 Crop Sciences Seminar

Business Curriculum

Two 2-hour courses in

Business Fundamentals, , and

Management and Marketing

PSM 501 Industry Seminar I

Year 1: Spring

Science Curriculum

CPSC 518 Crop Growth and Development

CPSC 484 Plant Physiology

CPSC 488 Soil Fertility and Fertilizers

CPSC 526 Herbicide Action in Plants

Business Curriculum

Two 2-hour courses in

Project Management, and

PSM 502 Industry Seminar II

Summer Internship

PSM 555 PSM Internship

Year 2: Fall

Science Curriculum

CPSC 479 Insect Pest Management

CPSC 414 Forage Crops and Pasture Eco

CPSC 440 Applied Statistical Methods I

Business Curriculum

One 2-hour course in Science and Regulatory Policy

PSM 503 Industry Seminar III

December Graduation

This is a **sample curriculum**; your courses will depend upon your individual interests and career plans. For additional course offerings, visit. http://psm.illinois.edu/ agricultural-production

Students have interned at:

- Bayer CropScience,
- Beck's Superior Hybrids,
- Consolidated Grain and Barge,
- Dow AgroSciences,
- Monsanto,
- Pioneer Hybrids,
- and others.

Graduates have been hired by:

- ACGT, Inc.
- Dow AgroSciences,
- Farmers National Company,
- Monsanto,
- University of Illinois,
- and others.



Illinois Professional Science Master's